

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Assemblers	10.05	Assembler, Subminiature	Assembles and installs various components into miniature and sub-miniature electronic or mechanical assemblies. Works in highly confined and congested areas without damaging adjacent parts or components. Performs such operations as soldering, winding, adjusting, gluing, masking and centering under special magnification equipment to exacting tolerances. Requires a high degree of eye-hand coordination and finger dexterity. Normally, work is repetitive. Work may be performed in a clean room environment. Most electronics assembly will fall within the three light assembler classifications or the subminiature assembler classification.
	Assemblers	10.10	Heavy Assembler I (High Complexity)	Third of three levels of heavy assembler. This role completes assembly of intricate units composed of a large number of component parts, or of large and complicated units, requiring print reading and basic math skills as well as the ability to use common hand tools and operate assembly machines. Typically requires a high school education or GED and 2+ years of experience, or equivalent. Under limited supervision performs highly diversified work involving considerable adjusting, fitting and aligning to very close tolerances and strict inspection standards. Works from drawings or specifications. May plan assembly procedures and direct the work of others. May test or inspect assembled units. May rotate stations in a work cell and/or is expected to have mastery of all steps in a process. Work involves frequent handling of moderate to heavy components and may include walking or standing most of the time.
	Assemblers	10.11	Heavy Assembler II (Moderate Complexity)	Second of three levels of heavy assembler. This role completes diversified mechanical or electro-mechanical assembly or sub-assembly of units that are moderately complex, requiring adjusting, fitting and aligning to ordinary tolerances. Requires print reading and basic math skills as well as the ability to use common hand tools and operate assembly machines. Typically requires a high school education and up to 2 years of related training or experience. Works from drawings or specifications. May inspect and test completed units. May rotate stations in a work cell. Work involves frequent handling of moderate to heavy components and may include walking or standing most of the time.
	Assemblers	10.12	Heavy Assembler III (Non-Complex)	First of three levels of heavy assembler. This role completes highly repetitive, simple short-cycle mechanical or electro-mechanical assembly following prescribed routine or where method of assembly is obvious. No diploma or experience required. All training is on-the-job. Requires the ability to follow demonstrated steps. Requires simple adjusting with liberal tolerances and no fitting. Work involves frequent handling of moderate to heavy components and may include walking or standing most of the time.
	Assemblers	10.20	Light Assembler I (High Complexity)	Third of three levels of light assembler. This role completes assembly of intricate units composed of a large number of component parts, or of large and complicated units, requiring print reading and basic math skills as well as the ability to use common hand tools and operate assembly machines. The job typically requires a high school education and 2+ experience, or equivalent. Under limited supervision performs highly diversified work involving considerable adjusting, fitting and aligning to very close tolerances and strict inspection standards. Works from drawings or specifications. May plan assembly procedures and direct the work of others. May test or inspect assembled units. May rotate stations in a work cell and/or is expected to have mastery of all steps in a process. Work is typically performed at a bench and may include walking or standing some of the time. Work may be in a clean room environment. Most electronic assembly will fall within the three light assembler classifications or the subminiature classifications.
	Assemblers	10.21	Light Assembler II (Moderate Complexity)	Second of three levels of light assembler. This role completes diversified mechanical or electro-mechanical assembly or sub-assembly of units that are moderately complex, requiring adjusting, fitting and aligning to ordinary tolerances. The job typically requires a high school diploma and related training or experience of less than 1 year, or equivalent. Requires print reading and basic math skills as well as the ability to use common hand tools and operate assembly machines. Works from drawings or specifications. May inspect and test complete unit. May rotate stations in a work cell. Work is typically performed at a bench and may include walking or standing some of the time. Work may be in a clean room environment. Most electronic assembly will fall within the three light assembler classifications or the subminiature classifications.
	Assemblers	10.22	Light Assembler III (Non-Complex)	First of three levels of light assembler. This role completes highly repetitive, simple short-cycle mechanical or electro-mechanical assembly following prescribed routine or where method of assembly is obvious. No diploma or experience required. All training is on-the-job. Requires the ability to follow demonstrated steps. Requires simple adjusting with liberal tolerances and no fitting. Work is typically performed at a bench and may include walking or standing some of the time. Work may be in a clean room environment. Most electronic assembly will fall within the three light assembler classifications or the subminiature classifications.
	Assemblers	10.31	Machine Builder I (Advanced)	Third of three levels of machine builder. This role typically requires problem solving and math skills at the high school or GED level, plus technical course work in blue print reading, hydraulics, pneumatics, electronics and machine tool operation and 5+ years of related experience, or equivalent. Works on unique products that are custom designed for specific applications or highly modified standard machines, such as packaging or process machinery. At this level incumbents are able to work independently on projects of greater difficulty. Fabricates parts from raw stock using machine tools. Typically will suggest design modifications to engineers. May be assisted by a lower-level machine builder or helper or lead a team of machine builders on a project. Work involves frequent handling of moderate to heavy components and may include walking or standing most of the time.
	Assemblers	10.32	Machine Builder II (Experienced)	Second of three levels of machine builder. This role typically requires problem solving and math skills at the high school or GED level, plus technical course work in blue print reading, hydraulics, pneumatics, electronics and machine tool operation and 2-4 years of related experience, or equivalent. Works on unique products that are custom designed for specific applications or highly modified standard machines, such as packaging or process machinery. At this level incumbents are able to work independently on projects of moderate difficulty. Fabricates parts from raw stock using machine tools. May suggest design modifications to engineers. May be assisted by a lower-level machine builder or helper. Work involves frequent handling of moderate to heavy components and may include walking or standing most of the time.
	Assemblers	10.33	Machine Builder III (Entry)	First of three levels of machine builder. This role typically requires problem solving and math skills at the high school or GED level, plus technical course work in blue print reading, hydraulics, pneumatics, electronics and machine tool operation. Works on unique products that are custom designed for specific applications or highly modified standard machines, such as packaging or process machinery. Fabricates parts from raw stock using machine tools. At this level workers are in a learning mode and primarily assist more experienced machine builders. Work involves frequent handling of moderate to heavy components and may include walking or standing most of the time.
	Finishing	11.11	Plater I (Experienced)	Second of two levels of plater. This role requires math and reading skills equivalent to high school or GED, or equivalent and 2+ years of related experience. Requires a knowledge of basic plating chemistry and procedures. Under general supervision, performs all required operations to process parts and products through electroplating operations to obtain finishes such as copper, chrome, gold, nickel, zinc, cadmium, etc. involving tank racks and/or roto-barrel methods. May calculate surface area and process specifications. May be responsible for testing, mixing, and maintaining all solutions and correct processing temperatures. Uses testing and measuring instruments incidental to operations. Regulates current input and plating time to obtain desired thickness of plate. May make up or suggest special holding fixtures for plating irregular shaped materials. May provide work direction and training to lower-level platers and helpers engaged in the plating process.
	Finishing	11.12	Plater II (Entry)	First of two levels of plater. This role requires math and reading skills equivalent to high school or GED, or equivalent and less than 2 years of experience. Under close supervision, performs assigned operations to process parts and products through electroplating operations to obtain a limited number of finish types (copper, chrome, gold, silver, zinc, nickel, cadmium, etc.) involving standardized and prescribed tank rack and/or roto-barrel methods. May assist in testing, mixing, and maintaining solutions. Regulates current and temperature as directed. May use testing and measuring devices. Works from simple formula and specifications.
	Finishing	11.21	Production Painter I (Experienced)	Second of two levels of production brush or spray operations. This role involves liquid or powder painting of manufactured products requiring custom finishes. Requires 1+ years of training or experience, or equivalent. Mixes paint, lacquer, and enamel to specified color, consistency and viscosity. Prepares surfaces and applies a variety of coatings with brush or spray gun to obtain high-grade finish coat or special types of finishes. May require decorative painting, shading and two-toning.
	Finishing	11.22	Production Painter II (Entry)	First of two levels of production brush or spray operations. This role involves liquid or powder painting of manufactured products requiring standard finishes. Requires the ability to follow demonstrated instructions and no previous experience. Requires physical dexterity and hand-eye coordination. Mixes paint products as required. Prepares surfaces for painting. Cleans and maintains equipment. Inspects completed work and corrects defects. May include hand or conveyor dipping.
	Machine Maintenance	12.11	Electronics Mechanic I (Experienced)	Second of two levels of electronic/electro-mechanical repair work. This role performs repair and maintenance work on electronic control equipment and apparatus as associated with automated machine tools, servo-mechanism, etc., of complex and involved design requiring broad technical knowledge of electro-mechanical principles and equipment design plus specialized skills and techniques. Diagnose and locate the trouble and the reason for malfunction: make needed repairs. Replaces, adjusts and calibrates components to align control apparatus to required operating specifications. Works closely with and coordinates procedures with engineers and mechanics on the installation of new equipment or the change over of plant layout requiring the movement of machines and control equipment. Uses special testing instruments such as oscilloscopes, synchroscope, galvanometer, voltmeter, strip chart recorders, electronic counters, digital discriminators, analog converters, amplifiers, etc., to test circuitry and components.
	Machine Maintenance	12.12	Electronics Mechanic II (Entry)	First of two levels of electronic/electro-mechanical repair work. This role requires technical training and less than 2 years of experience, or equivalent. Under limited supervision and with readily available technical guidance, performs intermediate troubleshooting, repair and maintenance work on electronic control equipment and apparatus such as automated machine tool controls, servo-mechanisms, etc., of standard design where a basic knowledge of electro-mechanical principles, plus specialized skills and techniques, are required to diagnose and repair malfunctions. Uses appropriate test instruments to diagnose troubles and operating problems and determine reason for malfunctions. Adjusts, calibrates and aligns components and, when necessary, replaces and connects parts to bring units to operating requirements. Assists Electronic Mechanic II or engineering staff to diagnose and analyze difficult operating malfunctions and to effect major, extensive or emergency repairs.
	Machine Maintenance	12.21	Machine Maintenance Mechanic I (Advanced)	Third of three levels of maintenance mechanic. The job typically requires 2 years of technical training and 5+ years of related work experience, or equivalent. Specific skills include mechanics, pneumatics, hydraulics, machining, welding and electrical. Duties include installation, maintenance and repair of production or processing equipment. Incumbents may fabricate machine guards, install or repair conveyers, replace motors, tear down or replace pumps, maintain fluid collection or distribution equipment or repair electro-mechanical equipment. Incumbents at this level perform advanced troubleshooting, work with general supervision and may provide work training to less experienced maintenance staff.

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	Machine Maintenance	12.22	Machine Maintenance Mechanic II (Experienced)	Second of three levels of maintenance mechanic. The job typically requires 2 years of technical training and 3+ years of related experience, or equivalent. Under limited supervision and with minimal technical guidance, keeps plant machinery and mechanical equipment in good repair. Examines machines to diagnose trouble, dismantles machines, replaces defective parts, reassembles machines and makes necessary adjustments to ensure efficient operation. May involve scraping of ways. May occasionally make replacement parts. Incumbents at this level perform intermediate troubleshooting, work with limited technical guidance and may provide work training to less experienced maintenance staff. See also "Maintenance Machinist."
	Machine Maintenance	12.23	Machine Maintenance Mechanic III (Entry)	First level of three levels of maintenance mechanic. The job typically requires 2 years of technical training and less than 1 year of experience, or equivalent. With readily available technical guidance, keeps plant machinery and mechanical equipment in good repair. Examines machines to diagnose trouble, dismantles machines, replaces defective parts, reassembles machines and makes necessary adjustments to ensure efficient operation. At this level much of the time is spent assisting more experienced maintenance mechanics.
	Machine Maintenance	12.31	Maintenance Machinist	Experienced maintenance machinist, requiring 2 years of technical training and 3+ years of related experience, or equivalent. Under limited supervision and with minimal technical guidance, produces replacement parts and new parts necessary to maintain and repair a variety of machinery and mechanical equipment. Lays out work and sets up and operates machine tools to perform machining operations on replacement parts. Examines machines and equipment to diagnose troubles, dismantles machines, replaces defective parts and reassembles machines. Overhauls machines, including scraping of ways and bearings and fitting parts. Uses a variety of hand tools and precision measuring instruments. See also "Maintenance Mechanic II."
	Plastics	13.11	Finishers (Second Operations)	Plastics general labor job, requiring the ability to follow demonstrated directions, or equivalent. Under close supervision performs one or more of a variety of repetitive, routine hand or machine operations on molded plastic objects, following prescribed methods. Includes such operations as removing flash, buffing, burring, drilling and tapping, filling, gluing, polishing, sanding and assembling. May be shifted from one operation to another as necessary. Does not include workers regularly assigned as tumbler operators.
	Plastics	13.21	Plastic-Molding Machine Operator I (Set-Up)	Third of three levels of plastics machine operator. This role requires problem solving skills equivalent to a high school education and 3+ years of related work experience, or equivalent. Under limited supervision and technical guidance, sets up and test cycles compression or injection-molding machines that mold thermoplastic materials. Work involves positioning assembled mold on press bed of molding machine, determining and adjusting length of stroke of ram to ensure correct operation of machine, connecting steam, oil, or water lines to mold or to cored platens or adjusts electric switches to heat mold to desired temperatures. Regulates pressure and curing time and makes other adjustments to achieve desired quality. Turns over machines to others for operation and troubleshoots machines for operators in need of technical support.
	Plastics	13.22	Injection-Molding Machine Operator II (Set-Up and Operate)	Second of three levels of plastics machine operator. This role requires problem solving skills equivalent to a high school education and less than 3 years of related work experience, or equivalent. With readily available supervision and technical guidance, sets up and operates one or more injection-molding machines that mold thermoplastic materials. Sets up the machine by positioning mold and adjusting machine for required stroke, pressure, temperature and cycles. Work includes cycling the machine, removing part(s) from mold, removing scrap material from molded object(s), checking molded parts by gauging and visual inspection, as prescribed. Changes and adjusts molding conditions such as temperature, pressure, feed, and time as necessary to correct deficiencies in quality.
	Plastics	13.31	Injection-Molding Machines Operator III (Operate Only)	First of three levels of plastics machine operator. This role requires the ability to follow demonstrated directions, or equivalent. Under close supervision, operates one or more injection-molding machines that mold thermoplastic material. Operates under prescribed conditions after set-up is completed by others. Work includes cycling the machine, removing part(s) from mold, removing scrap material from molded object(s), checking molded parts by gauging and visual inspection, as prescribed. Refers all deficiencies to supervisors or leads.
	Precision Sheet Metal	14.01	CNC Cutter Operator	CNC sheet metal operator requiring math and problem solving skills equivalent to a high school education, plus training in shop practices and print reading and 1+ years of related experience. Sets up and operates one or more types of CNC cutters, including arc, plasma, flame and laser cutters to cut materials to specified dimensions or to perform operations involving angular or circular cuts. Works from shop drawings, layout markings, etc. Selects and uses material to avoid excessive scrap. Does not include employees who operate only after setups are made by others, but does include those who operate using both prewritten programs and on-console edits and programs. Work may include use of computer material optimization programs. Workers may use cranes, carts or pallet jacks to move raw material or finished parts. Work direction may be given to a helper.
	Precision Sheet Metal	14.10	Power-Shear Operator	Sheet metal operator requiring math and problem solving skills equivalent to a high school education, plus training in shop practices and print reading and 1+ years of related experience. Sets up and operates one or more types of power shears to shear materials to specified dimensions or to perform operations involving angular cuts. Setups may include programming of a CNC back bar and/or use of computer material optimization programs. Works from shop drawings, layout markings, etc. Selects and uses material to avoid excessive scrap. Workers may use cranes, carts or pallet jacks to move raw material or finished parts. Work direction may be given to a helper.
	Precision Sheet Metal	14.21	Precision Sheet Metal Worker I (Advanced)	Third of three levels of precision sheet metal machine operation. This role requires reading and math skills equivalent to a high school education and 3+ years of related production experience, or equivalent. Under limited supervision and with minimal technical guidance, sets up and operates multiple types of sheet cutting, forming, fabricating or finishing machines such as cutters, shears, brakes, fabricators and punches, including CNC machines, on work of a difficult nature. Work includes short-run work requiring the worker to plan, lay out and perform all types of sheet metal operations to fabricate a wide variety of units or products of complex design involving close tolerances. Uses a variety of sheet metal hand tools and measuring instruments. Uses shop mathematics. Workers may use carts or pallet jacks to move raw material or finished parts. Work direction and training may be given to sheet metal helpers or less experienced workers.
	Precision Sheet Metal	14.22	Precision Sheet Metal Worker II (Experienced)	Second of three levels of precision sheet metal machine operation. This role requires reading and math skills equivalent to a high school education and 1-3 years of related production experience, or equivalent. With readily available supervision and technical guidance, sets up and operates one or more sheet cutting, forming, fabricating or finishing machines on work of moderate difficulty, performing operations on a variety of parts, following general instructions. May do simple layout work. Able to operate all types of sheet metal machines to cut, bend, or form parts and uses sheet metal hand tools. Workers may use carts or pallet jacks to move raw material or finished parts.
	Precision Sheet Metal	14.23	Precision Sheet Metal Worker III (Entry)	First of three levels of precision sheet metal machine operation. This role requires the ability to follow demonstrated directions, or equivalent. Under close supervision, workers operate one or more sheet cutting, forming or finishing machines on repetitive work, performing simple operations and following detailed instructions. May assist with set-ups that are typically made by others. Duties include positioning material, cycling the machine and removing finished parts and waste. Workers may visually inspect parts and/or use measuring tools or fixtures to determine whether parts pass or fail quality standards and specifications. Workers may use carts or pallet jacks to move raw material or finished parts. Sheet metal helpers are included in this level.
	Precision Sheet Metal	14.31	Punch Press Operator I (Advanced)	Third of three levels of punch press operation. This role requires reading and math skills equivalent to a high school education and 3+ years of related production experience, or equivalent. Sets up and operates presses on a variety of punch press work involving difficult, deep drawing and forming operations or the use of compound combination or progressive dies. Work includes short-run work requiring the ability to perform a variety of punch-press operations or to operate several types of presses. Operators are responsible for prompt recognition of faulty operation. Examines output and makes adjustments as necessary to maintain production within standards. May determine when dies need repair or rework.
	Precision Sheet Metal	14.32	Punch Press Operator II (Experienced)	Second of three levels of punch press operation. This role requires reading and math skills equivalent to a high school education and 1-3 years of related production experience, or equivalent. With readily available supervision and technical guidance, sets up and operates punch presses on work of moderate difficulty, performing operations on a variety of parts, following general instructions. Operators are required to feed and control operation of the press, check product against standards for conformance to specifications and detect faulty operation of press or auxiliary equipment. Work may involve either web or sheet fed punch presses, but does not include complex compound or progressive dies.
	Precision Sheet Metal	14.33	Punch Press Operator III (Entry)	First of three levels of punch press operation. This role requires the ability to follow demonstrated directions, or equivalent. Under close supervision, workers operate a punch press on repetitive work, performing simple operations and following detailed instructions. May assist with set-ups that are typically made by others. Duties include positioning material, cycling the machine and removing finished parts and waste. Workers may visually inspect parts and/or use measuring tools or fixtures to determine whether parts pass or fail quality standards and specifications. Workers may use carts or pallet jacks to move raw material or finished parts.
	Production Labor	15.01	Process Machine Operator I (High Complexity)	Third of three levels of machine or process operations. Complex Machine or process operations requiring reading and basic math skills as well as the ability to use common hand tools. Generally requires a high school education or GED and 2+ years of experience, or equivalent. Under limited supervision performs complex work involving considerable adjusting or aligning or considerable application of knowledge of process variables to produce a desired outcome. Work does not require formal training in a trade. May plan process steps and direct the work of others. May inspect and test completed product. May rotate stations in a work process and/or is expected to have mastery of all steps in a process. Work may involve frequent handling of moderate to heavy materials and may include walking or standing most of the time. Report machine tool or plastics machine operation elsewhere.
	Production Labor	15.02	Process Machine Operator II (Moderate Complexity)	Second of three levels of machine or process operations. Diversified machine or process operations that are moderately complex, requiring adjusting or aligning to produce a desired outcome. Requires reading and basic math skills as well as the ability to use common hand tools and operate machinery or equipment that is unique to the application. Work does not require formal training in a trade. Typically requires high school or GED and less than 2 years of experience, or equivalent. May inspect and test completed product. May rotate stations in a process. Work involves frequent handling of moderate to heavy components and may include walking or standing most of the time. Report machine tool or plastics machine operation elsewhere.

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	Production Labor	15.03	Process Machine Operator III (Non-Complex)	First of three levels of machine or process operations. Highly repetitive machine or process operation following prescribed routine or where the method of operation is obvious. Requires the ability to follow demonstrated steps and perform simple adjusting to produce to a general specification. Work typically involves operation of machinery or equipment that is unique to the application and does not require formal training in a trade. Typically requires a high school education or GED, or equivalent. All instructions typically given on the job. May inspect and test completed product. Work may involve frequent handling of moderate to heavy materials and may include walking or standing most of the time. Include helpers if no previous experience is required. Report machine tool or plastics machine operation elsewhere.
	Production Labor	15.11	General Heavy Production Labor	General production labor job. The job typically requires the ability to follow demonstrated directions, no diploma is required and all training is typically given on-the-job, or equivalent. Incumbents perform a variety of production duties, such as tending machines, handling product, visual sorting or inspection, packing, or performing other operations that can be learned on-the-job in a short time. Incumbents may use pallet jacks to move material in the work area. Work requires frequent moving, frequent exertion of moderate to heavy physical effort or frequent standing.
	Production Labor	15.12	General Light Production Labor	General production labor job. The job typically requires the ability to follow demonstrated directions, no diploma is required and all training is typically given on-the-job, or equivalent. Incumbents perform a variety of production duties, such as tending machines, handling product, visual sorting or inspection, packing, or performing other operations that can be learned on-the-job in a short time. Incumbents may use pallet jacks to move material in the work area. Work requires frequent moving, frequent exertion of moderate to heavy physical effort or frequent standing.
	Production Labor	15.21	Rough Grinder	Production rough grinding work requiring hand eye coordination and the ability to follow basic written instructions and simple diagrams. With readily available supervision, uses rotary or belt sanding tools to rough grind castings, remove burrs or finish weld seams. Work may include inspection of parts for voids in welds or casting. Work typically requires hearing protection and protective clothing and may be repetitive in nature. This job does not include polishers and buffers whose work is subject to close tolerances.
	Production Labor	15.31	Chemical Equipment Operator	Operates and controls a processing unit or series of units to effect desired chemical changes in basic substances in accordance with prescribed procedures. Charges materials in proper quantities into equipment and transfers same in accordance with processing sequences. Observe gauges, regulates control devices and obtains laboratory samples for testing. Maintains process records.
	Production Labor	15.35	Waste Water Treatment Operator	Handles, stores and disposes of hazardous material following all safety and environmental regulations and company standards. Drains and monitors the flow from process tanks and rinses waters to waste treatment area. Cleans process tanks and removes drained materials. Transports hazardous material to the proper storage area. Prepares process tanks for further use following detailed chemical makeup instructions.
	Production Labor	15.41	CNC Programmer I (Advanced)	Second of two levels of CNC programming. This role typically requires 3+ years of experience as a CNC Programmer. Incumbents use knowledge of machine operations to develop code to control machine operation. Incumbents prepare process plans, including positioning of carriage and/or tool, rate of feed, speed of rotation, tool changes, type of tool, sequence of operations and other variables. Incumbents may determine the suitability of a part for automation and may determine the appropriate machine assignments on the basis of efficiency and quality requirements. At this level, incumbents work with minimal supervision and may provide work training and direction to others. Assignments tend to be more complex, with unusual shapes, sizes, finishes and materials included in the mix. Short runs on valuable and complex parts may mean that there is less opportunity to use trial runs to fine-tune programs.
D	Production Labor	15.42	CNC Programmer II (Entry)	First of two levels of CNC programming. This role typically requires programming experience of less than 3 years or experience as a drafter, technician or machinist and specialized training. Strong math skills are required. Working from engineered drawings and specifications and using knowledge of machine operations, develops code to control machine operation. Incumbents prepare process plans, including positioning of carriage and/or tool, rate of feed, speed of rotation, tool changes, type of tool, sequence of operations and other variables. Incumbents may work directly with machines and machine operators to verify the accuracy and safety of programs. At this level, incumbents work independently on projects of moderate complexity, but have ready access to assistance from more experienced staff or supervisors.
	Production Labor	15.43	CNC Machining Center Operator I (Advanced)	Third of three levels of CNC machining center operator. The job typically requires 5+ years of combined formal training and experience, or equivalent. Requires a broad knowledge of machining techniques and familiarity with computer numerically controlled machine tool operating procedures. Setups involve familiarity with and understanding of program formats involving combinations of operations such as profile and contour milling, boring, recessing, turning, drilling, threading, etc., to the capacity of the machine and control factor. Performs advanced setup operations, adjusts and checks out programming and operates numerically controlled machine tools to perform a complex series of progressive machining operations on a diversified line of work to close and exacting tolerances and finish specifications requiring a high degree of skill. May set up machines for and instruct other operators. Checks parts for conformance to specifications. Operators may run more than one unit simultaneously.
	Production Labor	15.44	CNC Machining Center Operator II (Intermediate)	Second of three levels of CNC machining center operator. The job typically requires knowledge of machining techniques and methods and familiarity with computer numerically controlled machine tool operating procedures, plus the ability to follow written instructions and read blueprint specifications and 2+ years of experience, or equivalent. Sets up, adjusts and checks out programming, and operates numerically controlled machine tools to perform a series of progressive machining operations on repetitive work to close and exacting tolerances and finish specifications requiring considerable skill. Works from programming instructions, operational data and machine setup instructions defining and coding tool arrangements, material clamping methods, machine calibrations and console settings, for operations such as bore, mill, drill, face, thread and occasional profiling and contouring. Checks parts for conformance to specifications. Operators may run more than one unit simultaneously.
	Production Labor	15.45	CNC Machining Center Operator III (Entry)	First of three levels of CNC machining center operator. The job typically requires the ability to follow written instructions and read blueprint specifications, or equivalent. Operates and adjusts semi-automatic or automatic numerically controlled machine tools to perform standard and repetitive sequences of operations where programs are provided and setups are often made and maintained by others. Requires knowledge of operations include drilling, boring and milling, turning, etc., employing recognized tooling and procedures and where tolerances are close, but not difficult to maintain. Checks parts for conformance to specifications.
	Production Labor	15.51	CNC Wire EDM Specialist/Programmer	Experienced CNC wire EDM specialist/programmer. This role programs and operates wire Electrical Discharge Machining (EDM) machine to cut conductive materials with a thin (typically very thin brass wire) electrode that follows a programmed path. The job requires a vocational/technical diploma in machining, tool and die making, or mold making and 3+ years of related experience, or equivalent. Achieves complex configurations through development of machine control programs. May perform other machining operations using manual or CNC machine tools. Report experienced level incumbents who spend at least 50% of their work time performing EDM work.
	Production Labor	15.61	Lathe Operator I (Experienced)	Second of two levels of machine operator. This role requires 2+ years of machine operator experience, or equivalent. Sets up and operates engine or turret lathes or hand screw machines on wide variety of complicated production work, involving close tolerances and difficult set-ups. Either determines feeds, speeds, tooling and operation sequence for considerable range of difficult operations or sets up pursuant to feeds, etc., prescribed in drawings or other written specifications. Machines may have numeric controls.
	Production Labor	15.62	Lathe Operator II (Entry)	First of two levels of machine operator. This role requires math and problem solving skills equivalent to a high school education and less than 2 years of experience. Sets up and operates engine or turret lathe or hand screw machines, on a limited range of production work, involving close tolerances and set-ups which are exacting but not usually complex or difficult. Sets up machine where speeds, feeds, tooling and operation sequence are ordinarily prescribed. Machines may have numeric controls. Does not include repetitive work where others make set-ups.
	Production Labor	15.71	Machine Tool Operator I (Advanced)	Third of three levels of machine tool operator. The job typically requires the ability to follow written instructions and read blueprint specifications and 2+ years of experience, or equivalent. Under limited supervision, sets up and operates alternately more than one type of production machine tool such as grinders, millers, drill presses, lathes, etc., on complicated production work involving difficult operations, close tolerances, and difficult set-ups of parts of irregular shapes. Either determines feeds, speeds, tooling and operation sequence for considerable range of difficult operations or sets up pursuant to feeds, etc., prescribed in drawings or lay-outs. Machines may have numeric controls. Does not include employees engaged primarily to operate one classification of machine tool surveyed separately.
	Production Labor	15.72	Machine Tool Operator II (Experienced)	Second of three levels of machine tool operator. The job typically requires the ability to follow written instructions and read blueprint specifications and less than 2 years of experience, or equivalent. With readily available supervision, sets up and operates alternately more than one type of production machine tool such as grinders, millers, drill presses, lathes, etc., on a limited range of production work, involving close tolerances and set-ups which are exacting but not usually highly involved or difficult. Sets up machines where speeds, feeds, tooling and operation sequence are ordinarily prescribed. Machines may have numeric controls. Does not include employees engaged primarily to operate one classification of machine tool surveyed separately.
D	Production Labor	15.73	Machine Tool Operator III (Entry)	First of three levels of machine tool operator. The job typically requires the ability to follow written instructions and read blueprint specifications and little or no work experience, or equivalent. Under close supervision, operates alternately more than one type of production machine tool such as grinders, milling machines, drill presses, lathes, etc., on routine and repetitive operations. Set-ups are usually made by others. Speeds, feeds and tooling are prescribed. Machines may have numeric controls. Does not include employees engaged primarily to operate one classification of machine tool surveyed separately.
	Production Labor	15.81	Machinist I (Advanced)	Third of three levels of skilled machinist work. The job typically requires a technical degree and 5+ years of experience, or equivalent. Without technical supervision performs the most complex machining and fitting of all kinds of parts, tools, and machines in support of production operations or job shop machining. Lays out work from blueprints, sketches, and written specifications. Sets up and operates all available machine tools and performs progressive machining operations on work involving very close tolerances or unusual requirements. Determines operation sequences. Uses skillfully all machinists' hand tools and measuring instruments. Familiar with working properties of all materials. Programs CNC machine tools in the course of making parts. Fits and assembles where necessary. At this level machinists serve as technical resources for less experienced machinists. This is not a production machine tool operator.

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	Production Labor	15.82	Machinist II (Experienced)	Second of three levels of skilled machinist work. The job typically requires a technical degree and 2+ years of experience, or equivalent. Under limited supervision, performs complex machining operations in support of production operations or job shop machining. Operates various types of machine tools and performs progressive machining operations for metal parts, tools and machines with close tolerances or high finish requirements. Fits and assembles where necessary, using machinists' hand tools and measuring instruments. Has familiarity with working properties of various materials. May program CNC machines in the course of making parts. This is not a production machine tool operator.
	Production Labor	15.83	Machinist III (Entry)	First of three levels of skilled machinist work. The job typically requires a technical degree in machining and little or no work experience, or equivalent. Operates alternately more than one type of machine tool such as grinders, millers, drill presses, lathes, etc., on machining operations of moderate complexity. Projects have some diversity and may be in support of production operations or job shop machining. This is not a production machine tool operator.
	Production Labor	15.91	Precision Production Grinder I (Experienced)	Second of two levels of precision production grinder. This role, requires specialized training or experience and 3+ years of grinding experience. Under limited supervision and with minimal technical guidance, sets up and operates one or more types of precision grinding machines, such as surface, external, internal and centerless, on a variety of complicated production work having intricate recessing, unusual contours, or interrelated surfaces. Involves close tolerances and difficult set-ups of parts of irregular shapes. Either determines speeds, feeds and operation sequence or sets up pursuant to speeds, etc., prescribed in drawings or other written specifications. Selects and dresses wheels for varying materials and finish requirements. Does not include tool room work.
D	Production Labor	15.92	Precision Production Grinder II (Entry)	First of two levels of precision production grinder. This role, requires specialized training or experience of less than 3 years. With readily available supervision and technical guidance, sets up machines on standard operations where speeds, etc. are prescribed. Sets up and operates one or more types of precision grinding machines such as surface, external, internal and centerless, on a limited range of production work having ordinary recessing and contours. Involves close tolerances and set-ups which are exacting, but not highly involved or difficult. Selects wheels for a normal range of materials and finish requirements. Does not include tool room work.
	Production Labor	15.95	Lead Person	Under the direction of first and/or second line supervisors, leads production personnel in their functional area of responsibility. Ensures proper procedures are followed during production. Checks and arranges availability of required materials and communicates shift turnover. May give input to supervisors in evaluating production staff. Requires math and problem solving skills equivalent to a high school education and less than 2 years of work experience or equivalent.
	Inspection / Quality	16.11	CMM Programmer/Operator	Develops Coordinate Measuring Machine (CMM) programs, performs first piece and in process inspection of parts, and analyzes inspection data for compliance. Develops and maintain CMM work instructions, documentation of inspection results. Interprets blueprints and utilizes precision measuring equipment, works independently with minimal supervision. May assist in the training of other personnel. At this level, incumbents should have a working knowledge of geometric dimensioning and tolerancing (GD&T). This job requires a vocational/technical diploma and 3+ years of related experience, or equivalent.
	Inspection / Quality	16.21	Quality Inspector/Auditor I (Advanced)	Third of three levels of quality control inspector/auditor. The job typically requires high school level math and problem solving skills, course work in metrics and 4+ years of work experience, or equivalent. Following management guidelines, performs final inspection for quality, appearance and performance of complicated equipment, instruments or products, or of diversified parts and assemblies. Work may be highly diversified. May include auditing and qualifying vendors on location. Plans inspection procedures and may be required to devise unusual measuring or gauging set-ups. Uses a variety of precision measuring instruments including electronic devices. May use statistical tools to chart variance. Includes tool room inspectors.
	Inspection / Quality	16.22	Quality Inspector/Auditor II (Experienced)	Second of three levels of quality control inspector/auditor. The job typically requires high school level math and problem solving skills, course work in metrics and 2+ years of work experience, or equivalent. Under limited supervision performs diversified bench or floor inspection of a variety of standard or custom parts, products, or materials that are being produced in-house or received from vendors. Uses a variety of precision measuring instruments, including electronic devices. Checks color, finish, dimensions, hardness, density or other measurable or observable characteristics of material. Performs detailed first article inspections following the installation of new or revised molds and dies. May recommend, write, or modify sampling and inspection procedures. May use statistical tools to chart variance. Does not include tool room inspectors.
	Inspection / Quality	16.23	Quality Inspector/Auditor III (Entry)	First of three levels of quality control inspector. The job typically requires high school level math and problem solving skills and work experience of less than 1 year, or equivalent. With readily available supervision, performs repetitive inspection following standardized methods and procedures. Visually inspects or checks parts using a variety of precision measuring instruments or against fixed samples. Checks dimensions and finishes against blueprint or work order specifications. At this level, workers may perform finishing operations to correct rejected parts or assist with other production activities.
	Tool Room	17.11	Mold Maker I (Advanced)	Third of three levels of skilled mold maker. This role typically requires trade school and 6+ years of tool room experience, or equivalent. Requires a working knowledge of characteristics of alloy steel and other common metals and their heat treating processes. Under general supervision and without technical guidance, other than engineering input, performs the most difficult development work. Builds, restores, alters, and services molds of an extremely complex and precise nature used for molding plastic parts. Constructs molds where no design is available. Plans, designs, constructs or repairs a wide variety of highly intricate and complicated molds to extremely close tolerances. Selects allowances and devises mechanism detail. Works from complicated drawings and sketches. Uses advanced shop mathematics and all types of precision measuring instruments. Capable of troubleshooting to perfect molding operation. May provide training and technical guidance to others.
	Tool Room	17.12	Mold Maker II (Experienced)	Second of three levels of skilled mold maker. This role typically requires trade school and 3-6 years of tool room experience, or equivalent. Under limited supervision and with minimal technical assistance, builds, restores, alters, and services molds of a complex and precise nature used for molding plastic parts. Constructs complex units where design is available. Selects allowances and devises mechanism detail. Works from complicated drawings and sketches. Uses advanced shop mathematics and all types of precision measuring instruments.
	Tool Room	17.13	Mold Maker III (Entry)	Third of three levels of skilled mold maker. This role typically requires a technical degree in mold making and less than 3 years of work experience, or equivalent. With readily available supervision, builds, restores, alters, and services molds of a complex and precise nature used for molding plastic parts. Performs the more basic tool room machine operations. Projects have some diversity and may include assisting more experienced mold makers.
	Tool Room	17.21	Tool and Die Maker I (Advanced)	Third of three levels of tool and die maker. The job typically requires trade school and 6+ years of tool room experience, or equivalent. Under general supervision and without technical guidance, other than engineering input, performs the most difficult development work. Plans, designs, constructs or repairs a wide variety of highly intricate and complicated tools, dies, jigs, gauges, fixtures, to extremely close tolerances. Constructs tools where no design is available. Selects allowances and devises mechanism detail. Does highly skilled fitting, adjusting, and timing. Performs any tool room machine operation. Works from complicated drawings and sketches. Uses advanced shop mathematics and all types of precision measuring instruments. Typical work products include multi-station progressive dies, intricate compound dies of irregular shape, sub-press dies for parts of delicate outline and complex index milling fixtures.
	Tool Room	17.22	Tool and Die Maker II (Experienced)	Second of three levels of tool and die maker. The job typically requires trade school and 3+ years of tool room experience, or equivalent. Under limited supervision and with minimal technical guidance, performs difficult development work. Plans, designs, constructs or repairs a wide variety of intricate and complicated tools, dies, jigs, gauges, fixtures, to close tolerances. Constructs complex units where design is available. Selects allowances and devises mechanism detail. Does skilled fitting, timing and adjusting. Works from complicated drawings and sketches. Uses advanced shop mathematics and all types of precision measuring instruments. Typical work products include combination dies for parts of irregular contour, ordinary index milling fixtures, box type drill jigs with difficult locating or nesting features and complicated foot press and arbor press tools.
	Tool Room	17.23	Tool and Die Maker III (Entry)	First of three levels of tool and die maker, sometimes called apprentice. The job typically requires trade school and experience of less than 1 year. With readily available supervision and technical assistance, performs simple development work. Plans, constructs or repairs a variety of ordinary tools, dies, jigs, gauges, fixtures, to close tolerances. Performs difficult tool room machine operations. Works from complicated drawings and sketches. Uses shop mathematics and a variety of precision measuring instruments. Does skilled fitting, adjusting, etc. Typical work products include ordinary single and combination perforating and blanking dies, single position milling fixtures and box or stand type drill jigs.
	Tool Room	17.31	Tool Crib Attendant	Tool room stores attendant requiring familiarity with tooling and production equipment. The job typically requires reading and math skills equivalent to a high school education and 2+ years of shop experience, or equivalent. Issues tools to, and receives them from, production and tool room workers. Keeps records of receipt and issuance of tools. Visually inspects for obvious defects and reports to superiors or makes out repair tickets. May make minor repairs to equipment or clean tools between use. Does not include assembly parts and tool crib workers.
	Tool Room	17.41	Tool Room Machine Operator	Experienced tool room machinist, requiring 2 years of technical training and 2+ years of machine shop experience, or equivalent. Sets up and operates one or more types of machine tools, such as engine lathes, jig borers, grinding or milling machines, used in the construction or maintenance of tools, dies, jigs, fixtures and gauges. May specialize in operation of one machine or operate several machines. Involves difficult machining operations requiring close tolerances and complicated set-ups. Selects speeds, feeds, tooling, and operation sequence. Uses a variety of precision measuring instruments. May grind tooling and cutters.
	Tool Room	17.51	Die Setter	Sets up forging machines, such as forging presses, coining presses, drop hammers, forging rolls, and upsetters, following blueprint, work order, and data-chart specifications, and using hand tools and measuring instruments, such as rulers, squares, and gauges. Aligns and bolts specified dies to ram and anvil of presses and hammers. Installs impression and gripping dies and synchronizing cams on upsetting machines.

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	Welding	18.11	Welder I	Second of two levels of production welding. The job typically requires technical training in welding and 3+ years of related experience, or equivalent. May require special certification. Under limited supervision and minimal technical guidance, positions material to be welded and applies hand-eye coordination to achieve the desired weld. Materials welded may include steel, stainless, aluminum, or other alloys, and the methods may include gas welding, shielded metal arc, gas-lungsten arc, gas-metal arc or submerged arc. The variety of applications require an ability to plan, layout and perform diversified work, which may be characterized as short run production or job shop. Includes high pressure and code welding or other work involving critical safety and load requirements or welding where appearance is critical. Regulates heat and feed and may select electrodes, tips and rods. Works from more complex specifications, drawings, prints and welding symbols. May provide technical direction to others.
	Welding	18.12	Welder II	First of two levels of production welding. The job typically requires technical training in welding and experience of less than 1 year, or equivalent. With readily available supervision and technical guidance, positions material to be welded, using standard fixtures in most cases, and applies hand-eye coordination to achieve the desired weld. Materials welded may include steel, stainless, aluminum or various alloys and the methods may include gas welding, shielded metal arc, gas-lungsten arc, gas-metal arc or submerged arc, but the variety of applications tends to be limited to standard products and materials where plans are specified, welding positions are routine and work may be characterized as longer production runs. Regulates heat and feed and may select electrodes, tips and rods. Works from specifications, drawings, prints and welding symbols.
	Welding	18.21	Automatic Welding Machine Operator	Automatic welding machine operator, requiring technical training in welding and less than 2 years of related experience, or equivalent. Sets up and operates automatic welding machinery to perform repetitive welding operations. Adjusts clamping and positioning fixtures and feeding equipment so that components to be welded are properly positioned and secured. Adjusts variables such as welding speed, angle of arc, speed of movement, rate of wire feed, gas flow, current heat and other variables to achieve the desired weld. Inspects completed units and ensures that welds are free of voids and excess fill material. Adjusts automatic material handling equipment associated with the welding operation. Cleans and maintains equipment.
	Welding	18.31	Spot Welder	Production labor job requiring the ability to follow written instructions, diagrams or blueprints. Duties involve spot welding work on a variety of parts or products. Workers select electrodes and regulate current settings, time and pressure. Settings are usually specified for the application and characteristics of the materials and machine. Workers handle and position work with or without the use of fixtures. Supervision and technical guidance is readily available in most cases.
	Material Handling	19.01	Crater	General warehouse labor job. The job typically requires basic math skills and the ability to read shipping documents, crating diagrams, or equivalent, whose primary duty is to pack machinery, parts, etc., in crates and boxes for shipment. With readily available supervision, workers build crates and boxes according to specified dimensions or build non-standard crates following generally accepted methods, using care in bracing and blocking to eliminate shifting of product in transit. May wrap materials and apply protective coating. Workers typically use chop saws, power nailers, and various hand tools. Workers may use bar code readers, computer terminals or other electronic devices to track product as it is moved.
	Material Handling	19.05	Forklift Driver (Power)	General warehouse labor job. The job typically requires the ability to follow basic written and verbal instructions, such as bills of materials and shipping documents, or equivalent. With readily available supervision, workers operate a gas or electric powered forklift truck to move, stack, load, or unload materials in and about plant, warehouse, staging area, etc. Work may include using banding and shrink wrap machines. Workers may use bar code readers, computer terminals or other electronic devices to track product as it is moved.
	Material Handling	19.10	Material Handler and/or Warehouse Laborer	General warehouse labor job. The job typically requires the ability to read shipping documents, or equivalent. Working under close supervision, incumbents load and unload trucks and move material within the warehouse or production facility. Work includes pulling orders together and assembling them for shipment to customers or distribution centers. Work may include using banding and shrink wrap machines. Work may include gathering or distributing product or materials within the production area. Some packaging may be required. Incumbents will typically use pallet jacks and may occasionally use a riding forklift. Workers may use bar code readers, computer terminals or other electronic devices to track product. Do not report workers with fork truck driving as a primary focus or workers with greater emphasis on shipping and receiving clerical/administrative activities.
	Material Handling	19.15	Order Filler	General warehouse labor job. The job typically requires the ability to read shipping documents, or equivalent, whose primary duty is to fill orders from stored merchandise in accordance with specifications on customers' orders or other instructions. In addition to filling orders and indicating items filled or omitted, workers may keep records of outgoing orders, requisition additional stock, report short supplies to supervisor, and perform other related duties. Workers may use bar code readers, computer terminals or other electronic devices. May transport filled orders to shipping or delivery platform using hand carts or power lift trucks.
	Material Handling	19.20	Packer	General warehouse or production labor job. The job typically requires the ability to read production or shipping documents and no previous experience, or equivalent. Primary duty is to place finished products in containers (cases) for shipping or storage. The specific operations are dependent upon the type, size, and number of units to be packed, the type of container employed and the method of shipment. Work may involve one or more of the following: knowledge of various items of stock in order to verify content selection of appropriate type and size of container; using appropriate packing material to prevent breakage or damage; closing and sealing container; and applying labels or entering identifying data on container. Workers may use bar code readers, computer terminals or other electronic devices to track product. Packers whose primary duty is to make wooden boxes or crates should be reported as Craters rather than Packers.
	Material Handling	19.25	Shipping and/or Receiving Clerk	Warehouse clerical/administrative job. The job typically requires reading, math and communication skills equivalent to a high school education and 1+ years of related experience, or equivalent. Primary duties typically include shipping goods; preparing records of goods shipped and bills of lading; post weight and shipping charges; keeps files of shipping records; receives incoming shipments of merchandise or other materials; verifies correctness of shipments against bills of lading, invoices, etc.; keeps records of goods received; reports damaged goods and shortages; routes goods to the proper departments. Workers may use bar code readers, computer terminals or other electronic devices. Work may include material handling.
	Material Handling	19.30	Stockroom Attendant	Production support job requiring reading and math skills equivalent to a high school education. Duties include receiving, storing and issuing equipment or material in a stockroom or storeroom. Checks incoming material against requisitions or invoices; keeps stock in orderly arrangement; fills orders according to requisitions; may assist in inventory as required. May move material to other plant locations.
	Traffic & Fleet	20.11	Driver I	Drives a tractor with one or more trailers (18-wheel) on public streets or highways to transport materials or equipment between states (over-the-road). The job typically requires a valid class A commercial driver's license (CDL) and passage of Federal Motor Carrier Safety Regulations exam and Department of Transportation (DOT) physical. Drivers may or may not participate in loading, but are responsible for securing the load using approved devices and methods. Convert pay into an average hourly rate if pay is based on mileage or has a mileage component.
	Traffic & Fleet	20.12	Driver II	Drives a tractor with one or more trailers (18-wheel) on public streets or highways to transport materials or equipment within a city or state (local). The job typically requires a valid class A commercial driver's license (CDL). Drivers may or may not participate in loading, but are responsible for securing the load using approved devices and methods. Convert pay into an average hourly rate if pay is based on mileage or has a mileage component.
	Traffic & Fleet	20.13	Driver III	Drives a motor truck over 26,000 pounds gross vehicle weight (GVW), or a bus, school bus or a smaller vehicle (if transporting hazardous materials or more than 200 gallons of liquid fertilizer or petroleum) on streets or highways to transport materials, merchandise, equipment, or people. The job typically requires a valid commercial driver's license (CDL). May load or unload truck and is frequently assisted by a helper. Does not include driver-salespersons or over-the-road drivers. Convert pay into an average hourly rate if pay is based on mileage or has a mileage component.
	Traffic & Fleet	20.14	Driver IV	Drives a motor vehicle (automobile, utility van, pickup, light truck, etc.) up to 26,000 pounds gross vehicle weight (GVW) on the public highways to transport non-hazardous materials or equipment. The job typically requires a valid driver's license, but not a commercial driver's license (CDL). Typically loads or unloads the vehicle. Convert pay into an average hourly rate if pay is based on mileage or has a mileage component. Does not include bus drivers.
	Traffic & Fleet	20.17	Tankwagon Driver	Drives a tankwagon (4,500 or under gallons) on public streets or highways to transport hazardous liquid (i.e. fuel). The job typically requires a commercial driver's license (CDL), a minimum of 2 years experience in the transportation of hazardous liquids, plus knowledge of tractor/trailer operations. Drivers are responsible for safely loading trucks and distributing product to customers using approved devices and methods. Convert pay into an average hourly rate if pay is based on mileage or has a mileage component.
	Traffic & Fleet	20.18	Transport Driver	Drives a tractor with a trailer (over 4,500 gallons) on public streets or highways to transport hazardous liquid (i.e. fuel). The job typically requires a commercial driver's license (CDL), a minimum of 2 years experience in the transportation of hazardous liquids, plus knowledge of tractor/trailer operations. Drivers are responsible for safely loading trucks and distributing product to customers using approved devices and methods. Convert pay into an average hourly rate if pay is based on mileage or has a mileage component.
	Traffic & Fleet	20.21	Auto Mechanic	Maintains service operations by inspecting and maintaining vehicles. Responsible for keeping equipment available for use by inspecting and performing diagnostic testing of vehicles; completing preventive maintenance such as, engine tune-ups, oil changes, tire rotation and changes, wheel balancing, replacing filters. Maintains vehicle functional condition by listening to operator complaints; conducting inspections; repairing engine failures; repairing mechanical and electrical systems malfunctions; replacing parts and components; repairing body damage. Requires trade school or specialized certification and 3+ years of experience, or equivalent.
	Scheduling	21.01	Expediter	Experienced level expediting. The job typically requires high school graduate math and problem solving skills and 2+ years of related experience, including familiarity with company processes, or equivalent. Duties include locating customer orders and following through to expedite the processing of orders. Incumbents work closely with customer service, production supervisors and schedulers to ensure customer satisfaction and to minimize process disruption. Work requires frequent interaction with others. Incumbents follow precedent and seek supervisory assistance to resolve conflicts.

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	Scheduling	21.10	Production Planner/Scheduler (Master)	Third of three levels of production scheduling. This role is responsible for the technical aspects of overall coordination of materials, manpower and machine schedules for a production operation; at this level incumbents are usually exempt. The job typically requires a bachelor's degree and 5+ years of experience, or equivalent. Duties include merging subordinate schedules, often prepared by others, into an overall plan that prioritizes operations based on customer need and operations efficiencies. Requires an understanding of client and production priorities and coordination with account managers and/or production supervisors. Develops the master schedule, using information gathered from multiple sources, to drive daily and weekly materials and production schedules of the facility. Works under management guidance and has total project responsibility for the larger or more complex projects requiring advanced analysis. Provides training and direction to less experienced staff. Do not include Material Planners in this position.
	Scheduling	21.11	Production Planner/Scheduler (Experienced)	Second of three levels of production scheduling. This role is responsible for the technical aspects of scheduling materials, manpower and machines for a production operation. The job typically requires an associate's or bachelor's degree and 3+ years of experience, or equivalent. Duties include preparation of daily and weekly schedules for assigned product lines or departments and for coordination with the overall master schedule. Communicate regularly with purchasing and production staff to adjust schedules to accommodate changes in machine or material availability or staffing. Works under limited supervision and has significant responsibility for efficiency of operations. May provide training and direction to less experienced staff. Do not include Material Planners in this position.
	Scheduling	21.12	Production Planner/Scheduler (Entry)	First level of three levels of production scheduling work; at this level incumbents are non-exempt. The job typically requires high school graduate level math and problem solving skills and 2+ years of related training and experience. In small companies the individual may be the sole individual performing scheduling duties. In medium and larger companies, the incumbent may work on a segment of the scheduling function, with responsibility for assigned department(s) or product lines. Incumbents communicate frequently with line management and customer service staff regarding the status of orders or projects. Do not include Material Planners in this position.
	Facilities Management	22.05	Maintenance Manager, Plant	Manager responsible for the operation of a department involved in the maintenance, repair or replacement of plant equipment and systems. The job typically requires a Bachelor's degree and 10+ years of experience, or equivalent. Monitors the operation of plant equipment and systems to minimize unplanned downtime. Provides recommendations to management regarding modifications of existing equipment and facilities, replacement of existing equipment to improve operations, and reducing maintenance costs. Utilizes maintenance management systems to track work orders, parts inventories and the maintenance history of plant equipment. Assigns work to subordinate maintenance supervisors.
	Facilities Management	22.11	Building/Grounds Maintenance Mechanic I (Exp.)	Second of two levels of building/grounds maintenance. The job typically requires a technical degree, or equivalent, and 3+ years of experience. Work involves planning and performing work relating to repair of buildings, mechanical and/or electrical equipment; installing and aligning new equipment; and repairing building, floors, stairs, etc. Works independently on projects of greater complexity and may provide direction to an assistant or to less experienced maintenance staff. This is not a janitor job even though janitor duties may be performed a minor amount of the time.
	Facilities Management	22.12	Building/Grounds Maintenance Mechanic II (Entry)	First of two levels of building/grounds maintenance mechanic. The job typically requires a technical school degree, or equivalent. Work involves planning and performing work relating to repair of buildings, mechanical and/or electrical equipment; installing and aligning new equipment; and repairing building, floors, stairs, etc. Works independently on projects of limited complexity or as an assistant to more experienced maintenance staff on more difficult projects. This is not a janitor job even though janitor duties may be performed a minor amount of the time.
	Facilities Management	22.21	Electrician I (Master)	Third of three levels of electrician. The job typically requires completion of two years of formal technical school training and 5+ years of job experience, or equivalent, and successful completion of the board exam for licensing as a master electrician. Approves wiring plans for new installations. Plans and performs jobs of installing and maintaining a variety of electrical equipment such as control panels, switchboards, junction boxes, switches, etc. Connects and disconnects electric powered machines; repairs motors and generators; replaces fuses and sets circuit breakers on high and low tension circuits. Diagnoses electrical trouble. Uses hand and power tools. Works from wiring diagrams. Planning may involve determination of method and sequence of operation and selection of materials to be used, establishment of work procedures. Works independently and may provide direction to assistants or to less experienced electricians.
	Facilities Management	22.22	Electrician II (Journey)	Second of three levels of electrician. The job typically requires completion of two years of formal technical school training and 3+ years of job experience, or equivalent, and successful completion of the board exam for licensing as a journey-level maintenance electrician. Plans and performs jobs of installing and maintaining a variety of electrical equipment such as control panels, switchboards, junction boxes, switches, etc. Connects and disconnects electric powered machines; repairs motors and generators; replaces fuses and sets circuit breakers on high and low tension circuits. Diagnoses electrical trouble. Uses hand and power tools. Works from wiring diagrams. Planning may involve determination of method and sequence of operation and selection of materials to be used. Works independently and may provide direction to an assistant or to less experienced electricians.
	Facilities Management	22.23	Electrician III (Assistant)	First of three levels of electrician work. The job typically requires less than 1 year of formal technical training, or equivalent. Under close supervision assists others in installing and maintaining electrical equipment such as large control panels, switchboards, junction boxes, switches, motors, etc. Tests circuits with testing equipment and reports readings for diagnosis by others. Under direction, performs wiring of ordinary light circuits; setting circuit breakers; repairing switches, small motors and simple starting and control devices; replacing lights and fuses; and minor trouble shooting. Uses hand and power tools. May work from simple wiring diagrams.
	Facilities Management	22.41	Operating Engineer HVAC	Heating, ventilation and air conditioning technician. The job typically requires formal technical training, 2+ years of experience and a class 2-B or higher boiler operator's license, or equivalent. Operates and maintains equipment such as steam boilers, heat pumps, air conditioning, refrigeration, turbines, generators, motors, and ventilating equipment. Performs maintenance and minor repairs on boilers and equipment and keeps records of fuel consumption and other required data. Adjusts and calibrates pneumatic and electronic controls.
	Facilities Management	22.51	Plant Janitor/Sanitation	General labor job associated with plant or facility sanitation duties. The job typically requires the ability to follow basic verbal and written instructions, such as the ability to read and follow label instructions on cleaning supplies. Duties include cleaning walls, floors, equipment, or any other areas of the facility. Duties include disposing of waste, sanitation of facilities and equipment, maintenance of lighting, and other related facilities and grounds duties. Incumbents may assist maintenance mechanics with maintenance of equipment. Work may include moderate to heavy lifting. Do not report office maintenance staff.
	Facilities Management	22.61	Experienced Heavy Equipment Operator	Uses a wide range of equipment including excavators, bulldozers, backhoes, compactors, loaders, and road graders. Conducts pre-operational inspections, utilize local site drawings, and estimate the amount of material to be used as well as other area essential items critical to the success of the project. Requires specialized training and 3+ years of heavy equipment experience, or equivalent. A CDL license and OSHA certificate is required.
	Facilities Management	22.71	Food Sanitation Worker	Responsible for the sanitation of food processing equipment. Dismantles, cleans, sanitizes, and assembles processing equipment following established plant procedures. Reports damaged or worn equipment. Required to know all facets of cleaning procedures or processing equipment to include vats, work tables, conveyors, machines, mills, and packaging equipment; also, cleaning procedures of the general plant. Responsible for safe handling, correct measurement, and proper usage of cleaning chemicals for sanitation. Responsible for quality and quantity, and inspection of own work. May be required to perform minor maintenance on malfunctioning valves and lines, such as replace leaking O-rings, replace leaking line gaskets. May record inventories of equipment and/or collect and inspect charts.
	General Executive	40.001	Chief Executive Officer	Determines the basic objectives of the organizational unit; formulates plans and policies and allocates resources for the achievement of these objectives. Interprets and applies policies established by the owners of the enterprise or their representatives (Bd. of Directors, Trustees, etc.). Organizes the unit and determines allocation of duties and authorities to subordinates. Exercises controls to see that objectives are achieved in accordance with basic organization policy. Fully accountable for the results of the activity of the organizational unit. This is usually a single incumbent position.
	General Executive	40.002	Chief Operating Officer	Directs and coordinates the activities of the line and staff components of the organizational unit toward the achievement of established objectives. Is accountable for the full range of operations of the organizational unit, providing operational guidance and analyzing and appraising the effectiveness of all operations. Acts as Chief Executive in the absence of the Chief Executive Officer. This position reports to Chief Executive Officer, if your Chief Operating Officer is also your CEO, please report position under CEO only.
	General Executive	40.003	Chief Executive - Multi Function Responsibility	Directs and coordinates the activities of major segments of the line and/or staff components of the organizational unit toward the achievement of established objectives. Is accountable for the operations of two or more major functions of the organizational unit, providing operational guidance to the executives in charge of these functions and analyzing and appraising the effectiveness of their operations. Examples of this position might include: Administrative Vice President (typical subordinates being the Financial-Accounting Executive, the Human Resources Executive, the General Counsel, etc.), Executive Vice President (typical subordinates being the Production-Operations Executive, Procurement Executive, Marketing-Sales Executive, etc.) and similar titles with any combination of major line and/or staff functions as subordinates. This position is not the Chief Corporate Executive or Chief Operating Officer but may report to one of these positions.
	General Executive	40.004	Chief Operations Executive – Non-Manufacturing	Responsible for planning, controlling and coordinating the entire range of activities of the organizational unit associated with the non-manufacturing function. Coordinates and adjusts organizational processes and facility operations as needed to ensure the smooth execution of policies and procedures. Typical position titles include: Vice President of Non-manufacturing, Vice President of Operations, Director of Operations, etc.
	General Executive	40.005	Chief Manufacturing Executive	Responsible for planning, controlling, and coordinating the entire range of manufacturing activities of the organization. Responsible for all related manufacturing activities such as production functions, manufacturing or process engineering, plant and facility engineers, industrial engineering, production scheduling, inventory control, quality control.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Accounting / Financial	41.000	Chief Financial Officer	This is the top finance position where the function is at a senior executive level and is part of the executive cabinet. The job typically requires a degree in Accounting or Finance and 10+ years of experience as a Controller or equivalent management level experience. A C.P.A. certification is commonly required. Directs and coordinates organizational activities related to accounting, budgeting and financial reporting/growth. Monitors cash balances and cash forecasts to ensure alignment with business objectives. Reviews and analyzes financial results and makes strategic and tactical recommendations to improve results. Identifies and complies with legal requirements and government reporting regulations. The CFO directs all accounting staff usually through subordinate staff. May also be responsible for administration, facilities, or other operational functions. Typically reports directly to the CEO and will develop and set the financial business plan subject to ratification by the executive committee, CEO, or the Board of Directors.
	Accounting / Financial	41.001	Controller (Corporate)	Reports to Top Financial Officer and directs financial affairs of an organization. Prepares or directs preparation of reports which summarize and forecast company business activity and financial position in areas of income, expenses, and earnings, based on past, present, and expected operations. Establishes, or recommends to management, major economic objectives and policies for company or subdivision.
	Accounting / Financial	41.002	Controller (Plant/Single Location)	Top manager in charge of accounting with responsibility for a single plant or facility that is not the sole corporate or divisional operation. The job typically requires a bachelor's degree in accounting and 8+ years of experience, or equivalent. Under direction from the General Manager, Plant Manager, CFO, or Corporate Controller, the incumbent is responsible for all local accounting activities, including budget, financial forecasting, statistical reports, audits, tax activities, etc. The incumbent supervises directly, or through subordinate supervisors, all accounting staff at the location.
	Accounting / Financial	41.005	Financial/Budget Analysis Manager	Manager level of professional analyst work. The job typically requires a bachelor's degree in business with 8+ years of experience or a MBA and 5+ years of experience, or equivalent. Incumbents work in one or more areas of financial, business or budget analysis under the direction of senior management or executives. Duties include directing the compilation of financial data mined from multiple sources, such as sales, production, accounting, public sources or vendors and subsequent analysis of that data to produce business information used to support decisions. Incumbents at this level typically review the work of others and are able to readily identify questionable report findings. Directs the verification of data and report conclusions. Work assignments are of the greatest difficulty and largest financial impact. Recommendations may heavily influence decisions to buy or sell businesses or to invest in, or withdraw from, business lines. Provides full supervision and work direction to professional and clerical staff.
	Accounting / Financial	41.008	Financial/Budget Analyst I (Advanced)	Third of three levels of professional analyst work. The job typically requires a bachelor's degree in business with 5+ years of experience or a master's of business administration and 2+ years of experience, or equivalent. Incumbents work in one or more areas of financial, business or budget analysis under the direction of management. Duties include research, selection, and compilation of financial data from multiple sources, such as sales, production, accounting, public sources or vendors and subsequent analysis of that data to produce business information used to support decisions. Data is often difficult to obtain and may be diluted with unnecessary data points. Identifies questionable data and may then direct others in verifying the accuracy of data. Work assignments are of the greatest difficulty and largest financial impact. Provides work leadership and direction to other professional and clerical staff with respect to project approach and identification of project tasks.
	Accounting / Financial	41.009	Financial/Budget Analyst II (Experienced)	Second of three levels of professional analyst work. The job typically requires a bachelor's degree in business with 3+ years of experience or a master's of business administration, or equivalent. Incumbents work in one or more areas of financial, business or budget analysis under the direction of management. Duties include research, selection, and compilation of financial data from multiple sources, such as sales, production, accounting, public sources or vendors and subsequent analysis of that data to produce business information used to support decisions. May verify the accuracy of data. Work assignments are of greater difficulty or larger financial impact than those given to first level incumbents.
	Accounting / Financial	41.010	Financial/Budget Analyst III (Entry)	First of three levels of professional analyst work. The job typically requires a bachelor's degree in business with less than 1 year of experience, or equivalent. Incumbents work in one or more areas of financial, business or budget analysis under the direction of senior staff or management. Duties include compilation of financial data from multiple sources, such as sales, production, accounting, public sources or vendors and subsequent analysis of that data to produce business information used to support decisions. May verify the accuracy of data. At this level most work is subject to close review by senior staff.
	Accounting / Financial	41.015	Risk Manager	Manager responsible for controlling exposure of the organization to losses associated with personal injury, products liability, property damage or other areas. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Develops and recommends to senior management risk management policies for the organization. Seeks to identify and mitigate exposure to loss through prevention of loss and purchase of insurance product. Duties include regular auditing of operations, facilities and practices to identify potential problems and monitoring industry experiences with regard to liability. Works closely with insurance organizations specializing in property and casualty and/or workers compensation coverage and attempt to secure favorable insurance rates when insurance is deemed appropriate. May supervise safety and/or workers compensation staff.
	Accounting / Financial	41.017	Portfolio Manager	Manager of portfolio administration in an organization, typically requiring a graduate degree or professional certification (CFA) and 5+ years of related experience. Responsible for the management and trading of one or more asset classes within an organization's investment portfolio to achieve desired portfolio results and other corporate objectives. Develops the specific trading strategy, identifies product/name/sector focus and relative value trading opportunities. Monitors and analyzes existing portfolio holdings on an ongoing basis to identify risk and return opportunities and develop sales/asset swap focus. Ensures compliance with policy limits, rules and regulations. Strong understanding of finance/capital markets. Applies broad technical knowledge and fundamental business concepts.
	Accounting / Financial	41.020	Cost Accounting Manager	Manager responsible for the operation of a department focused on cost accounting. The job typically requires a bachelor's degree in accounting and 8+ years of experience, or equivalent. This job typically reports to a CFO or Controller. The incumbent manages the preparation of cost accounting reports, designs and implements cost control procedures, oversees the recording and calculation of unit cost for products or services related to specific jobs or projects and produces cost accounting or operating reports for use by management. In addition, the incumbent examines any costs that seem contrary to past experience. Incumbents at this level typically provide full supervision and work direction to professional and clerical staff.
	Accounting / Financial	41.025	Cost Accountant I (Advanced)	Third of three levels of professional cost accounting work. The job typically requires a bachelor's degree in accounting and 5+ years of experience, or equivalent. Under direction from management and using independent judgment analyzes financial data obtained through studies to determine effects of costs on business. Analyzes changes in product design, raw materials, manufacturing methods, or services provided, to determine effects on costs. Compares actual cost to estimates and identify reasons for variances. Analyzes actual manufacturing costs and prepares periodic reports comparing standard costs to actual production costs. Provides management with detailed reports for use in making business decisions and controlling expenditures. May lead major projects and/or direct the work of professional cost accounting staff.
	Accounting / Financial	41.026	Cost Accountant II (Experienced)	Second of three levels of professional cost accounting work. The job typically requires a bachelor's degree in accounting and 2+ years of experience, or equivalent. Under limited supervision, incumbents conduct and analyze cost audits to determine costs of business activity, such as raw material purchases, inventory, and labor. Incumbents analyze data obtained and organize results into management reports using standard spreadsheet or database software programs. Analysis includes review of changes in product design, raw materials, manufacturing methods, or services provided, to determine effects on costs. Provides management with reports specifying and comparing factors affecting prices and profitability of products or services. Incumbents at this level may direct the work of clerical cost accounting staff.
	Accounting / Financial	41.027	Cost Accountant III (Entry)	First of three levels of professional cost accounting. The job typically requires a bachelor's degree in accounting and less than 1 year of experience, or equivalent. Under general supervision, incumbents apply principles of cost accounting to conduct studies that provide detailed cost information for use by management. Incumbents collect data from multiple sources and compute the costs of business activity, such as raw material purchases, inventory, and labor. Incumbents analyze data obtained and organize results into management reports using standard spreadsheet or database software programs.
	Accounting / Financial	41.030	General Accounting Manager	Accounting manager job with responsibility for operation of a department focused on general accounting functions. The job typically requires a bachelor's degree in accounting with 8+ years of experience, or equivalent. This job typically reports to a CFO or Controller. Responsible for the application of principles of accounting to install and maintain the general accounting system, including preparation of reports and statistics reflecting assets, liabilities, financial transactions, earnings, profits, cash balances, and other financial results. Maintains accounts and records of disbursements, expenses and tax payments. Prepares and files tax returns and other reports to government agencies; maintains insurance and property records. Supervises and directs work of professional and clerical staff.
	Accounting / Financial	41.031	General Accounting Supervisor	First level of supervision of the accounting area. The job typically requires an associate's degree in accounting and 5+ years of experience, or equivalent. Responsible for the supervision of non-exempt employees who maintain general and subsidiary ledgers of the facility, prepares operating and financial statements, and reconcile bank statements. Other subordinate functions may include fixed asset control and depreciation, accrual to meet anticipated liabilities, preparation of general tax reports such as those for sales, payroll and personal property taxes, and payables/receivables. Report supervisors of professional accountants as General Accounting Manager.
	Accounting / Financial	41.032	Accountant I (Advanced)	Third of three levels of professional general accounting work. The job typically requires a bachelor's degree in accounting and 5+ years of experience, or equivalent. The job may also be referred to as Senior Accountant or Staff Accountant. Under direction from management and using independent judgment, performs advanced and specialized accounting assignments, usually involving complex and confidential data. Obtains and analyzes financial information to prepare reports, statements and recommendations. Provides work leadership and direction to other accountants and clerical workers. May also provide special project assistance to the CEO, Controller or Accounting Manager.
	Accounting / Financial	41.033	Accountant II (Experienced)	Second of three levels of professional general accounting work. The job typically requires a bachelor's degree in accounting and 2+ years of experience, or equivalent. Under limited supervision, analyzes financial information detailing assets, liabilities, and capital, and prepares balance sheet, profit and loss statement, and other reports to summarize current and/or projected company financial position(s). May establish, modify, document, and coordinate implementation of accounting and accounting control procedures. Typically uses standard spreadsheet and database software or an accounting applications package designed for general accounting. May direct and coordinate activities of other accountants and clerical workers performing accounting and bookkeeping tasks.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Accounting / Financial	41.034	Accountant III (Entry)	First of three levels of professional accounting work. The job typically requires a bachelor's degree in accounting and less than 1 year of experience, or equivalent. Under general supervision, applies principles of accounting to record financial information and prepare financial reports. Duties include compiling and classifying financial information, preparing entries to accounts and documenting business transactions. Other duties include auditing contract terms, orders, and vouchers and/or preparing reports to substantiate individual transactions prior to settlement. Typically uses standard spreadsheet and database software or an accounting applications package designed for general accounting. May provide technical direction to clerical staff.
	Accounting / Financial	41.035	Accounting Clerk I (Advanced)	Third of three levels of accounting clerical work. The job typically requires 5+ years of accounting training and experience, or equivalent. This job may be called Accounting Technician or Senior Accounting Clerk. Incumbents at this level are qualified to work in all phases of accounting. However, in a large organization work may be specialized. Incumbents make non-routine choices within established precedent and with limited supervision. A higher level of computer skill is required, including mastery of the internal accounting package and strong spreadsheet skills. At this level, incumbents will assist with monthly trial balances and custom report generation involving intermediate levels of financial analysis using generally prescribed procedures. Incumbents may provide technical direction and work review to lower level accounting staff, but do not provide complete supervision. Do not report staff with four-year degrees in accounting or a closely related field.
	Accounting / Financial	41.036	Accounting Clerk II (Experienced)	Second of three levels of accounting clerical work. The job typically requires a general understanding of accounting principles commensurate with 2+ years of accounting training or experience, or equivalent. In larger departments this level may specialize in accounts payable, accounts receivable or another area of accounting. Incumbents make routine choices within established procedures. Incumbents perform basic troubleshooting to reconcile account balances and inquiry to obtain missing information or verify unusual data. An intermediate level of computer skill is required, usually involving use of an accounting software package and spreadsheets to enter, compile or extract data. Work is relatively independent, with supervision available to address non-routine questions.
	Accounting / Financial	41.037	Accounting Clerk III (Entry)	First of three levels of accounting clerical work. The job typically requires reading, communication and math skills commensurate with a high school education or GED and no previous accounting experience, or equivalent. Work is task oriented, routine and repetitive, such as matching bills to purchase orders or entering data. Much of the time is spent using a keyboard. Follows instructions and is subject to close supervision.
	Accounting / Financial	41.040	Accounts Payable Clerk	Performs any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounts payable records.
	Accounting / Financial	41.041	Accounts Receivable Clerk	Performs any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in processing records for advance or final billings.
D	Accounting / Financial	41.043	Contract Administrator	Responsible for the preparation of proposals, pricing consultation, contract negotiation, contract finalization, internal project setup, invoicing of projects, and contract change orders. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Evaluates contract performance to determine necessity for amendments or extensions of contracts. Advises on the approval or rejection of requests for recommendations from contract specifications and delivery schedules. Analyzes price proposals, financial reports, and other data to determine appropriate prices.
	Accounting / Financial	41.045	Payroll Supervisor/Manager	Manager or Supervisor responsible for the payroll function of the organization. The job typically requires a bachelor's degree in accounting, public administration, business administration, or a related field, and 3+ years of related experience, or equivalent. This role is often found in larger organizations and those with multiple locations, is responsible for the supervision of employees who perform payroll functions, including management of external service provider relationships. Duties include: maintaining necessary payroll records; calculating (or preparing for calculation) payrolls from original approved time records; delivering paychecks; balancing, controlling, and preparing summaries; debiting the appropriate accounts; calculating payroll deduction payments; computing and delivering W-2 forms; making determinations regarding application of wage and hour law and Davis Bacon type laws; and prepares all required reports. Do not report those with significant responsibility other than payroll responsibility.
	Accounting / Financial	41.050	Payroll Supervisor/Administrator	The Payroll Supervisor/Administrator provides leadership of the payroll function. The job typically requires some technical training in accounting and payroll practices beyond high school and 5+ years of experience in accounting and payroll processing. Under direction of an accounting or human resource manager, this job is responsible for maintenance and implementation of the payroll system, including management of external service provider relationships. Responsible for supervision of employees who maintain employee information necessary for payroll calculation (such as base rate, number of exemptions, eligibility for shift premium, etc.) and who prepare payroll. Subordinate employees compile time cards, job tickets or other source records all information necessary to calculate earnings for each pay period, including base pay, overtime pay and any incentive pay. Makes determinations regarding application of wage and hour law and oversees preparation of reports of earnings, taxes, and deductions.
	Accounting / Financial	41.051	Payroll Clerk I	Second of two levels of payroll clerical work. The job typically requires reading, communication and math skills commensurate with a high school diploma or GED and 3+ years of related training and experience, or equivalent. Incumbents follow standard procedures in making a variety of entries and computations from data on employee time cards or computer entries. Work includes entering rate changes, totaling hours and distributing or allocating costs; checking computations of timekeepers and researching shortage claims. Work may include calculating total earnings, overtime, taxes, withholding for premiums and savings and similar factors. Work may include coordinating with an outside payroll service to produce calculations, print checks and prepare total payroll reports. Work may also include calculating commissions, administering executive compensation and record maintenance of short and long-term incentive plans. May provide work direction or check the work of less experienced payroll staff.
	Accounting / Financial	41.052	Payroll Clerk II	First of two levels of payroll clerical work. The job typically requires reading, communication and math skills commensurate with a high school diploma or GED and less than 1 year of related training and experience, or equivalent. Incumbents follow standard procedures in making a variety of system entries and computations from data on employee time cards or computer entries. Work includes entering rate changes, totaling hours and distributing or allocating costs; checking computations of timekeepers and researching shortage claims. Work may include calculating total earnings, overtime, taxes, withholding for premiums and savings and similar factors. Work may include coordinating with an outside payroll service to produce calculations, print checks and prepare total payroll reports. Much of the time is spent using a keyboard. Incumbents may use specialized software packages to enter and compute payroll. Incumbents follow standard procedures and have readily available supervision.
	Accounting / Financial	41.055	Tax Manager	Manager responsible for operation of a department focused on the preparation of federal, state and local tax returns. The job typically requires a bachelor's degree with 8+ years of experience, or equivalent. Plans, reviews and assists in all phases of tax research and planning, compliance, audits, property value negotiations, and business transactions entered into by the company. Ensures organization compliance with all federal, state and local tax laws and regulations. Minimizes tax liability through application of tax laws and regulations permitting alternate treatment of taxable items. Managerial tax management / compliance position that oversees all tax staff. Develops, installs, and maintains reporting systems which provide control of tax expenditures and marketing, production and labor, maintenance, or project activities. Interpret accounts and records to management.
	Accounting / Financial	41.057	Tax Accountant	Experienced level of tax accountability. The job typically requires a bachelor's degree and 3+ years of related experience, or equivalent. Prepares assigned federal, state and local income tax returns, sales and use tax and other business tax returns. Maintains tax accounting records, effective tax rates, and prepare tax related reports for financial, regulatory or other purposes, and responds to audit document requests. Prepares and reviews tax depreciation reports and other activities associated with the assimilation of fixed asset data for tax return preparation purposes. Ensures compliance with GAAP and regulatory requirements. Participates in the calculation of quarterly estimated tax payments. Generally works under limited supervision and with independent judgment and discretion.
	Accounting / Financial	41.060	Audit Manager	Position typically requires a Bachelor's degree in Accounting or Finance. An MSA or MBA may be required as well. CIA and/or CPA designation also required and 5 to 10 years of audit experience or equivalent. Intermediate knowledge of Audit, Financial and SAP Financials is expected. The Audit Manager manages a team of senior and staff audit professionals. The Audit Manager typically reviews the work of the senior and staff audit professionals. Duties may include but are not limited to training and mentoring. Individuals are typically responsible for reviewing work papers, reports, financial statements, and SEC documents. Individuals consult with engagement teams on how to address technical issues.
	Accounting / Financial	41.065	Auditor I (Advanced)	Third of three levels of professional auditor work. The job typically requires a bachelor's degree in accounting and 5+ years of experience, or equivalent. Examines and analyzes accounting records to determine the financial status of an establishment and compliance with applicable regulations, and prepares reports concerning operating and investment procedures. Reviews data regarding material assets, net worth, liabilities, capital stock, surplus, income, and expenditures. Inspects items in books of original entry to determine if accepted accounting procedure was followed in recording transactions. Prepares reports for management concerning scope of audit, financial conditions found, and source and application of funds. May make recommendations regarding improving operations and financial position of company. May lead an audit team.
	Accounting / Financial	41.066	Auditor II (Experienced)	Second of three levels of professional auditor work. The job typically requires a bachelor's degree in accounting and 2+ years of experience, or equivalent. Examines and analyzes accounting records to determine the financial status of an establishment and compliance with applicable regulations. Prepares reports concerning operating and investment procedures. Reviews data regarding material assets, net worth, liabilities, capital stock, surplus, income, and expenditures. Inspects items in books of original entry to determine if accepted accounting procedure was followed in recording transactions. Following accepted convention, prepares reports for management concerning scope of audit, financial conditions found, and source and application of funds. Notes exceptions and consults with accounting staff to improve procedures.
	Accounting / Financial	41.067	Auditor III (Entry)	First of three levels of professional auditor work. The job typically requires a bachelor's degree in accounting with less than 1 year experience, or equivalent. Under direction from higher level auditors or managers, examines and analyzes accounting records to determine accuracy of accounting and the financial status of an establishment and compliance with applicable regulations. Reviews data regarding material assets, net worth, liabilities, capital stock, surplus, income, and expenditures. Inspects items in books of original entry to determine if accepted accounting procedure was followed in recording transactions. Counts cash on hand, inspects notes receivable and payable, negotiable securities and cancelled checks. Verifies journal and ledger entries of cash and check payments, purchases, expenses, and trial balances. Examines and authenticates inventory items.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Accounting / Financial	41.070	Bookkeeper (Small Company)	Experienced level bookkeeping job. This job typically requires a general understanding of accounting principles commensurate with 2+ years of accounting training or experience, or equivalent. Responsible for diverse duties in maintaining accounting records in a small company or office. Higher level accounting and financial system work is often provided by outside consultants or CPA's. Incumbents post entries from a wide variety of sources into ledgers and journals. Incumbents reconcile bank statements, monitor schedules for notes payable and receivable, bonds, securities and interest, cross check, make comparisons, balance accounts and take trial balances. Work often includes payroll, credit and collection duties. Work is regularly reviewed by outside consultants or auditors to verify appropriate procedure and accuracy. Incumbents may regularly prepare budget status reports for managers. Incumbents may devote a minor portion of time to performing other office support duties.
	Accounting / Financial	41.072	Billing Supervisor	Supervisor of the billing function. The job typically requires an associates degree and 5+ years experience. Receives orders for material or merchandise and supervises the preparation of orders, price estimates and quotations for customers. Supervises the approval and record-keeping process. Supervises the preparation of customer statements, bills and invoices, obtaining of information from purchase orders, sales and charge slips, and calculating of amounts, verification of billing with accounts receivable ledger and records of billing volume.
	Accounting / Financial	41.074	Billing Clerk	Experienced level of billing clerical work. The job typically requires reading, communication and math skills commensurate with a high school diploma or GED and 2+ years of related experience, or equivalent. Prepares statements by hand, on typewriter or via automated system, prepares bills and invoices to be sent to customers showing an itemized account of amount owed, obtains information from purchase orders, sales and charge slips or other records. Incumbents make non-routine choices within established precedent and policies, referring unusual situations to a supervisor.
	Accounting / Financial	41.080	Credit and/or Collection Manager	Manager responsible for operation of a department focused on credit and/or collections. The job typically requires a bachelor's or associate's degree with 5+ years of credit/collection experience, or equivalent. Provides direction to staff and administers credit/collection policies of the organization. May formulate credit and collections policies and methods for approval by management. Duties include determining customer credit capacity, managing the compilation of credit information, analyzing and interpreting available information and authorizing extension of credit. Decisions include determining action to take in collection of past due accounts where normal collection procedures have failed, approval of terms of sales and authorization of financial arrangements for foreign shipments. Prepares or supervises preparation of data showing credit activities and status of accounts. Communicates with sales and finance on the status of client accounts or the credit classification of prospective clients.
	Accounting / Financial	41.081	Credit and/or Collection Specialist	Professional level of credit and collections work. The job typically requires a bachelor's or associate's degree with 1+ years of credit/collection experience, or equivalent. Work includes reviewing credit applications and delinquent accounts; researching information from credit organizations; maintaining records on delinquent accounts and credit risks. Issues progressive requests for payment of past-due accounts. Within policy limits, works out payment plans for past due accounts, referring large cases to the manager for approval. Has frequent contact with sales staff regarding qualification of accounts.
	Accounting / Financial	41.082	Credit and/or Collection Clerk	Experienced level of credit and collections clerical work. The job typically requires reading, communication and math skills commensurate with a high school diploma or GED and 2+ years of related experience, or equivalent. Work includes reviewing credit applications and delinquent accounts; researching information from credit organizations; maintaining records on delinquent accounts and credit risks. Incumbents issue progressive requests for payment of past-due accounts. Much of the time is spent using a keyboard and using appropriate software applications, including web resources. Incumbents make non-routine choices within established precedent and policies, referring unusual situations to a supervisor.
	Administrative	42.001	Administrative Assistant to the CEO	Highest level administrative assistant job, equal in skills to the level I administrative assistant job, but directly supporting the CEO or President. The job typically requires high school graduate level reading, communication, math and problem solving skills and 5+ years of experience, or equivalent. Assists the top executive by performing a variety of support duties, such as screening calls, conference/meeting planning, preparing complex documents or coordinating activities. Collects, compiles, records or otherwise gathers data and prepares standard and custom reports with information necessary for decision-making. Incumbents typically use computer applications for word processing, spreadsheets, databases, graphics or scheduling. Incumbents must have the ability to exercise independent judgment and exercise discretion regarding confidential matters. Incumbents may provide work direction to other support staff.
	Administrative	42.002	Administrative Assistant I (Advanced)	Third of three levels of administrative assistant job. This role does not directly support the CEO or President. The job typically requires high school graduate level reading, communication, math and problem solving skills and 5+ years of experience, or equivalent. Perform administrative support work; specific duties vary with department(s) assigned. Assists the department or function manager and other department or function staff by performing a variety of support duties, such as conference/meeting planning, preparing complex documents or coordinating activities. Gathers data and prepares reports with information necessary for decision-making. Typically uses and may train others to use, computer applications for word processing, spreadsheets, databases, graphics or scheduling. Incumbents must have the ability to exercise independent judgment and discretion. May set precedent within limits and/or administer operating rules and procedures under management guidance. May provide work direction to other support staff.
	Administrative	42.003	Administrative Assistant II (Experienced)	Second of three levels of administrative assistant job. This role typically requires high school graduate level reading, communication, math and problem solving skills and 3+ years of experience, or equivalent. Incumbents perform administrative support work; specific duties vary with department(s) assigned. Assists the department or function manager and other department or function staff by performing a variety of support duties, such as conference/meeting planning, preparing complex documents or coordinating activities. Gathers data and prepares standard and custom reports with information necessary for decision-making. Incumbents typically use computer applications for word processing, spreadsheets, databases, graphics or scheduling. Other skills may include use of a programmable telephone system, audiovisual equipment or the internet. Incumbents must have the ability to exercise independent judgment and discretion. Incumbents make non-routine choices within established guidelines, with minimal supervision.
	Administrative	42.004	Administrative Assistant III (Entry)	First of three levels of administrative assistant job. This role typically requires reading, communication, math and problem solving skills equivalent to a high school education or GED and 1+ years of experience, or equivalent. Performs administrative support work; specific duties vary with department(s) assigned. Assists the supervisor and other department personnel by performing a variety of duties in support of department functions, such as meeting planning, preparing documents, or coordinating activities. Collects, compiles, records or otherwise gathers data and prepares standard reports with information necessary for decision-making. Incumbents typically use computer applications for word processing, spreadsheets, databases, graphics or scheduling. Other skills may include use of a programmable telephone system, audiovisual equipment or the internet. Incumbents make routine choices within established guidelines, with readily available supervision.
	Administrative	42.006	Bilingual Secretary	Performs secretarial duties, frequently requiring oral and written communications in a foreign language. Answers and relays telephone calls and receives visitors. Operates a personal computer and appropriate software packages or its equivalent.
	Administrative	42.008	Receptionist	This is a specialized job performing reception duties at the corporate, divisional or departmental level. The job typically requires high school graduate level communication and problem solving skills with previous experience of less than 1 year, or equivalent. Receives visitors, secures identification, and determines whom they wish to see. Announces visitors and directs them to the proper office when authorized. Issues visitor's badge and registers as required. Work is task oriented with routine decisions within established guidelines, with readily available supervision. Incumbents may perform other support tasks that can be done while in the reception area.
	Administrative	42.010	Telephone Operator/Receptionist/Secretary	This is a combination job performing at least two of the three listed functions in the title at the corporate, division or departmental level. The job typically requires high school graduate level communication and problem solving skills with previous experience of less than 1 year, or equivalent. Receives visitors, secures identification, and determines whom they wish to see. Announces visitors and directs them to the proper office when authorized. Issues visitor's badge and registers as required. Operates a telephone console, receives incoming calls and connects to the proper party. Answers general requests for information within established guidelines. Performs routine secretarial duties such as typing, data entry, schedule coordination, making travel arrangements or handling company mail.
	Administrative	42.020	General Clerk I (Advanced)	Third of three levels of general clerical work. This role typically requires reading, communication and math skills commensurate with a high school education or GED and 5+ years of related training and experience, or equivalent. Incumbents have a high degree of understanding of the work function and will typically provide work direction to other clerical staff within the area. Incumbents perform a variety of clerical and typing duties, some non-routine and complex in nature. Incumbents utilizes knowledge of company policies and procedures in maintaining files, records, and other information. Incumbents work under minimal supervision, using good judgment in resolving routine problems.
	Administrative	42.021	General Clerk II (Experienced)	Second of three levels of general clerical work. This role typically requires reading, communication and math skills commensurate with a high school education or GED and 2+ years of related training and experience, or equivalent. Incumbents normally are familiar with department or functional operations and are able to work with minimal assistance. Incumbents perform clerical, counter work and typing duties of some diversity, requiring the application of various standard procedures and preparation or use of several types of forms, reports or records. Incumbents may post data directly to a database from information furnished. Posting may involve some intermediate operation such as cross-checking, comparison or ordinary calculations. Incumbents may prepare and type reports, orders or other forms such as requisitions, schedules or control records of various types.
	Administrative	42.022	General Clerk III (Entry)	First of three levels of general clerical work. This role typically requires reading, communication and math skills commensurate with a high school education or GED and no previous experience, or equivalent. Duties include performing routine clerical procedures in support of an assigned department or function. Duties may include combinations of counter work, filing, checking, redirecting, or entering data into a computer. Incumbents follow prescribed procedures in handling, classifying, filing or indexing data. Working under close supervision, Incumbents perform simple computations according to clearly defined principles.
	Administrative	42.025	Data Entry Operator I (Experienced)	Second of two levels of data entry. The job typically requires high school graduate reading, communication and math skills and 2+ years of experience, or equivalent. Under limited supervision, following more complex procedures and instructions, transcribes data from source documents using data entry devices, or a keyboard. May involve selection of codes or interpretation of data entered. Incumbents may solve routine problems such as erroneous items or codes and obtain missing information. More extensive problems are referred to a supervisor.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Administrative	42.026	Data Entry Operator II (Entry)	First of two levels of data entry. The job typically requires high school graduate level reading, communication and math skills and no previous experience, or equivalent. Under close supervision, transcribes data from source documents using data entry devices, or a keyboard, following generally standardized procedures and instructions. Little or no selecting coding or interpreting of data is required. Incumbents refer problems, such as erroneous items or codes and missing information, to a supervisor.
	Administrative	42.030	Mail Room Supervisor	Supervises mailroom function with responsibility for handling high volumes of incoming or outgoing mail. The job typically requires some training beyond high school including knowledge of postal regulations and equipment and 3+ years experience, or equivalent. Duties include supervising mail and delivery staff and coordinating work schedules to meet work demand. Researches and decides on the best mode of delivering mail, or small packages, in order to meet customer needs in a timely, cost efficient manner. May also have responsibility for copy center services or other office support as a secondary function.
	Administrative	42.032	Mail Clerk	Administrative / Clerical Support job. The job typically requires high school graduate level reading, communication and math skills and no previous experience, or equivalent. Incumbents sort incoming mail for distribution and dispatch outgoing mail. Incumbents may open envelopes by hand or machine and may stamp date and time of receipt on incoming mail. Incoming mail is sorted according to destination and type, such as returned letters, adjustments, bills, orders, and payments. Incumbents often pick up and deliver mail within the organization. Incumbents may check alternative delivery methods and, based on established policy, determine that an alternative delivery, such as courier, is more economical. Incumbents keep records of registered mail or mail sent via courier. Incumbents must follow instructions and are subject to close supervision.
	Administrative	42.034	File Clerk	Experienced file maintenance job. The job typically requires math and problem solving skills equivalent to a high school diploma or GED and 1+ years of work experience, or equivalent. Incumbents maintain assigned files with supervision readily available to address unusual cases. Work involves setting up folders for new materials. Incumbents are generally able to determine classification of material without assistance, but are responsible for verifying classification with appropriate staff. Incumbents may maintain a computerized index or maintain electronic files. Incumbents will routinely transfer files to storage and periodically purge files per company record retention policies. Incumbents may provide training and work direction to others in the filing area.
D	Administrative	42.036	Librarian	Responsible for administering libraries and performing related library services. The job typically requires a master's degree in Library or Information Sciences and 3+ years of experience, or equivalent. May work in a variety of settings, including public libraries, educational institutions, museums, corporations, government agencies, law firms, non-profit organizations, and healthcare providers. Tasks may include selecting, acquiring, cataloging, classifying, circulating, and maintaining library materials; and furnishing reference, bibliographical, and readers' advisory services. May perform in-depth, strategic research, and synthesize, analyze, edit, and filter information. May set up or work with databases and information systems to catalogue and access information.
	Administrative	42.038	Courier/Messenger	Primary duties include transportation and delivery of items such as letters, messages, packages, inter-office memoranda, and the items to offices, departments, or prescribed stations. May make occasional trips to other concerns to deliver or obtain items. May operate a motor vehicle or be required to be bonded. Other miscellaneous duties may include furnishing/delivery supplies from stock, or escorting visitors to various offices or destinations.
	Administrative	42.040	Facilities Manager (Multi-Location)	Manager in charge of functions associated with the operation of multiple facilities used to house the operations of an enterprise. The job typically requires a bachelor's degree in business administration and 5+ years of related experience, or equivalent. Responsibilities include management of facility support employees and/or outside vendors contracted to provide services. Functions may include building rental negotiations, remodeling planning and management, building and parking lot cleaning and maintenance, space planning, purchase of furniture, fixtures and equipment. May include any or all of the following: office supplies, copy center management, telecommunications planning and administration, mail room management and other business support activities.
	Administrative	42.041	Facilities Supervisor (Single Location)	Manager in charge of functions associated with the operation of a single facility used to house the operations of an enterprise. This job typically requires a bachelor's degree in business administration and 1+ years of related experience, or equivalent. Responsibilities include management of facility support employees and/or outside vendors contracted to provide services. Functions may include building rental negotiations, remodeling planning and management, building and parking lot cleaning and maintenance, space planning, purchase of furniture, fixtures, and equipment. May include any or all of the following: office supplies, copy center management, telecommunications planning and administration, mail room management and other business support activities.
D	Administrative	42.045	Office Manager	Ensures effective and efficient general office operations. The job typically requires an associates degree and 3+ years experience. May be responsible for the coordination of various departments (i.e., mail and courier services, filing, and printing). Where applicable, supervises billing and/or sales service functions. Responsible for the assessment of the office supply and equipment needs, ordering and inventory. Maintains company records, may coordinate interdepartmental clerical services.
	Administrative	42.047	Office Administrator (Small Company/Branch Office)	Supervisory administrative job with responsibility for multiple support functions for a small company office or a branch office location. The job typically requires some training beyond high school and 5+ years of experience, or equivalent. Typical responsibilities extend to all, or some, of the following functions: office support, telecommunications, mail, copy center, security, facilities, purchasing, computer support, payroll, bookkeeping, human resources and customer service. Supervises non-exempt staff engaged in any of the functions listed above. May use and direct outside resources to assist with some of the job functions.
D	Administrative	42.053	Print Production Manager	Develops specifications and budgets for all types of print products. The job typically requires a bachelor's degree and 3+ years of experience, or equivalent. Reviews all types of pre-press proofs, initiates changes and corrections with vendors on process color subjects and other inconsistencies. Knowledgeable in a wide variety of production methods including advertisements, sheet fed/web lithography, serigraphy, bindery, letter shop, point-of-sale and incentive purchase.
	Administrative	42.056	Copy Center Operator	Administrative / Clerical Support job. The job typically requires high school graduate level reading, communication and math skills and no previous experience, or equivalent. Incumbents operate various duplication/imaging machines and prepare final documents or booklets. Machines may be controlled through an electronic console, requiring specialized operator training. Originals may be in paper or electronic form. Incumbents may perform basic preventive maintenance activities, such as cleaning, and may adjust machine(s) for the feed characteristics of different materials. Work may include assembly of materials using various binding methods. Incumbents may assist with mailroom or similar levels of support activities as time allows. Incumbents normally work and make decisions within established procedures and may perform simple troubleshooting to resolve problems.
	Administrative	42.060	Travel Coordinator	Schedules and coordinates business travel for employees. Makes reservations for air travel, car rentals, overnight accommodations, etc. Notifies employees of completed arrangements and forwards itineraries, tickets and instructions.
	Administrative	42.063	Meeting and Events Coordinator	This is an experienced paraprofessional in charge of making arrangements for meetings in support of general & administrative and marketing functions within the organization. The job typically requires an associate's degree and 1+ years of experience, or equivalent. The incumbent is responsible for planning, coordinating and attending corporate events in a logistical support capacity. Typical duties include coordinating facilities reservations and hiring catering services. The job may include coordinating travel arrangements and recreational events. The incumbent typically does not supervise staff. Incumbents may perform other administrative duties up to 50% of the time.
	Administrative	42.065	Project Manager, Sr. (Non-Technical)	Second of two levels of non-technical project management. This role is typically the manager in charge of designated projects having significant business unit impact. The job typically requires a bachelor's degree and 6+ years of experience, or equivalent. The incumbent is responsible for planning, administering and completing assigned projects, which may cross several functional areas, such as facilities, operations, marketing, or administration. Assignments may vary in length and complexity, but are generally not permanent. The incumbent does not typically supervise staff, but may provide work direction to individuals supporting a project. Do not report IT project managers or individuals managing construction projects.
	Administrative	42.066	Project Manager (Non-Technical)	First of two levels of non-technical project management. This role is typically the manager in charge of designated projects. The job typically requires a bachelor's degree and 3+ years of experience, or equivalent. The incumbent is responsible for planning, administering and completing assigned projects, which may cross several functional areas, such as facilities, operations, marketing or administration. Assignments may vary in length and complexity, but are generally not permanent. The incumbent typically does not supervise staff, but may provide work direction to individuals supporting a project. Do not report IT Project Managers or individuals managing construction projects.
	Administrative	42.070	Security Guard	Single level of security guard. The job requires the ability to follow written and verbal instructions and an acceptable background clearance. Incumbents screen access to secured areas of a facility and may patrol company facilities on foot or in a vehicle during or after working hours to maintain security. Incumbents follow specific operating procedures and have readily available supervision, sometimes through a dispatch center. Incumbents will commonly use portable electronic communication devices, computers and security camera systems. Incumbents may or may not be required to carry a firearm.
	Administrative	42.075	Office Janitor	General office labor job. The job typically requires the ability to follow basic verbal and written instructions, such as the ability to read and follow label instructions on cleaning supplies. Job duties include sweeping floors, vacuuming carpeting, removing wastepaper and other refuse, and dusting furniture and fixtures. May also include performing routine light manual work in cleaning and sweeping offices, halls, restrooms, etc. Do not report plant maintenance staff unless office maintenance duties are secondary.
	Administrative	42.080	Chauffeur-Executive	Drives a company vehicle to transport top level executives, other personnel and visitors. May plan itineraries and make overnight or extended trips requiring irregular hours. Oversees the appearance, operation, maintenance and servicing of the vehicle, and makes minor repairs and adjustments.
	Information Systems	44.001	Chief Information Officer	Position typically requires a bachelor's degree in computer science and 12+ years of experience, or equivalent. Responsible for directing all information systems activities within the organizational unit. Establishes policies for maintaining current program effectiveness. Develops recommendations regarding new hardware and software. Establishes budgetary and performance controls. Maintains documentation on current systems. Provides technical assistance to other functions in the organization as requested.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Information Systems	44.002	IT Director	Responsible for all corporate IT activities including systems analysis, programming, and computer auxiliary operations. Position typically requires a bachelor's degree in computer science and 10+ years of experience, or equivalent. Under a broad corporate plan, develops policies, procedures, technical standards, methods, and schedules. Oversees the strategic relationship between IT and other functions within the organization. Maintains the organization's awareness of developments in IT and computer hardware and software for the formulation of long- and short-range plans for the acquisition and implementation of new equipment and techniques. Reports to management on IT plans, projects, performance and related matters. Provides functional direction to middle IT managers in a division, subsidiary or region. Typically, this position reports to the chief information technology officer. In small and mid-sized organizations this may be the top IT position reporting to a top-level executive position.
	Information Systems	44.005	Director, Systems and Programming	Responsible for the implementation of the organization's applications systems analysis and programming activities and leads associated IT managers and subordinate staff. Position typically requires a bachelor's degree and 8+ years of experience, or equivalent. Reviews systems development project requests and coordinates schedules and related departmental activities. Works closely with management to ensure the effective balance and support of implementation activities that best fits the organization's IT objectives. Manages, reviews, and evaluates the work of subordinate staff and develops goals, coaches, and prepares performance appraisals. Directs and coordinates, and controls assigned department resources including, budget, planning, support, and implementation. Prepares activity and project reports regarding applications systems analysis and programming.
	Information Systems	44.010	Manager, Information Technology	Manages the overall function of the organization's information systems, including systems analysis, programming, telecommunications and computer operations. The job typically requires a bachelor's degree and 5+ years of related experience, or equivalent. Develops long-range and short-range plans for the acquisition and installation of equipment. Coordinates the integration of new and existing systems. Identifies software, hardware, or other equipment problems. Evaluates system performance, and investigates alternatives if necessary. Collaborates with other departments in the selection and set-up of applications suitable to their needs. Typically, this position reports to the chief information technology officer. In small and mid-sized organizations this may be the top IT position reporting to a top-level executive position.
	Information Systems	44.015	Applications Systems and Programming Manager	Manages employees engaged in the activities and operation of an organizational work unit involved in applications systems design and analysis. The job typically requires a bachelor's degree and 8+ years of related experience, or equivalent. Reviews requests for applications systems and programming services, confers with systems users to clarify objectives and determines the feasibility of the requested services. Work involves determining plans, and developing the budget, staffing patterns, work units, guidelines, and processes to accomplish work in order to implement and achieve applications programming objectives. May work with other technical personnel in establishing time schedules and priorities for development of data processing applications.
	Information Systems	44.020	Applications Systems Analyst/Programmer I (Principal)	Fourth of four levels of applications programming/analyst; highest-level technical expert without supervisory responsibility. The job typically requires a bachelor's degree and 8+ years of related experience, or equivalent. Works on variety of highly complex projects involving the analysis, design, modification, installation and maintenance of application programs, integrated systems, or software solutions. Analyzes and develops user specifications, designs, codes and tests applications to meet those specifications. Prepares documentation on all procedures utilized by programs. Identifies options for potential solutions and assess them for both technical and business suitability. May modify, test and implement third party supplied application software. Often provides direction and instruction to the lower levels of programmer/analysts.
	Information Systems	44.021	Applications Systems Analyst/Programmer II (Senior)	Third of four levels of applications programming/analyst. The job typically requires a bachelor's degree and 5+ years of related experience, or equivalent. Under general direction works on a variety of moderately complex projects involving the analysis, design, modification, installation and maintenance of application programs, integrated systems, or software solutions. Analyzes and develops user specifications, designs, codes and tests applications to meet those specifications. Prepares documentation on all procedures utilized by programs. Identifies options for potential solutions and assess them for both technical and business suitability. May modify, test and implement third party supplied application software. May occasionally train and guide the work of less experienced analysts, but this function is incidental to specific projects.
	Information Systems	44.022	Applications Systems Analyst/Programmer III (Intermediate)	Second of four levels of applications programming/analyst. The job typically requires a bachelor's degree and 2+ years of related experience, or equivalent. Under general supervision, works on a variety of projects of limited complexity involving application programming and analysis. Analyzes and develops user specifications, designs, codes and tests applications to meet those specifications. Prepares documentation on all procedures utilized by programs. Identifies options for potential solutions and assess them for both technical and business suitability. May modify, test and implement third party supplied application software. Able to work in most aspects of application systems analysis in accordance with acceptable practices standards.
	Information Systems	44.023	Applications Systems Analyst/Programmer IV (Entry)	First of four levels of applications programming/analyst. The job typically requires a bachelor's degree and less than 1 year of related experience, or equivalent. Under direct supervision, works on a variety of projects of limited complexity involving the analysis, design, modification, installation and maintenance of application programs, integrated systems, or software solutions. Assists senior-level analysts in preparing detailed specifications from which programs will be written. Carries-out progressively more difficult assignments involving the compiling, summarizing, and analysis of data concerning the function or problem being studied. May prepare flow charts to outline the existing process or the proposed solution to the problem.
	Information Systems	44.030	Business Systems Analyst, Sr.	Second of two levels of business systems analysis. Incumbents provide guidance concerning business implications of highly complex application development projects. The job typically requires a bachelor's degree and 6+ years of experience, or equivalent. Reviews, analyzes and evaluates workflows, business systems and user needs. Writes detailed descriptions of user needs, program functionality, and the steps required to develop, modify, and implement automated systems and workflow processes. Works with both technical and non-technical staff to identify the appropriate data for testing, and may prepare that data for testing. Acts as a liaison between developers and end-users on development projects to determine requirements and obtain approvals. Develops business requirements, publish requirements documents and follows projects to completion. Often educates end users on software/system changes or new product functionality.
	Information Systems	44.031	Business Systems Analyst	First of two levels of business systems analysis. Incumbents provide guidance concerning business implications of moderately complex application development projects. The job typically requires a bachelor's degree and 3+ years of experience, or equivalent. Writes detailed descriptions of user needs, program functionality, and the steps required to develop, modify, and implement automated systems and workflow processes. Works with both technical and non-technical staff to identify the appropriate data for testing, and may prepare that data for testing. Acts as a liaison between developers and end-users on development projects to determine requirements and obtain approvals. Develops business requirements, publish requirements documents and follows projects to completion. Often educates end users on software/system changes or new product functionality.
	Information Systems	44.040	Systems Programming Manager	Position typically requires a bachelor's degree in computer science and programming and 8+ years of experience, or equivalent. Responsible for overseeing and administering the control computer systems software. Manages a team that designs and develops new application systems and also maintains, enhances and upgrades existing applications. Develops and establishes departmental standards and procedures and coordinates the staff's efforts with the programming and other operating departments, providing technical support and direction.
	Information Systems	44.045	Systems Programmer I	Second of two levels of systems programming. This job typically requires a bachelor's degree in computer science and programming and 5+ years of experience, or equivalent. Evaluates, recommends, installs and maintains various complex software (as opposed to applications) systems required to support the organization's critical data processing functions. Provides technical assistance in support of complex computer systems, applications, system design and operating techniques. Performs highly complex software research and development to realize optimal computer utilization, productivity and cost savings.
	Information Systems	44.046	Systems Programmer II	First of two levels of systems programming. This job typically requires a bachelor's degree in computer science and programming and 3+ years of experience, or equivalent. Installs and maintains various complex software (as opposed to applications) systems. Generates and modifies such systems to fulfill the data processing needs of the organization, while insuring optimal performance of the organization's computer systems. Provides technical assistance to all areas of data processing, involving system design, operating techniques, data processing standards and problem resolution.
	Information Systems	44.050	Systems Analyst I	Second of two levels of systems analysis. This job typically requires a bachelor's of science in related computer science discipline and 5+ years of experience, or equivalent. Devises and modifies procedures to solve complex business or scientific problems using data processing equipment, considers the capacity and limitations of the equipment, operating time, and form of desired results. Evaluates and analyzes complex applications of systems with objective of utilizing equipment capacity, increasing efficiency, and reducing costs. Directs subsequent system design, implementation, and use of programs and projects. May direct, train, instruct, or check work of other analysts.
	Information Systems	44.051	Systems Analyst II	First of two levels of systems analysis. This job typically requires a bachelor's of science in related computer science discipline and 3+ years of experience, or equivalent. Assists in formulating systems scope and objectives through research and fact-finding to develop or modify a data processing system. Prepares specifications from which programs may be written. Assists in the analysis, design and implementation of less complex projects.
	Information Systems	44.055	Computer Operations Manager	Position typically requires a bachelor's degree in computer science, business or another related field and at least 3+ years of experience or equivalent. Provides general direction to appropriate staff regarding information technology and systems support to end-users. Responsible for supporting computer hardware and software and the companies overall system. This position typically directs and coordinates the activities of employees working in computer operations. Manages the testing and evaluation of new software programs done by front-line staff.
	Information Systems	44.060	Computer Operator I	Second of two levels of computer operations. This role typically requires a high school diploma and 3+ years of related experience, or equivalent. Under general direction, monitors and controls the company computer and peripheral equipment. Oversees the operations of the companies hardware systems. Operators may work with PC's, mainframes and/or minicomputers. Monitors the entire computer system for errors, failures, security issues and other issues causing slow response times. Computer Operators differ from Systems Administrators in the education requirements and systems used (system other than UNIX). In some organizations, Operators will assist programmers and analyst test new software for virus and usability.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Information Systems	44.061	Computer Operator II	First of two levels of computer operations. This role typically requires a high school diploma and less than 1 year of experience or equivalent. Under general supervision, monitors and controls the company computer and peripheral equipment. Provides support for the overseeing of the companies hardware systems. Manages the company back-up systems and may (if applicable) change tapes and maintain printers. Computer Operators differ from Systems Administrators in the education requirements and systems used (system other than UNIX). In some organizations, Operators will assist programmers and analyst test new software for virus and usability.
	Information Systems	44.065	LAN Administrator	Experienced level position typically requiring a Bachelor's degree in computer science, information technology or a related field as well as at least 3+ years of experience in networking or equivalent. Installs, maintains, and monitors the operation of an organization's local area network (LAN). Evaluates and recommends hardware and software products. Installs new or updated hardware and software. Establishes and implements LAN policies, procedures and standards. Ensures that security procedures are implemented and enforced. Trains users on LAN operations and procedures. Diagnoses and resolves LAN problems. Documents any issues with the network and solutions implemented to solve the problem.
	Information Systems	44.068	UNIX Administrator	Experienced level position that typically requires a Bachelor's degree in computer science, information technology or a related field as well as at least 3+ years experience or equivalent. This position is responsible for installing, updating and monitoring UNIX operating systems. This position also performs routine maintenance directly related to the performance of the overall system. Administrator troubleshoots issues as well as documents them and the solutions. Plans, schedules and implements server upgrades in a timely basis. May be required to train end users.
	Information Systems	44.070	Database Administrator	Professional level position requiring at least a bachelor's degree in computer science, information technology or a related field and 8+ years of experience in database management or equivalent. Some organizations may require an advanced degree. Incumbents in this position are responsible for the overall security and reliability of the organization's database(s). Roles of the DBA may include installing new software, configuring new hardware, security administration, data analysis, preliminary database design, data modeling, establishing policies and procedures, documentation of the system, performance of the database and more. Incumbents in this position will also be tasked with staff training duties.
	Information Systems	44.075	Database Analyst/Programmer I	Second of two levels of database programming and analysis. This role is involved in redesigning databases as business needs change. The job typically requires a bachelor's degree and 5+ years of related experience, or equivalent. Designs, codes, tests and executes physical databases from logical designs. Evaluates database quality. Tunes and reorganizes databases as needed. Recommends ways the new database management systems can be implemented.
	Information Systems	44.076	Database Analyst/Programmer II	First of two levels of database programming and analysis. This role typically requires a bachelor's degree and 1+ years of related experience, or equivalent. Designs database applications to specifications provided by higher-level staff. Tests, corrects, monitors and updates developed applications. Evaluates database performance. Tunes and reorganizes databases as needed. Sets up back-up and recovery procedures for databases. Controls access to data in physical database designs for both privacy and security.
	Information Systems	44.077	Director, IT Security	Position typically requires a bachelor's degree in computer science and 10+ years of experience, or equivalent. Responsible for the overall strategic direction concerning the organization's network infrastructure security, cyber security, data security and disaster recovery. Typically, this position reports to the chief information technology executive. Working through subordinate staff, is responsible for the information technology security operations including risk assessment/acceptance, vulnerability management, security event and threat monitoring and reporting, intrusion, malware and inappropriate use detection, secure application development and testing, effective implementation of policy, standards and controls, and incident response. Establishes information security risk management priorities and establishes the budget to meet those priorities. Provide reports to executive leadership on the information security risk posture of the organization. Typically reports to the Chief Information Officer.
	Information Systems	44.078	Manager, IT Security	Manager position responsible for the security of the organization's systems and network infrastructure. The job typically requires a bachelor's degree in computer science discipline and 8+ years of experience, or equivalent. Independently, or through subordinate personnel, conducts information security risk assessments, implements security monitoring protocols and manages information security compliance efforts. May oversee a variety of operational functions including forensics/investigations, enterprise network security software, access auditing, network inspection, segregation, and filtering, data encryption, and metrics and reporting. Develops information security policies, standards, and procedures. Often responsible for ensuring and/or monitoring security compliance with industry and government rules and regulations.
	Information Systems	44.079	IT Security Analyst I	Second of two levels of IT security analysis. This role is responsible for operational security duties including the development and implementation of security standards, procedures and guidelines. The job typically requires a bachelor's degree and 8+ years of related experience, or equivalent. Act as a technical lead on operational information security issues. Under limited supervision monitors, evaluates, and maintains systems and procedures to safeguard the organizations data and systems from exposure. May establish and lead teams responsible for investigating and mitigating any outages or penetrations/intrusions. Performs penetration and vulnerability testing, as directed, to ensure systems and data are adequately protected. Develops operational security policies and guidelines and generates technical documentation regarding security protocols. Informs and educates the workforce about information technology security procedures and policies.
	Information Systems	44.080	IT Security Analyst II	First of two levels of IT security analysis. This role is responsible for operational security duties including the development and implementation of security standards, procedures and guidelines. The job typically requires a bachelor's degree and 4+ years of related experience, or equivalent. Under general supervision monitors, evaluates, and maintains systems and procedures to safeguard the organizations data and systems from exposure. Performs penetration and vulnerability testing, as directed, to ensure systems and data are adequately protected. Participates in the investigations of attacks and security related events. Develops operational security policies and guidelines and generates technical documentation regarding security protocols. Informs and educates the workforce about information technology security procedures and policies.
	Information Systems	44.081	IT Security Engineer I	Second of two levels of IT security engineering. This role is responsible for designing, developing, testing, and implementing network infrastructure solutions necessary to ensure the availability, confidentiality, and security of the organization's information systems. The job typically requires a bachelor's degree and 8+ years of related experience, or equivalent. Acts in a lead role in performing vulnerability assessments, security testing, and working with cross-functional teams on remediation and mitigation of findings. Under limited supervision deploys and manages network equipment, as well as firewalls and intrusion detection systems. Maintain, configure, and analyze network and host-based security platforms. Tests and implements system patches, updates, and upgrades. Recommends or develops technical solutions and new security tools to help mitigate security vulnerabilities. Acts as internal subject matter expert for network infrastructure security.
	Information Systems	44.082	IT Security Engineer II	First of two levels of IT security engineering. This role is responsible for designing, developing, testing, and implementing network infrastructure solutions necessary to ensure the availability, confidentiality, and security of organization's information systems. The job typically requires a bachelor's degree and 4+ years of related experience, or equivalent. Under general supervision deploys and manages network equipment, as well as firewalls and intrusion detection systems. Maintain, configure, and analyze network and host-based security platforms. Tests and implements system patches, updates, and upgrades. Recommends or develops technical solutions and new security tools to help mitigate security vulnerabilities. Often refers more complex security related issues to more senior IT security professionals.
	Information Systems	44.085	Network Manager	Manages employees engaged in the activities and operation of an organizational work unit involved in network design and support. The job typically requires a bachelor's degree and 8+ years of related experience, or equivalent. Manages the planning, configuration, installation, systems management, and coordination of enterprise LANs/MANs/WANs, ensuring a cost-effective and efficient infrastructure that will provide the processing power essential to business unit and departmental operations. Responsible for the technical architecture and recommendations related to LAN/MAN/WAN internetworking. Makes decisions that are critical in the areas of throughput analysis, problem solving, and infrastructure planning.
	Information Systems	44.090	Network Analyst/Engineer I	Second of two levels of networking professional. This role typically requires a bachelor's degree and 5+ years of experience or equivalent. Incumbents usually have special certification as a CNE. Under general direction, is responsible for the design, installation, configuration and maintenance of network devices and equipment, including but not limited to, routers, WAN and LAN switches, and other network hardware. Assesses network capacity needs, monitors network performance and troubleshoots problem areas as needed. Creates and maintains documentation as it relates to network configuration, network mapping, processes, and service records. May develop, implement and maintain policies, procedures, and training plans for network administration, usage, and disaster recovery.
	Information Systems	44.091	Network Analyst/Engineer II	First of two levels of networking professional. This role typically requires a bachelor's degree and 3+ years experience or equivalent. Incumbents usually have special certification as a CNE. Under general supervision, is responsible for the design, installation, configuration and maintenance of network devices and equipment, including but not limited to, routers, WAN and LAN switches, and other network hardware. Assesses network capacity needs, monitors network performance and troubleshoots problem areas as needed. Creates and maintains documentation as it relates to network configuration, network mapping, processes, and service records. May develop, implement and maintain policies, procedures, and training plans for network administration, usage, and disaster recovery.
	Information Systems	44.095	Network Support Technician I	Second of two levels of network support technicians. Under general supervision, is responsible for the maintenance, troubleshooting, and repair of network systems. The job typically requires 2 years of formal training beyond high school and 3+ years of experience or equivalent. Provides support on more complex installations and/or maintenance assignments. Monitors and diagnoses hardware and software problems utilizing a variety of hardware and software testing tools and techniques. Installs and configures network hardware and software. Provides technical support and training to end-users. Administers network security and backs up file server data/disks. Provides minor to moderately complex server maintenance. Typically reports to a project leader or manager.
	Information Systems	44.096	Network Support Technician II	First of two levels of network support technicians. Under direct supervision, is responsible for the maintenance, troubleshooting, and repair of network systems. The job typically requires two years of formal training beyond high school and less than 2 years of experience or equivalent. Provides support on relatively simple installations and/or maintenance assignments. Monitors and diagnoses hardware and software problems utilizing a variety of hardware and software testing tools and techniques. Installs and configures network hardware and software. Provides technical support and training to end-users. Administers network security and backs up file server data/disks. Provides minor to moderately complex server maintenance. Typically reports to a project leader or manager.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Information Systems	44.100	Web Operations Manager	Manager position responsible for the performance and reliability of the organization's web infrastructure. The job typically requires a bachelor's degree in computer science discipline and 8+ years of experience, or equivalent. Independently or through subordinate staff, monitors and analyzes site performance and security. Defines and ensures operational criteria, goals, processes and standards required for the organizations website. Prioritizes schedules and monitors projects relating to the companies web operations. Manages web platform changes/deployments. Establishes and identifies budgets, staffing requirements, and equipment requirements to ensure product and/or service delivery.
	Information Systems	44.101	Web Applications Development Manager	Manager position responsible for the design, development and maintenance of applications deployed on the web. The job typically requires a bachelor's degree in computer science and 8+ years of experience, or equivalent. Responsible for defining user requirements, leading application design, and project teams. Works with cross functional teams to prioritize deliverables and monitor project progress. Independently or through subordinate staff responsible for the support of existing web applications including ongoing development or fixes, security, software patches, reliability testing, and disaster recovery. The position typically reports to the Director, Systems and Programming.
	Information Systems	44.102	Web Master	Responsible for maintaining and modifying the organization's Internet/intranet efforts including content, graphical and multimedia displays, and communications. The job typically requires a bachelor's degree and 3+ years of experience in web design and development, including development of complex HTML documents with embedded graphics, forms, audio, video and script objects, or equivalent. Supervises development efforts including content, design and production. Responsible for website maintenance, updating existing information and creating new content. Maps the flow of the website, creates general graphics, provides specifications to the Web Author, Web Developer, and outside vendors for the development of databases, interactive applets, and custom graphics. Acts as a liaison between the site and users. Has considerable knowledge of multiple operating systems (e.g., UNIX, Sun SOLARIS, Mac).
	Information Systems	44.105	Web Applications Developer I	Second of two levels of web application development. This role is responsible for designing, testing, implementing and maintaining web applications. This job typically requires a bachelor's degree in computer science and 5+ years of experience, or equivalent. Under limited supervision, works on projects of moderate to high complexity. Often acts as a technical lead for development teams. May evaluate, install, and configure third-party modules to meet specific requirements. Performs maintenance and enhancements on existing or new projects. This position typically reports to the Web Applications Development Manager.
	Information Systems	44.106	Web Applications Developer II	First of two levels of web application development. This role is responsible for designing, testing, implementing and maintaining web applications. This job typically requires a bachelor's degree in computer science and 3+ years of experience, or equivalent. Under general supervision, works on projects of moderate complexity. May refer more complex problems to more senior developers. May evaluate, install, and configure third-party modules to meet specific requirements. Performs maintenance and enhancements on existing or new web applications. This position typically reports to the Web Applications Development Manager.
	Information Systems	44.110	Web Designer	Position typically requires a bachelor's of science in related computer science discipline and 2+ years of experience, or equivalent. Plans, develops, designs, establishes, and maintains Internet sites for clients using a variety of graphics software applications, techniques and tools to achieve marketing or informational goals of the organization. Knowledgeable of web-based technologies and design-related applications.
	Information Systems	44.112	Web Content Administrator	Position typically requires a degree in journalism, marketing, graphic design and 3+ years of experience, or equivalent. Develops and provides content that will allow users to access the website regularly and utilize it as a major source of information and decision making. Responsible for managing/performing website editorial activities. Gathers feedback from customers for website improvement and enhancement.
	Information Systems	44.120	Technical Support Manager	Management level position responsible for providing technical (computer) assistance to employees of an organization. Typically requires a bachelor's degree in a technical discipline or related field and 5+ years of experience in a technical field or equivalent. Individuals in the position will manage a small group of analysts in charge of delivering IT solutions to the company and/or provides support for customers of the organization. The Technical Support Manager will provide training to employees as well as oversee the troubleshooting and maintenance of the network as well as any outside hardware. May be responsible for evaluating the overall effectiveness of programs and network and providing suggestions for future improvements.
	Information Systems	44.125	PC Analyst	Professional level position typically requiring a college degree in a technical discipline and 3+ years of experience in a technical field or equivalent. Incumbents in this position will typically install software to end user PC's in the organization. Analysts take part in the design, testing and maintenance of computer network. Troubleshoot end user problems and make recommendations for alleviation of problems. Analyst may be responsible for creating reports documenting troubleshooting process. Analyst is also responsible for the evaluation, implementation and support of existing PC technologies.
	Information Systems	44.130	PC Technician I	Second of two levels of PC technician. This position typically requires a high school diploma and 3+ years of experience or equivalent. This position provides higher-level PC services to employees of an organization. Examples may include but are not limited to: setting up network/Internet connectivity, configuring all PC's to company network, backing up data on network, perform maintenance on server as necessary, maintains compliance with software licensing and may provide training to end users.
	Information Systems	44.131	PC Technician II	First of two levels of PC technician. This position typically requires a high school diploma and 1 year of experience in an office setting or equivalent. This position provides lower-level PC services to employees of an organization. Examples may include but are not limited to: setting up desktops, installing software, setting up printer connections, changing out peripherals, clean hardware, responds to help desk issues and may provide training to end users.
	Information Systems	44.135	Help Desk Manager	Manager position responsible for directing the day-to-day activities of the Help Desk Department and its analysts, ensuring performance standards and service levels are met. The job typically requires a four-year degree and 5+ years of experience, or equivalent. Manages and delivers all end-user support, maintenance, and scheduling of new installations and may manage dispatching of technicians. Ensures that technical problems are promptly handled with a minimal amount of user inconvenience. Monitors staff and their resolution of user problems to ensure optimum user-system performance. Will implement the necessary administrative procedures to monitor, log, and track technical problems and/or user difficulties. Typically, this position takes part or is the lead person in the evaluation of software/hardware used by the help desk group. Will prepare reports related to department activities, system functionality, and staff performance.
	Information Systems	44.137	Help Desk I	Third of three levels of help desk job, sometimes called Coordinator. The job typically requires specialized training beyond high school and 5+ years of experience in computer software and hardware applications, or equivalent. Assists users in resolving difficult problems, often referred by less experienced staff, through discussion and diagnosis. Takes the necessary steps to remedy the problem. Incumbents are nearly always able to diagnose problems and will refer problems requiring specialized intervention to a higher level. Incumbents at this level may provide work direction and training to others. May dispatch Computer Technicians.
	Information Systems	44.138	Help Desk II	Second of three levels of help desk job. The job typically requires specialized training beyond high school and 2+ years of experience in computer software and hardware applications, or equivalent. Assists users in resolving problems through discussion and diagnosis. Takes the necessary steps to remedy the problem. Incumbents are usually able to diagnose problems and will refer problems requiring specialized intervention to a higher level.
	Information Systems	44.139	Help Desk III	First of three levels of help desk job. The job typically requires reading, communication and math skills commensurate with a high school diploma or GED and 1+ years of training and experience in computer software and hardware applications, or equivalent. Assists users in resolving problems through discussion and diagnosis. Takes the necessary steps to remedy the problem and refers more complex problems to a higher level.
	Information Systems	44.140	IT Training Specialist I	Second of two levels of professional IT trainer. This role's primary focus is on the development, implementation, and delivery of multiple methods of information technology related training. The job typically requires a bachelor's degree and 3+ years of experience, or equivalent. Duties include preparation of multi-media training materials and delivery of those materials in a classroom or work environment. Develops detailed training plans, creates training materials, and delivers or coordinates the delivery of end user training for both systems and applications. Works under limited supervision and has significant responsibility for needs identification and program design as well as delivery of training. May provide training and direction to less experienced staff.
	Information Systems	44.141	IT Training Specialist II	First of two levels of professional IT trainer. This role's primary focus is on the development, implementation, and delivery of multiple methods of information technology related training. The job typically requires a bachelor's degree and experience of less than 1 year, or equivalent. Duties include assisting with preparation of multi-media training materials and delivery of those materials in a classroom or work environment. Assists in developing training plans, creating training materials, and delivering or coordinating the delivery of end user training for both systems and applications. Receives considerable development direction from senior staff and management and may spend the majority of time delivering training.
	Information Systems	44.145	Instructional Designer	Incumbents provides instructional and program design expertise for the development and support of online courses and specialized educational programs. The job typically requires a bachelor's degree and 3+ years of related experience, or equivalent. Analyzes training needs, designs training approaches and develops the training activity in the appropriate format. Collaborates with trainers, subject matters experts (SMEs) and analysts to find additional ways of training current material (web or CBT) and manages the conversion of classroom course material to different media. Tests and debugs e-learning modules for quality assurance of the course. Performs recommended updates to program. May make recommendations for multimedia software for use by the organization.
	Information Systems	44.150	Electronic Data Interchange Manager	Management level position typically requiring a bachelor's degree in a technical discipline and 6+ years of experience with HTTP or FTP communication protocols and experience managing a small staff or equivalent. Incumbents in this position will supervise other EDI staff and oversee all new electronic data projects as well as updates to pre-existing electronic data projects. Reviews all EDI transactions as well as reviewing the overall quality of the EDI database. EDI Manager may work with Enterprise Resource Planning (ERP) software and may be tasked with some project management duties.
	Information Systems	44.151	Electronic Data Interchange Administrator	Professional level position typically requiring a bachelor's degree in a technical discipline and 3+ years of experience working with electronic data interchanges or equivalent. This position is responsible for testing, maintaining, evaluating, enhancing and supporting relevant company EDI databases. The EDI Administrator is responsible for the overall administration for all EDI systems and other similar programs. The EDI Administrator is also responsible for technical support related to the interchange. Incumbents document and communicate changes and upgrades to clients as well as internal users.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
D	Information Systems	44.160	Project Manager, Sr. - IT	Second of two levels of IT project management. This role typically requires a bachelor's degree in a technical discipline and 5+ years of experience managing projects of varying size and scope or equivalent. This position may require an advanced degree and/or a certification. The Senior Project Manager performs similar functions as the lower level Project Manager but is differentiated from the Project Manager in the scope of the projects taken on. The senior level Project Manager will take on projects with a higher budget and a narrower scope than the lower level manager.
	Information Systems	44.161	Project Manager - IT	First of two levels of IT project management. This role typically requires a bachelor's degree in a technical discipline and 3+ years of experience managing projects of varying size and scope or equivalent. The Project Manager oversees IT projects from start to finish. During that time they will work with the customer to determine the amount of resources allocated to project, timeline(s), budget and the overall scope of the project. The Project Manager is responsible for ensuring all metrics of a project are met.
	Information Systems	44.170	Manager, IT Quality Assurance	Manager position responsible for staff engaged in quality design and testing of information systems. The job typically requires a bachelor's degree in a computer science discipline and 8+ years of experience, or equivalent. Plans and directs activities concerned with the development, application, and maintenance of quality processes and measurements. Develops product quality plans for validation of new product design. Develops, implements, and tracks product quality measurements and initiates action and follow-up of factors negatively impacting product quality and operation.
	Information Systems	44.175	IT Quality Assurance Analyst I	Second of two levels of information technology quality assurance. This role is responsible for ensuring the functionality and reliability of IT applications or software. The job typically requires a bachelor's degree and 5+ years of related experience, or equivalent. Develops and conducts quality tests to insure that software systems and products meet quality standards and user requirements. Reviews and audits software requirements and designs and develops automated and manual tests to identify and resolve defects. Documents, tracks, and verifies defects and fixes across products, platforms, and releases. <u>At this level, the analyst may work on multiple projects at a time or projects of a complex nature.</u>
	Information Systems	44.176	IT Quality Assurance Analyst II	First of two levels of information technology quality assurance. This role is responsible for ensuring the functionality and reliability of IT applications or software. The job typically requires a bachelor's degree and 3+ years of related experience, or equivalent. Develops and conducts quality tests to insure that software systems and products meet quality standards and user requirements. Reviews and audits software requirements and designs and develops automated and manual tests to identify and resolve defects. Documents, tracks, and verifies defects and fixes across products, platforms, and releases.
	Information Systems	44.180	Data Scientist	Professional level data science professional requiring at least a bachelor's degree in mathematics, statistics, data mining or a related field and 8+ years of experience, or equivalent. Incumbents in this position are responsible for building predictive models and analyzing reports on large volumes of data to determine trends and emerging requirements, anticipate future needs and requirements in order to take proactive actions. Create and uncover new and data elements and structures. Work on cross-functional teams to identify and prioritize needs, deficiencies, data, techniques and insights across a variety of core business areas.
	Information Systems	44.185	Data and Analytics Manager	Manager position responsible for staff engaged in statistical analysis and data manipulation. The job typically requires a bachelor's degree in mathematics, statistics, data mining or a related field and 8+ years of experience, or equivalent. Performs data mining (including data auditing, aggregation, validation and reconciliation). Collates, models, interprets and analyzes data; explains variances and trends. Identifies and documents enhancements to modeling techniques. Conduct necessary research and remediation of identified data discrepancies or data issues in reporting and analyses. Build analytics solutions using variety of big data technologies and analytics tools as required, and create robust documentation of solutions and underlying design decisions and operating procedures. Develop and maintain automated report production and QA processes to reduce resource demand and facilitate data analysis.
	Information Systems	44.190	Data Architect	Professional level data science professional requiring at least a bachelor's degree in computer science, information technology or a related field and 8+ years of experience, or equivalent. Incumbents in this position are responsible for the development and enhancement of a data warehouse environment which includes data design, database architecture, metadata and repository creation. Maintains data mapping documents, business matrix and other data design artifacts that define technical data specifications and transformation rules. Reviews current data structures and conducts research into new data warehouse applications and determines viability for adoptions.
	Information Systems	44.195	Data Engineer, Sr.	Second of two levels of professional data engineering job. The job typically requires a bachelor's degree in computer science, mathematics, statistics, data mining, and 5+ years of experience, or equivalent. Under limited supervision, develops, maintains, tests, and evaluates large-scale, multi-tiered, distributed data applications and systems to support business analysis and data science. Designs data models for enterprise-wide data integration incorporating structured data. Performs data extractions, data purges, or data fixes as required. Captures functional requirements and develops technical requirements which leverage best in class tools.
	Information Systems	44.196	Data Engineer	First of two levels of professional data engineering job. The job typically requires a bachelor's degree in computer science, mathematics, statistics, data mining, and less than 5 years of experience, or equivalent. Under general supervision, develops, maintains, tests, and evaluates large-scale, multi-tiered, distributed data applications and systems to support business analysis and data science. Designs data models for enterprise-wide data integration incorporating structured data. Performs data extractions, data purges, or data fixes as required. Captures functional requirements and develops technical requirements which leverage best in class tools.
	Information Systems	44.200	Statistician	Professional level data science professional requiring at least a master's degree in statistics, mathematics, economics or another quantitative field and 8+ years of related experience, or equivalent. Some organizations may require a doctorate degree. Plans data collection, analyzes and interprets numerical data from experiments, studies, surveys and other sources and applies statistical methodology to provide recommendations for operational and strategic business units. Evaluates reliability of source information, adjusts and weighs raw data and organizes results into form compatible with analysis by computer or other methods. Analyzes and interprets statistics to point up significant differences in relationships among sources of information, prepare conclusions and forecasts based on data summaries.
	Information Systems	44.205	Data Analyst, Sr.	Second of two levels of data science. This role typically requires a bachelor's degree and 5+ years of related experience, or equivalent. Under limited supervision, performs data mining with performance and operational data to identify and isolate patterns and outliers for use in forecasting projections and performance improvement. Writes ongoing and ad hoc analytical, executive summary-style reports. Strong knowledge of spreadsheet tools (e.g., Excel) and database systems (e.g., SQL). Designs and administers data collection tools, cleans, merges and manages existing data sets as well as establishes and maintains data quality procedures to ensure accuracy and timeliness of data.
	Information Systems	44.206	Data Analyst	First of two levels of data science. This role typically requires a bachelor's degree and less than 5 years of experience, or equivalent. Under general supervision, performs data mining with performance and operational data to identify and isolate patterns and outliers for use in forecasting projections and performance improvement. Writes ongoing and ad hoc analytical, executive summary-style reports. Strong knowledge of spreadsheet tools (e.g., Excel) and database systems (e.g., SQL). Designs and administers data collection tools, cleans, merges and manages existing data sets as well as establishes and maintains data quality procedures to ensure accuracy and timeliness of data.
	Human Resources	45.001	Human Resource VP/SVP	This is the top human resource position where the function is at a senior executive level and is part of the executive cabinet. The job typically requires a degree in human resources and 10+ years of general Human Resources experience, including management experience, or equivalent. A master's degree is commonly required. Directs and coordinates organization activities related to Human Resources and Industrial Relations functions. Functions directed include, but are not limited to, employment, compensation, benefits, payroll, OD, employee relations, performance management, affirmative action, training, recruitment, and safety. Identifies and complies with legal requirements and government reporting regulations. The VP/SVP directs all Human Resources staff usually through subordinate staff. May also be responsible for administration or facilities. Typically reports directly to the CEO and will develop and set HR policies subject to ratification by the executive committee, CEO, or the Board of Directors.
	Human Resources	45.002	Human Resources Director	This is the top HR position where the function is staffed at a director level and the job is usually not considered part of the executive cabinet. The job typically requires a degree in human resources and 8+ years of general Human Resources experience, including management experience, or equivalent. Directs and coordinates activities related to HR and Industrial Relations functions. Job duties include, but are not limited to, employment, compensation, benefits, payroll, OD, employee relations, performance management, AAP/EEO, training, recruitment, and safety. Establishes programs and policies designed to protect company and employee interests in accordance with company HR policies and gov't laws and regulations. The director supervises HR staff, often through subordinate staff. May also be responsible for administration or facilities. Typically reports to an Executive Vice President or directly to the CEO, and will develop and recommend policies for approval by senior management.
	Human Resources	45.003	Human Resources Manager	Manages and coordinates organization activities related to one or more Human Resources and Industrial Relations functions. The job typically requires a degree in human resources and 5+ years of Human Resources experience, or equivalent. Job duties may include, but are not limited to, employment, compensation, benefits, payroll, organizational development, employee relations, performance management, training, recruitment, and safety. Recommends and develops policies and implements approved programs and policies designed to protect company and employee interests in accordance with company HR policies and governmental laws and regulations. Identifies and complies with legal requirements and government reporting regulations. The manager may supervise Human Resource or Payroll staff. Typically reports to a Director or Vice President, but may report directly to the CEO, and will develop and recommend policies for approval by senior management.
	Human Resources	45.005	Human Resources Generalist, Sr.	Second of two levels of human resource professional. This role is typically in an organization with more than one human resource staff person, with responsibility for multiple human resource activities. The job typically requires a degree in human resources and 4+ years of experience in multiple areas of HR, or equivalent. Duties include supporting the organization in several areas of HR, which may include coordinating employment activities, participating in union contract negotiations (where applicable), receiving and acting on employee complaints or grievances, administering employee records, ensuring compliance with employment laws and regulations, recommending and coordinating employee training activities and administering compensation, benefits, performance and other programs. May provide training and work direction to human resources or payroll support staff. Typically reports to a Human Resource Manager, Director or VP and administers functional rules and procedures under management guidance.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Human Resources	45.006	Human Resources Generalist	First of two levels of human resource professional. This role is typically in an organization with more than one human resource staff person, with responsibility for several human resource activities. The job typically requires a degree in human resources and less than 1 year of experience, or equivalent. Duties include supporting the organization through work in several areas of human resources, which may include coordinating employment activities, participating in union contract negotiations (where applicable), receiving and acting on employee complaints or grievances, administering employee records, ensuring compliance with labor laws and regulations, recommending and coordinating employee training activities and administering compensation, benefits and performance programs. Typically reports to a Manager, Director or VP of Human Resources and administers functional rules and procedures under management guidance.
	Human Resources	45.007	Human Resources Assistant	Paraprofessional human resource job. The job typically requires two years of formal training beyond high school and 1+ years of experience in the field of human resources, or equivalent. Incumbents typically assist in more than one area of human resources, such as new employee orientation, worker's compensation, staffing, and relocation. Incumbents create and maintain employee personnel records, including tracking systems for vacation, sick leave and FMLA. Incumbents provide customer service to employees by answering questions regarding policies and procedures. Incumbents may also provide assistance in other areas of human resources by doing special projects, such as completing benefit and salary surveys. Incumbents may use specialized software applications. Incumbents work under limited supervision and will often make decisions based upon established policies and/or procedures.
	Human Resources	45.008	Labor Relations Manager	Manager in charge of a department focused on labor relations programs. The job typically requires a bachelor's degree and 5+ years of experience, or equivalent. Under direction of senior labor relations staff or HR executive, is responsible for the management and interpretation of the labor agreements. Provides counsel and guidance to management and labor officials in development, application, and interpretation of labor relations policies and practices. Assists in the preparation of arbitration briefs, prepare summary and analysis, and make recommendations in discipline cases, may present oral arguments at arbitration, and conduct research on labor agreements and prior National Labor Relation Board (NLRB) decisions. May negotiate claim settlements. Often manages and provides guidance to labor relations representatives.
	Human Resources	45.010	Labor Relations Representative	Experienced level labor relations professional. The job typically requires a degree in Human Resources or Labor Relations and 4+ years of experience, or equivalent. Under limited supervision, advises management and union officials in development, application, and interpretation of labor relations policies and practices. Arranges and schedules meetings between grieving workers and supervisory personnel. Tracks action taken regarding grievances, arbitration and mediation cases. Monitors implementation of policies and oversees compliance with terms of labor contract(s). Represents the company in dealings with governmental agencies. Keeps abreast of labor legislation and labor market conditions which may or may not affect union contract negotiation.
	Human Resources	45.020	Compensation Manager	Manager responsible for operation of a department focused on compensating employees within the organization. The job typically requires a bachelor's degree and 5+ years of experience, or equivalent. Under direction of a senior human resource manager or executive, is responsible for the management of the organization's compensation program. Incumbent directs development and application of techniques of job analysis, job descriptions, evaluations, grading, and pricing. Manages the analysis of company compensation policies and their financial impacts, oversees compliance with government regulations concerning pay. Provides analysis for negotiating agreements with labor unions. Makes final recommendations to executive management regarding individual and group compensation adjustments and approves merit increases permitted within budgetary limits and according to pay policies. May work with the compensation committee of the Board of Directors to coordinate the design of executive compensation.
	Human Resources	45.022	Compensation Analyst I	Second of two levels of compensation analyst. The job typically requires a bachelor's degree and 3+ years of compensation experience, or equivalent. Generally works under limited supervision and with independent judgment and discretion. Analyzes company compensation policies, government regulations, market data and agreements with labor unions, in order to comply with legal requirements and to establish competitive rates designed to attract, retain, and motivate employees. Recommends compensation adjustments according to findings, utilizing knowledge of prevailing rates of pay, types of wage incentive systems, and special compensation programs for professional, technical, sales, supervisory, managerial, and executive personnel. Assists in the development and implementation of salary administration guidelines.
D	Human Resources	45.023	Compensation Analyst II	First of two levels of compensation analyst. The job typically requires a bachelor's degree and less than 3 years of compensation experience, or equivalent. Under general supervision, assists in the development and administration of employee salary administration programs. Reviews proposed salary actions to ensure conformance with established guidelines and policies and advises management on compensation actions for employees. Participates in market salary surveys, writes job descriptions and develops recommendations to adjust salary structure. Also reviews proposed new or revised classifications to develop recommendations for salary grade assignments. May assist with human resource generalist activities.
	Human Resources	45.025	Compensation and Benefits Administrator	Administers and coordinates compensation, benefits, and/or service programs for the organization. Establishes or maintains the content for direct and indirect compensation programs. Supervises organization's employee retirement plans, workers' compensation, disability pay, unemployment pay, and other benefits, and may review and approve claims. Designs competitive rate range structures and benefit packages, analyzing existing company, industry, and area practices and procedures.
	Human Resources	45.030	Benefits Manager	Manager responsible for operation of a department focused on employee benefit programs. The job typically requires a bachelor's degree with 5+ years of experience, or equivalent. Manages the employee benefits program for the organization. Plans and directs the administration of benefits programs designed to protect employees against loss of income due to illness, injury, layoff, or retirement. Directs preparation and distribution of employee communications regarding benefits programs, such as insurance and pension plans, paid time off, and bonus pay. Directs the analysis of current benefit policies in order to support decisions necessary to establish market competitiveness. Directs the evaluation of services, coverage, and options available through insurance and investment companies, to determine optimal programs. Recommends plan changes to management. Plans modification of current benefit programs, utilizing knowledge of laws and agreements with labor unions, to ensure legal compliance.
	Human Resources	45.032	Benefits Analyst I	Second of two levels of benefits analyst. The job typically requires a bachelor's degree and 3+ years of benefits experience, or equivalent. Generally works under limited supervision and with independent judgment and discretion. Analyzes existing benefits policies of the organization, and prevailing practices among competing organizations, to establish market competitive benefits programs. Evaluates services, coverage, and options available through insurance and investment companies, to determine programs best meeting needs of the organization. Prepares and studies benefit analyses for determination of benefit costs and trends. Examines predictions for market changes in benefit costs and programs and recommends revisions to company benefits. Prepares appropriate government reports and documents. May provide work direction to lower level analysts and work on special projects as defined by department management.
D	Human Resources	45.033	Benefits Analyst II	First of two levels of benefits analyst. The job typically requires a bachelor's degree and less than 3 years of benefits experience, or equivalent. Under general supervision, provides assistance in design and administration of the organization's benefit programs. Duties include researching legal and administrative issues relating to benefit plans and participating in benefit surveys to determine market trends. Prepares benefit analyses for determination of benefit costs. May serve as a liaison with outside benefits administration firms. May administer one or more benefit programs.
	Human Resources	45.035	HRIS Manager	Responsible for the organization's HRIS function. The job typically requires a bachelor's degree and 5+ years of related experience, or equivalent. Identifies user needs and monitors progress toward objectives. Defines system maintenance requirements and authorizes enhancements to existing systems to improve departmental efficiency. Is the main liaison with all departments regarding HRIS issues. Works with corporate IS to manage the continuous processing, handling and storage of human resources data. Ensures that HRIS upgrade information is communicated to human resources department employees. Established HRIS standards.
	Human Resources	45.036	HRIS Analyst	Administers the HRIS system on a daily basis. The job typically requires a bachelor's degree and 1+ years of related experience, or equivalent. Assists system users and performs system maintenance. Develops custom enhancements to existing systems to ensure and improve departmental efficiency. Coordinates operations and acts as liaison with Corporate IS to oversee the continuous processing, handling and storage of human resources data. Implements directed HRIS standards to ensure integrity of HRIS data.
	Human Resources	45.040	Training Manager	Manager of professional training with a primary focus on development and delivery of training materials and programs. The job typically requires a bachelor's degree and 6+ years of experience, or equivalent. Duties include needs identification, material preparation, media selection, vendor management and coordination with internal customers. Training content may cover work procedures, product use, safety, customer service, work skills, language skills or other topics. Specific tasks may include reviewing vendor proposals, monitoring quality of material, managing cost and assessing effectiveness. Working within overall direction established by senior management, solves complex technical problems and develops and recommends new alternatives. Manages department staff and budgets.
	Human Resources	45.043	Training Administrator/Coordinator	Support job responsible for organizing and coordinating organizational training activities. The job typically requires two years of formal training beyond high school and 2+ years of experience. Under the general supervision, coordinates, plans, and monitors organizational training programs. Confers with others to determine relevant training needs. Evaluates training packages/materials, including outline, text, and handouts written by instructors. May coordinate and track relevant certifications, re-certifications, and development programs. Schedules classes based on availability of classrooms, equipment, and instructors. May prepare training materials including the construction of binders, course books and any relevant job aids that facilitate the training process.
	Human Resources	45.045	Training Specialist I	Second of two levels of professional trainer. This role's primary focus is on conducting employee or customer training. The job typically requires a bachelor's degree and 3+ years of experience, or equivalent. Duties include preparation of multi-media training materials and delivery of those materials in a classroom or work environment. The training content may cover work procedures, product use, safety, customer service, work skills, language skills or other topics. Works under limited supervision and has significant responsibility for needs identification and program design as well as delivery of training. May provide training and direction to less experienced staff.
	Human Resources	45.046	Training Specialist II	First of two levels of professional trainer. This role's primary focus is on conducting employee or customer training. The job typically requires a bachelor's degree and experience of less than 1 year, or equivalent. Duties include assisting with preparation of multi-media training materials and delivery of those materials in a classroom or work environment. Training content may cover work procedures, product use, safety, customer service, work skills, language skills or other topics. Receives considerable development direction from senior staff and management and may spend the majority of time delivering training.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Human Resources	45.047	Employee Wellness Administrator	Experienced level professional responsible for organizing and coordinating organizational wellness activities. The job typically requires a bachelor's degree in health and/or fitness and 3+ years of related experience, or equivalent. Under limited supervision develops and promotes worksite wellness programs. Establishes organizational wellness goals and actively works with management to improve the health of the employee population and their families. Implements wellness campaigns and supports program promotion, including development and/or distribution of promotional materials. Develops and facilitates educational programs (i.e., courses, workshops, special events, etc.).
	Human Resources	45.050	Safety Manager	Manager of the safety function in an organization. The job typically requires a bachelor's degree specializing in occupational safety and 5+ years of related experience, or equivalent. Develops and implements programs intended to reduce or eliminate injuries, illnesses, deaths, and financial losses. Duties include determining conditions which could produce accidents and financial losses and evaluating the potential extent of resulting injuries. Develops accident-prevention and loss-control programs for incorporation into operational policies of the organization. Coordinates safety activities of unit managers to ensure implementation throughout organization. Compiles and analyzes data related to exposure factors concerning occupational illnesses and accidents and prepares reports. Maintains liaison with outside organizations, such as fire departments, mutual aid societies, and rescue teams to assure information exchange. May supervise professional safety staff and may have responsibility for security.
	Human Resources	45.052	Safety Specialist	Professional within the safety function in an organization. The job typically requires a bachelor's degree specializing in occupational safety, or equivalent. Assists with development and implementation of programs intended to reduce or eliminate injuries, illnesses, deaths, and financial losses. Duties include identifying and appraising conditions that could produce accidents and financial losses and evaluating the potential extent of injuries resulting from accidents and developing accident-prevention and loss-control systems and programs for incorporation into operational policies of the organization. Supports safety activities of unit managers to ensure implementation of safety activities throughout organization. Compiles and analyzes data related to exposure factors concerning occupational illnesses and accidents and prepares reports. May also maintain liaison with outside organizations, such as fire departments, mutual aid societies, and rescue teams to assure information exchange.
	Human Resources	45.060	Employment Manager	Manager responsible for operation of a department focused on personnel procurement within the organization. The job typically requires a bachelor's degree and 5+ years of experience, or equivalent. Manages the full life cycle recruiting process for openings in all areas of the company. Responsible for workforce planning, working with other areas of HR in succession planning, negotiating contracts with vendors, coordination of contract personnel, developing and managing internship programs, coordination of recruiting materials, and identifying process improvements. May negotiate fee agreements with external recruiters/agencies. Prepares employment and advertising budgets and schedules expenditures. Monitors all hiring metrics to ensure progress toward corporate goals and objectives. Complies with federal, state, and local employment law by studying existing and new legislation; anticipating new requirements; enforcing adherence to requirements; advising management on needed actions.
	Human Resources	45.064	Recruiter, Sr.	Second of two levels of professional recruiter. This role's primary focus is on recruiting for positions ranging from exempt professionals to Executives. The job typically requires a Bachelor's degree and 3+ years of experience, or equivalent. Duties include working with management to define job qualifications and advertising in multiple media. Incumbents pre-screen job candidates, conduct background checks and assists management with conducting interviews and selection. Networks within the industry and community and may actively recruit from colleges. Markets the organization to potential employees and explains benefits and compensation programs as well as company expectations. Recruiters at this level typically work under limited supervision and will exercise considerable initiative.
	Human Resources	45.065	Recruiter	First of two levels of professional recruiter. This role's primary focus is on recruiting hourly and non-exempt salaried positions that are typically less complex and/or diverse. The job typically requires a bachelor's degree and less than 1 year of experience, or equivalent, with thorough knowledge of the legal aspects of recruitment and selection. Duties include working with management to define job qualifications and advertising in multiple media. Pre-screens job candidates, conducts preliminary interviews, administers skills tests, arranges drug tests, conducts background checks and assists management with conducting interviews. Markets the organization to potential employees and explains benefits and compensation programs as well as company expectations. Networks within the community and may participate in job fairs. May make employment offers for lower level jobs based on predetermined standards without involving line management.
	Human Resources	45.070	Translator/Interpreter	Responsible for converting spoken statements or written material from one language to another in various settings. The job typically requires a bachelor's degree and 1+ years of experience, or equivalent. Speech interpretation involves listening to, understanding and memorizing content, then reproducing statements, questions and speeches in a different language. This is usually from another language into the mother tongue, but may be on a two-way basis. Written materials may include marketing or technical materials, including web pages. Requires researching specialized vocabulary and terminology.
	Human Resources	45.075	Organizational Development Manager	Manager in charge of the design and delivery of corporate-wide organizational development initiatives. The job typically requires a degree in Organizational Development, Organizational Psychology, Industrial Psychology, or Organizational Behavior and 8+ years of experience, or equivalent. A master's degree is commonly required. Works with leadership to design and implement customized solutions to meet the development and organizational effectiveness needs of the organization. Areas of involvement may include, but are not limited to, assessment and selection, change management, career development, coaching, training and development and succession planning processes, programs, and tools. May work with outside vendors to ensure the delivery of key development programs, systems and resources.
	Human Resources	45.080	Global Mobility Manager	Manager in charge of the global mobility programs of the organization. The job typically requires a bachelor's degree and 5+ years of experience, or equivalent. Designs, develops and implements global mobility program philosophies, policies and procedures. Collaborates with Human Resources department to provide advice and ensure compliance with policies. Manages exceptions and acts as the liaison between headquarters and host Human Resources personnel. Responsible for planning, scheduling, monitoring and reporting on global assignments.
	Supply Chain / Logistics	46.001	Operations Manager (Non-Manufacturing)	Manager in charge of one or more business operations in a non-manufacturing organization. The job typically requires a bachelor's degree in business and 6+ years of experience in the function managed, or equivalent. Responsible for a business process, service to clients or similar activity. Manages the quality and cost efficiency of operations through subordinate supervisors. Duties include managing planning and process development, equipment selection and operations performance. Responsibilities are often shared with division or corporate management.
D	Supply Chain / Logistics	46.003	Operations Research Analyst	Conducts analyses of management and operational problems and formulates mathematical or simulation models of problem for solution by computers and/or other techniques. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Gathers, interprets, and identifies data with variables in models by applying scientific principles and other mathematical tests.
	Supply Chain / Logistics	46.005	Distribution Manager	Manager responsible for operation of a department focused on distribution of finished goods and materials of the organization, typically requiring a bachelor's degree and 6+ years of experience. Directs and oversees the activities of distribution through lower supervisors and employees involved in the area of distribution and ordering. Establishes and develops procedures for bills of lading for incoming merchandise and customer orders. Establishes policies for verifying incoming and outgoing shipments. Coordinates and oversees the activities of the distribution warehouse.
D	Supply Chain / Logistics	46.007	Logistics Specialist	Responsible for activities required to move finished goods, components, and raw materials. The job typically requires a bachelor's degree in Logistics, Supply Chain, or related field and 4+ years of experience, or equivalent. Responsible for developing processes for the shipment of products (inbound and/or outbound) that meet all regulatory and legal requirements relative to duties, fees, and controls. May establish processes and metrics for the key logistics activities to ensure efficient operations and customer satisfaction.
	Supply Chain / Logistics	46.015	Warehouse Manager	Manager responsible for the operation of a department focused on receiving, storage and shipment of materials. The job typically requires technical or business training beyond high school and 5+ years of experience, or equivalent. Responsible, either directly or through subordinate supervisors, for the direction and coordination of all of the warehousing activities of the facility. Typical subordinate activities are the receiving, storage and shipment of raw materials and/or finished goods, and the maintenance of inventory control records. May be responsible for the movement of materials and goods within the facility. May also have responsibility for traffic and/or export activities.
	Supply Chain / Logistics	46.016	Warehouse (Shipping / Receiving) Supervisor	First level of warehouse supervision. The job typically requires a high school diploma and 5+ years of experience, or equivalent. This position is responsible for the supervision of the warehousing activities and shipping/receiving activities of a facility. In larger organizations this may be one of several supervisors, each having responsibility for a segment of the operation. Typical duties carried out by subordinates are the receiving, storage and shipment of raw materials and/or finished goods and the maintenance of inventory control records. Incumbents may also be responsible for the movement of materials and goods within a plant. Do not report working supervisors or leads of the department where a majority of time is spent performing hands-on work.
	Supply Chain / Logistics	46.020	Fleet Manager	Ensures the safety and reliability of vehicles and equipment within the Fleet Department. The job typically requires an associate's degree and 5+ years of relevant work experience, or equivalent. Supervises employee activities related to vehicle and equipment maintenance. Schedules daily maintenance to accommodate preventative maintenance, statutory and safety related repairs. Develops work schedules, routes trucks, and investigates truck and work comp accidents. Observe and enforces all DOT safety rules and regulations.
	Supply Chain / Logistics	46.022	Traffic Manager	Manager of traffic activities of the organization. The job typically requires completion of a formal technical program and 3+ years of progressively responsible traffic experience or 5+ years of progressively responsible traffic experience, or equivalent. Responsible for determining the most advantageous and economical methods of shipment for company products. Duties include negotiating contracts with vendors, monitoring vendor performance and resolving issues with lost or damaged shipments. Other duties include maintaining records of shipments. Supervises traffic staff and manages the department budget. May also have responsibility for a small company fleet when there is not a separate Fleet Manager role.
	Supply Chain / Logistics	46.024	Traffic Dispatcher	Experienced traffic dispatcher. The job typically requires 2+ years of related training and experience within the shipping or transportation industry, or equivalent. Duties include assigning shipments to common carriers based on optimum service and price; scheduling of routes for company drivers and arranging back-hauls. Incumbents may maintain records of fleet maintenance and schedule service. Incumbents follow precedent, considering objectives, under limited supervision.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Supply Chain / Logistics	46.026	Material Manager	Manager position responsible for directing and coordinating activities of personnel engaged in purchasing and distributing materials, equipment, and supplies in an organization. The job typically requires a bachelor's degree in business or engineering and 5+ years of experience, or equivalent. Plans, organizes, directs, and controls activities related to the procurement function. Independently, or through subordinate personnel, prepares instructions regarding purchasing systems and procedures. Analyzes market and delivery conditions to determine present and future material availability, and prepares market analysis reports. Designs, implements, manages, and monitors procurement reporting systems to meet company requirements. Responsible for sourcing and maintaining the organization's supplier base. Oversees all activities related to procurement of a commodity, from intent to purchase through delivery of commodity.
	Supply Chain / Logistics	46.027	Material Planner, Sr.	Second of two levels of material planning. This job typically requires a bachelor's degree and 4+ years of experience. Under minimal supervision, ensures that the appropriate type and quantities of materials are available for the master production schedule, while maintaining awareness of over stocking and asset utilization targets. Maintains close liaison with Buyers, Production Planner/Scheduler, Program Managers and Internal Shops regarding logistics and cycle times, improving overall asset utilization and maximizing internal and external customer satisfaction. May provide training and direction to less experienced staff.
	Supply Chain / Logistics	46.028	Material Planner	First of two levels of material planning. This job typically requires a bachelor's degree and less than 4 years of experience. Under general direction, ensures that the appropriate type and quantities of materials are available for the master production schedule, while maintaining awareness of over stocking and asset utilization targets. Maintains close liaison with Buyers, Production Planner/Scheduler, Program Managers and Internal Shops regarding logistics and cycle times, improving overall asset utilization and maximizing internal and external customer satisfaction.
	Supply Chain / Logistics	46.030	Purchasing Manager	Manager responsible for operation of a department focused on procurement of materials and supplies needed for the operation of the organization. The job typically requires a bachelor's degree and 6+ years of experience. Develops and recommends to senior management purchasing policies for the organization. Manages the purchase of machinery, equipment, tools, raw material, services and supplies necessary for operation of an organization. May actively participate in vendor selection and purchasing of the most critical goods or services. Supervises the maintenance of records of purchases, delivery dates, vendors, costs and other resources. Approves plans to work out remedies for defective or unacceptable goods or services. Materials purchased are processed, consumed or used in the organization and are not purchased for direct resale; this is not a manager of merchandising buyers.
	Supply Chain / Logistics	46.031	Purchasing Supervisor	First level of purchasing supervision. The job typically requires an associate's or bachelor's degree and 5+ years of experience. Responsible for the supervision of non-exempt employees who perform duties related to the purchase of materials and supplies needed for the operation of the organization. Typical duties of these employees include placing orders with vendors, revising orders, following up on orders to assure satisfactory delivery, verification of invoices against original orders, and maintenance of purchase order and invoice files. Report supervisors of professional buyers as Purchasing Manager; this is not a supervisor of merchandising buyers.
	Supply Chain / Logistics	46.032	Buyer I (Purchasing Agent)	Third of three levels of professional purchasing. The job typically requires an associate's or bachelor's degree and 5+ years of experience, or equivalent. Duties include coordinating activities involved with procuring goods/services, such as raw materials, equipment, tools, parts, supplies, and advertising for the establishment. May work directly in support of line operations and in collaboration with other staff. Estimates values according to knowledge of market price and determines method of procurement. Prepares bid specifications, receive bids and make purchases of commodities or goods where the financial impact is great. Works out remedies for unacceptable goods/services with inspection or quality control personnel, users, vendors and others. Provides work direction and training to other professional staff and non-exempt buyers. Materials purchased are processed, consumed or used in the organization and are not purchased for direct resale.
	Supply Chain / Logistics	46.033	Buyer II (Experienced)	Second of three levels of professional purchasing. The job typically requires an associate's or bachelor's degree in business and 3+ years of experience, or equivalent. Incumbents at this level have the authority to purchase at the most favorable price consistent with quality, quantity, delivery and other factors, raw materials, equipment, machinery and/or supplies for the operation of the organization. Prepares bid specifications, receives bids and makes purchases of commodities or goods where the financial impact is moderate. May work directly in support of line operations and in collaboration with department managers, engineers or operations staff. Participates in the selection of vendor sources and has considerable latitude in determining acceptable price. Materials purchased are processed, consumed or used in the organization and are not purchased for direct resale.
	Supply Chain / Logistics	46.034	Buyer III (Entry)	First of three levels of professional purchasing. The job typically requires an associate's or bachelor's degree in business, or equivalent. Under supervision of a purchasing manager and/or with direction from senior purchasing staff, performs purchasing duties of limited scope and authority. Prepares bid specifications, receive bids and make purchases of commodities or goods where the financial impact is limited. May work directly in support of line operations and in collaboration with department managers, engineers or operations staff. Materials or equipment purchased are processed, consumed or used in the organization and are not purchased for direct resale.
	Supply Chain / Logistics	46.035	Purchasing Clerk	First level of purchasing. The job typically requires math and problem solving skills equivalent to a high school diploma or GED and 1+ years of related training or experience, or equivalent. Duties include issuing purchase orders to replenish stocks where prices and vendors are mostly pre-established. Incumbents may receive purchase requests from others or initiate orders based on standard stock levels or other issuing criteria. Incumbents use computer terminals or PC's to record data. Incumbents follow established procedures and have readily available supervision.
	Supply Chain / Logistics	46.040	Inventory Control Manager	Manager in charge of inventory control. The job typically requires a bachelor's degree in business and 5+ years of inventory control experience, or equivalent. Responsible for managing inventory control staff. Duties include record keeping, inventory verification and establishing appropriate inventory levels, with consideration for demand, re-supply or delivery lead time, storage capacities, shelf life, cost of stock and other factors. Responsibility for forecasting demand is shared with other management staff.
	Supply Chain / Logistics	46.042	Inventory Control Clerk/Cycle Counter	First level of inventory clerical work. The job typically requires math and problem solving skills equivalent to a high school diploma and no experience, or equivalent. Duties include counting inventory at various locations within the organization and matching results with inventory records. Incumbents may attempt to resolve differences by locating product or isolating errors in records. Incumbents use computer terminals or PC's to record data. Incumbents follow established procedures and have readily available supervision.
	Supply Chain / Logistics	46.050	Import/Export Manager	Manager responsible for operation of a department focused on import and/or export of finished goods or components. The job typically requires an associate's degree and 5+ years of experience or a bachelor's degree and 3+ years of experience, or equivalent. Develops and recommends to senior management import/export policies for the organization. Manages the shipping or receiving of, equipment, tools, raw material, finished goods and supplies necessary for operation of the organization. Duties include arranging for shipping via air, land or sea in order to ensure on time delivery. Duties include minimizing shipping costs and tariffs, duties or taxes. Works with government agencies to ensure compliance with government rules and restrictions. May work with financial institutions to manage currency exchange. Supervises import/export staff.
	Supply Chain / Logistics	46.052	Import/Export Coordinator	Advanced level of import/export clerical support. The job typically requires high school math and problem solving skills and 5+ years of related training and experience, or equivalent. Duties include processing papers necessary to facilitate shipments between international locations. Incumbents obtain necessary permits and prepare tax documents. Works with purchasing or sales to make appropriate arrangements for carriers based on delivery time requirements. Incumbents will typically handle the more complex cases and may provide work direction and training to other import/export staff.
	Supply Chain / Logistics	46.054	Import/Export Clerk	Experienced level of import/export clerical support. The job typically requires high school math and problem solving skills and 2+ years of related training and experience, or equivalent. Duties include processing papers necessary to facilitate shipments between international locations. Incumbents obtain necessary permits and prepare tax documents. Works with purchasing or sales to make appropriate arrangements for carriers based on delivery time requirements.
D	Legal	47.000	General Counsel	This position is the top legal advisor for the organization. Responsible for setting the overall legal strategy of the organization. Provides advice and legal counsel to senior leadership and, if applicable, the Board or other governing bodies. The job typically requires a Juris Doctorate (J.D.), admission to the bar and 8+ years of experience, or equivalent. Provides advice on a wide variety of legal issues, including contracts, governance and compliance, business development, mergers and acquisitions, employment, technology, landlord/tenant and litigation management. Represents the organization in litigation and other legal proceedings. Conducts research and analysis of specific legal questions and prepares memoranda, opinions and position papers. Interprets laws, rulings, and regulations for organization. May provide supervision to a subordinate staff of professional lawyers, legal paraprofessionals and/or support staff.
D	Legal	47.001	Attorney I (Advanced)	Third of three levels of professional attorney. The job typically requires a Juris Doctorate (J.D.), admission to the bar and 6+ years of experience, or equivalent. Under direction of Corporate Counsel, carries out legal activities of the organization, including legal support of operations, drafting complex or critical agreements and reviewing agreements prepared by others, researching and drafting policies, advising management, providing legal representation in civil activities and preparation for litigation. Incumbents at this level participate in negotiations on behalf of the organization and typically represent the organization in litigation. Participates in negotiations on behalf of the organization. Provides leadership on major projects and will provide work direction and training to staff.
D	Legal	47.002	Attorney II (Experienced)	Second of three levels of professional attorney. The job typically requires a Juris Doctorate (J.D.), admission to the bar and 3+ years of experience, or equivalent. Under direction of Corporate Counsel, carries out legal activities of the organization, including legal support of operations, drafting and reviewing agreements, researching and drafting policies, advising management, providing legal representation in civil activities and preparation for litigation. Incumbents at this level participate in negotiations on behalf of the organization and may represent the organization in litigation. Works independently on assigned projects and will provide work direction to staff.
D	Legal	47.003	Attorney III (Entry)	First of three levels of professional attorney. The job typically requires a Juris Doctorate (J.D.), admission to the bar and less than 1 year of experience, or equivalent. Under direction of Corporate Counsel, assists with legal activities of the organization, including legal support of operations, drafting and reviewing agreements, researching and drafting policies, advising management, providing legal representation in civil activities and preparation for litigation.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
D	Legal	47.010	Tax Attorney	Represents the organization in its dealings with federal, state and local taxing agencies. This job typically requires a J.D. (Juris Doctor) degree and admission to the Bar. Advises management on the impact of tax laws and develops tax saving plans most beneficial to the organization in its current and long term activities. Prepares legal documents concerning tax liabilities and advises on the preparation of the various tax activities.
D	Legal	47.012	Patent Attorney	Responsible for handling legal projects relative to company patent applications, trade secrets, trademarks, copyrights, licensing and research agreements, publications, and the intellectual property aspects of contracts and agreements. This job typically requires a J.D. (Juris Doctor) degree and admission to the Bar. Provides legal opinions and analysis on the patentability of inventions. Prepares applications for patents, copyrights, and trademarks and presents applications to the U.S. Patent Office. Provides other legal advice and represents the company in matters relating to industrial property law.
	Legal	47.020	Paralegal/Legal Assistant	Paraprofessional level legal support position. The job typically requires two-year college degree and 3+ years of work related experience, or equivalent. Researches and analyzes law sources such as statutes, recorded judicial decisions, and legal articles. Investigates facts to determine causes of action and to prepare case materials and legal documents for review, approval, and use by an attorney. Schedules and may assist with depositions. May specialize in an area of legal practice. Please include incumbents who may be classified as exempt.
	Legal	47.021	Legal Secretary I (Advanced)	Second of two levels of legal support job. The job typically requires specialized training beyond high school and 5+ years of related experience. Incumbents work under minimal supervision to provide clerical assistance to attorney(s). Duties typically include conducting research and drafting reports and involves coordinating special projects and preparation of materials used in litigation. Incumbents at this level will typically provide work direction and training to others. Paralegal is the next level.
	Legal	47.022	Legal Secretary II (Experienced)	First of two levels of legal support job. The job typically requires specialized training beyond high school and 2+ years of related experience. Incumbents work under minimal supervision to provide clerical assistance to attorney(s). Duties typically include conducting research and drafting routine reports and involve coordinating special projects and preparation of materials used in litigation.
	Plant Management	51.001	Plant Manager	Manager in charge of all staff and activities at a single plant facility. Typically this job requires a bachelor's degree and 8+ years of experience, or equivalent. Responsibilities include staffing, administration, production, quality, materials, equipment and financial performance of the plant. Responsibilities are often shared with division or corporate functions. Interprets and administers company policy at the plant level and will typically have input on overall company policy.
	Plant Management	51.007	Production Control Manager	Manager in charge of production control in a process or manufacturing organization. The job typically requires a bachelor's degree in business and 5+ years of experience in production/inventory control, or equivalent. Responsible for managing professional and technical scheduling staff. Requires an understanding of client/production priorities and coordination with account managers, inventory managers and/or production managers.
	Plant Management	51.010	General Supervisor	Second level of supervisor to which production supervisors or working supervisors report, typically requiring specialized training in supervision and 8+ years of job related training and experience, including 3 years of supervisor experience, or equivalent. Working under management guidance, schedules work, assists with employee selection, reviews employee performance, administers work rules and recommends compensation, unless it is governed by contract. Responsible for productivity and quality management to the extent that it falls within the job's span of control. Recommends equipment upgrades, staffing adjustments, process modifications and may recommend product or service modifications. Manages a shift or multi-department area. Responsibilities may extend to overall facilities security and maintenance during duty hours.
	Plant Management	51.015	Machine Shop Supervisor - Job Shop & Tool Room	First line supervisor of job shop or tool room machining operations, typically requiring specialized training in supervision and 5+ years of job related training and experience, including training and experience in machining, or equivalent. Specific activities supervised may include custom machining, tool & die, mold making, precision grinding, model making or experimental machining, but not production machining of proprietary products. Under management guidance, schedules work, assists with employee selection, reviews employee performance, administers work rules and recommends compensation, unless it is governed by contract. Recommends equipment upgrades, staffing adjustments, maintenance schedules and selection of equipment, service or material vendors. Maintains project documentation, including schematics, blueprints, CAD files, work plans, contracts, manuals and inspection records. Incumbents may participate in process of estimating time requirements and bidding projects.
	Plant Management	51.018	Supervisor, Maintenance	Responsible for only that part of the maintenance operation which is concerned entirely with the installation and maintenance of electrical and/or mechanical equipment and machinery used in company operations. Subordinate employees could include such classification as maintenance electricians, maintenance mechanics, maintenance machinists, welders, oilers, etc. Does not include maintenance supervisors whose responsibilities include structural maintenance (such as carpentry or painting) or supervisors with substantial responsibility for janitorial services.
	Plant Management	51.020	Supervisor, Material Control	Responsible for supervising allocation and distribution of materials for production. Consults with engineering department on material substitutions and changes. Checks and orders original bills of materials on new and special items. Checks for material shortages. Cooperates with purchasing department in requisitioning and following up materials needed for production.
	Plant Management	51.022	Supervisor, Shipping and Receiving	Supervises, assigns and reviews the work of employees engaged in shipping, receiving, storing, distributing and maintaining inventories of materials, parts, and finished products. Gathers and assimilates pertinent information regarding shipping schedules and logistics of materials and goods entering and exiting the facility. May be responsible for maintaining records of items received, released, and shipped.
	Plant Management	51.025	Production Supervisor - Unskilled Operation	First line supervisor of an unskilled production labor workforce, typically requiring specialized training in supervision and 5+ years of job related training and experience, or equivalent. Under management guidance, schedules work, assists with employee selection, reviews employee performance, administers work rules and recommends compensation, unless it is governed by contract. Responsible for productivity and quality management to the extent that it falls within department control. Recommends equipment upgrades, staffing adjustments, process modifications and may recommend product or service modifications. Do not report working supervisors or leads, where a majority of time is spent performing hands-on work of the department.
	Plant Management	51.030	Production Supervisor - Semi-Skilled Operation	First line supervisor of a semi-skilled production labor workforce, typically requiring specialized training in supervision and 5+ years of job related training and experience, including experience in the work of the department, or equivalent. Under management guidance, schedules work, assists with employee selection, reviews employee performance, administers work rules and recommends compensation, unless it is governed by contract. Responsible for productivity and quality management to the extent that it falls within department control. Recommends equipment upgrades, staffing adjustments, process modifications and may recommend product or service modifications. Do not report working supervisors or leads, where a majority of time is spent performing hands-on work of the department.
	Plant Management	51.035	Production Supervisor - Skilled Operation	First line supervisor of a skilled production labor workforce, typically requiring specialized training in supervision and 5+ years of job related training and experience, including experience in the work of the department, or equivalent. Under management guidance, schedules work, assists with employee selection, reviews employee performance, administers work rules and recommends compensation, unless it is governed by contract. Responsible for productivity and quality management to the extent that it falls within department control. Recommends equipment upgrades, staffing adjustments, process modifications and may recommend product or service modifications. Do not report working supervisors or leads, where a majority of time is spent performing hands-on work of the department. Report supervisors of machining operations under specific machining job descriptions.
	Plant Management	51.040	Trades Supervisor - Production Support	First line supervisor of one or more skilled trades groups supporting a production operation, typically requiring specialized training in supervision and 5+ years of job related training and experience, including training and experience in one or more of the skilled trades, or equivalent. Specific trades supervised may include maintenance, electronic/electrical and/or building trades, but not machining. Under management guidance, schedules work, assists with employee selection, reviews employee performance, administers work rules and recommends compensation, unless it is governed by contract. Recommends equipment upgrades, staffing adjustments, maintenance schedules and selection of equipment, service or material vendors. Maintains project documentation, including schematics, blueprints, CAD files, work plans, contracts, manuals and inspection records.
	Plant Management	51.051	Manufacturing Director (Multi-facility)	Director in charge of manufacturing operations at more than one facility. Typically this job requires a bachelor's degree in business or engineering and 10+ years of experience, or equivalent. Responsibility for production and manufacturing engineering and may have materials, quality and distribution responsibility through subordinate managers and supervisors. Duties include directing planning and process development, equipment selection oversight and overall manufacturing performance. Establishes functional policies and makes tactical decisions within overall strategic direction, with top management guidance.
	Plant Management	51.052	Manufacturing Manager (Single-facility)	Manager in charge of manufacturing operations at a single facility. Typically this job requires a bachelor's degree in business or engineering and 8+ years of experience, or equivalent. Responsible for production and manufacturing engineering at a facility and may have materials, quality and distribution responsibility through subordinate managers and supervisors. Duties include managing planning and process development, equipment selection oversight and overall manufacturing performance. Responsibilities are often shared with division or corporate management.
	Engineering Management	55.001	Vice President Engineering	Executive level engineering job. The job typically requires a degree in engineering and 10+ years of experience, including management experience. Responsible to plan, analyze and evaluate all phases of engineering programs, plans and procedures. Reviews recommendations for designs and methods as well as equipment purchases. Coordinates the creation, development, design and improvement of corporate products to conform to established program objectives. Provides engineering consultation as requested. Works with top management to meet organizational objectives for all engineering activities. Directs the appropriate staffing of the engineering department. Controls budgets for all engineering activities.
	Engineering Management	55.002	Director of Engineering	Director level engineering job. The job typically requires a degree in engineering and 8+ years of experience, including management experience. Responsibilities include planning, analyzing and evaluating all or several phases of engineering programs, plans and procedures. Reviews recommendations for designs and methods as well as equipment purchases. Coordinates the creation, development, design and improvement of corporate products to conform to established program objectives. Provides engineering consultation as requested. Works with top management to meet organizational objectives for all engineering activities. Directs the appropriate staffing of the engineering department. Controls budgets for engineering activities.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Engineering Management	55.003	Engineering Manager	Responsible for the management and execution of an assigned engineering function or department. This job typically requires a bachelor's or master's degree in engineering or an engineering degree with a master's degree in business administration and significant experience, or equivalent. Coordinates and monitors technical matters, program costs, sufficient labor, timing and the like to ensure successful design, development and launch of products. Provides direction to engineers, technicians, and designers. May have one or more engineering supervisors reporting to this position. Provides technical engineering advice and counsel to top management personnel and represents the company in outside discussions or at professional meetings and forums.
	Engineering Management	55.005	Engineering Supervisor - Large Operation	Supervises 12 to 15 professional engineers, plans and conducts engineering projects and acts as a liaison between other departments, divisions and companies. May report to engineering department head. Works to achieve overall objectives at a minimum cost. Estimates number of employees needed and schedules work to meet completion date and technical specifications. This job typically requires a bachelor's degree in engineering and a minimum of 8 years of related experience, or equivalent.
	Engineering Management	55.006	Engineering Supervisor - Small Operation	Supervises 6 to 8 professional engineers, plans and conducts engineering projects and acts as a liaison between other departments, divisions and companies. May report to engineering department head. Works to achieve overall objectives at a minimum cost. Estimates number of employees needed and schedules work to meet completion date and technical specifications. This job typically requires a bachelor's in engineering and a minimum of 8 years of related experience, or equivalent.
	Engineering Management	55.010	Engineering Specialist	Highest non-managerial engineering position in the organization. In an organization with a dual-ladder system for engineers, acts as a staff consultant. This job typically requires a bachelor's in engineering and a minimum of 8 years of related experience, or equivalent. Essentially an expert/authority in their area of specialization. Possesses the technical qualifications of an Engineering Supervisor.
	Engineering Program / Project Management	60.005	Program Manager, Sr., Engineering	Manager in charge of an engineering program of significant complexity and scope. The job typically requires a bachelor's or master's degree in engineering or an engineering degree with a master's degree in business administration and 8+ experience, or equivalent. Plans and develops procedures for implementing and carrying out objectives of program, directs and coordinates program activities, and exercises control over personnel responsible for specific functions or phases of program. Responsibilities include tracking and meeting program cost and schedule commitments; providing daily direction, both technical and programmatic, to other engineering staff and program personnel. May act as a primary interface between the customer providing regular status updates on program goals and objectives.
	Engineering Program / Project Management	60.006	Program Manager, Engineering	Manager in charge of an engineering program of moderate complexity and scope. The job typically requires a bachelor's or master's degree in engineering or an engineering degree with a master's degree in business administration and 5+ years of experience, or equivalent. Plans and develops procedures for implementing and carrying out objectives of program, directs and coordinates program activities, and exercises control over personnel responsible for specific functions or phases of program. Responsibilities include tracking and meeting program cost and schedule commitments; providing daily direction, both technical and programmatic, to other engineering staff and program personnel. May act as a primary interface between the customer providing regular status updates on program goals and objectives.
	Engineering Program / Project Management	60.010	Project Engineering Manager, Sr.	Plans, directs, and coordinates projects of significant complexity and scope. The job typically requires a bachelor's degree and 5+ years of experience, or equivalent. Oversees staff and activities of a designated project to ensure that goals or objectives of a project are accomplished within prescribed time frame and funding parameters. Translates project requirements into project objectives and tasks. Manages activities concerned with technical developments, scheduling, and resolving engineering design and test problems.
	Engineering Program / Project Management	60.011	Project Engineering Manager	Plans, directs, and coordinates projects of the moderate complexity and scope. The job typically requires a bachelor's degree and less than 5 years of experience, or equivalent. Oversees staff and activities of a designated project to ensure that goals or objectives of a project are accomplished within prescribed time frame and funding parameters. Translates project requirements into project objectives and tasks. Manages activities concerned with technical developments, scheduling, and resolving engineering design and test problems.
	Engineering Program / Project Management	60.015	Project Engineer, Sr.	Second of two levels of engineering project management. Under limited supervision, plans, schedules, and coordinates detailed phases of engineering work as part of a major project or as a total project of moderate scope. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Reviews product design for compliance with engineering principles, company standards, and customer contract requirements, and related specifications. Coordinates activities concerned with technical developments, scheduling, and resolving engineering design and test problems. Work requires a broad knowledge of precedents in the specialty area and a good knowledge of principles and practices of related engineering specialty. May direct or lead other Engineers or Technicians.
	Engineering Program / Project Management	60.016	Project Engineer	First of two levels of engineering project management. Under general supervision, plans, schedules, and coordinates detailed phases of engineering work as part of a major project or as a total project of moderate scope. The job typically requires a bachelor's degree and less than 4 years of experience, or equivalent. Reviews product design for compliance with engineering principles, company standards, and customer contract requirements, and related specifications. Coordinates activities concerned with technical developments, scheduling, and resolving engineering design and test problems. Work requires a broad knowledge of precedents in the specialty area and a good knowledge of principles and practices of related engineering specialty.
	Design / Drafting	61.001	Design Engineering Manager	Manager in charge of a design engineering group. The job typically requires a bachelor's or master's degree in engineering or an engineering degree with a master's degree in business administration and significant experience, or equivalent. Work may include creation of previously non-existent products or modification of existing products, including product line extensions. Work includes selection and testing of materials, ingredients or components that will be suitable for the product. Work may include responding to a customer request for a particular product or design. The manager's role is the first level of engineering where management of people is a primary function. Work includes planning, supervising and coordinating all phases of design and testing. Initiates procedures, methods and equipment for development of projects. Approves designs and prototypes. Provides consultation on engineering matters. Work primarily is involved with the development or improvement of actual products or designs.
	Design / Drafting	61.002	Design Engineering Supervisor	Supervisor of the design engineering group. The job typically requires a bachelor's degree in engineering and 5+ years of experience, or equivalent. Supports the department manager with the execution of all design and drafting activities including managing staff, monitoring schedules and budgets, evaluating productivity and quality and directing the complete technical operations of the project. Work may include creation of previously non-existent products or modification of existing products, including product line extensions. Work includes selection and testing of materials, ingredients or components that will be suitable for the product. Work may include responding to a customer request for a particular product or design. Work includes planning, supervising and coordinating all phases of design and testing. Initiates procedures, methods and equipment for development of projects. Approves designs and prototypes. Provides consultation on engineering matters. Work primarily is involved with the development or improvement of actual products or designs.
	Design / Drafting	61.003	Drafting and Documentation Manager	Managerial job with responsibility for all staff in a drafting and documentation department. The job typically requires a bachelor's degree in business or a technical field and 6+ years of related experience, or equivalent, with strong drafting and/or technical writing background (may rely upon subordinates to provide technical expertise in certain areas). Responsibilities include management of the drafting, CAD, engineering documentation and possibly the technical writing function and management of electronic and conventional document files. Duties include budget management, hiring, assigning and reviewing work, evaluating staff and developing, recommending, and implementing policies and procedures.
	Design / Drafting	61.005	Drafting Supervisor	Supervisory job with responsibility for non-exempt staff in a drafting and documentation department. The job typically requires a technical degree in drafting and 6+ years of related experience, or equivalent. Responsibilities include technical leadership of the drafting function, including CAD and management of electronic and conventional document files. Duties include assigning work, reviewing work, and providing technical instruction. Responsibilities may also extend to technical writing as a secondary function of the job.
	Design / Drafting	61.010	CAD Designer, Sr.	Second of two levels of CAD design. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Performs complex and non-routine drafting assignments by operating Computer Aided Design (CAD) equipment such as digitizers, plotters, CRT's, and associated peripheral equipment and software. Reviews drawings and supporting documents to verify specific dimensioning, tolerances and adherence to organization or industry standard practices. Incumbents plan and carry out the assignment and resolve most conflicts independently. Coordinates work with others as necessary. Interprets policies and requirements in terms of established objectives. May develop changes to plans and/or methodology. Provides recommendations for improvements in order to meet program objectives.
	Design / Drafting	61.011	CAD Designer	First of two levels of CAD design. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Prepares major assembly, section and detail CAD drawings. Modifies drawings by analyzing, resolving and incorporating changes. Incumbents plan and carry out the assignments in conformance with accepted policies and practices. Typically adheres to instructions, policies, precedents, and guidelines in exercising judgment to resolve commonly encountered work problems. May bring unusual findings or problems to the supervisor's or lead engineer for direction.
	Design / Drafting	61.015	CAD Drafter I (Design)	Third of three levels of technical drafting work; highest level of non-supervisory work. The job typically requires completion of a formal drafting program and 5+ years of drafting experience, or equivalent. Work assignments are varied and of the highest level of scope and complexity. Supervision is limited, but engineering staff, may review work product. Incumbents break down information obtained from specifications, sketches, customer layout drawings and instructions furnished by others and convert the information into detailed drawings with section views and dimensions. Incumbents have responsibility for coordinating with others to determine whether drawings can be executed efficiently and within expected tolerances. Incumbents typically prepare bills of materials and specifications when drawings are complete. Considerable time may be devoted to providing technical help to less experienced staff and checking the work of others.
	Design / Drafting	61.016	CAD Drafter II (Layout)	Second of three levels of technical drafting work. The job typically requires completion of a formal drafting program and 2+ years of drafting experience, or equivalent. Work assignments are varied and of considerable scope and complexity. Supervision is limited, but work may be reviewed by peers or by more experienced staff. Incumbents break down information obtained from specifications, sketches, customer layout drawings and instructions furnished by others and convert the information into detailed drawings with section views and dimensions. Incumbents have responsibility for coordinating with others to determine whether drawings can be executed efficiently and within expected tolerances. Incumbents typically prepare bills of materials and specifications when drawings are complete. Most work is completed using computerized drafting applications. Some time may be devoted to providing technical help to less experienced staff.

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	Design / Drafting	61.017	CAD Drafter III (Detail)	First of three levels of technical drafting work. The job typically requires completion of a formal drafting program and no previous experience, or equivalent. Work assignments are varied, but limited in scope and complexity. Supervision is readily available and work is usually reviewed by more experienced staff. Incumbents break down information obtained from specifications, sketches, customer layout drawings and instructions furnished by others and convert the information into detailed drawings with section views and dimensions. Incumbents perform a variety of mathematical calculations using standard procedures. Incumbents have responsibility for coordinating with others to determine whether drawings can be executed efficiently and within expected tolerances. Incumbents may prepare bills of materials and specifications when drawings are complete. Most work is completed using computerized drafting applications.
	Engineering	62.005	Chemical Engineer I	Fourth of four levels of professional chemical engineering. The job typically requires a bachelor's degree and 6+ years of experience, or equivalent. Conducts research or production work to develop or improve chemical processes or products. May include the manufacture of substances from basic materials and substances through a controlled chemical or physical change process. Includes the research, development, construction, and operation of equipment to carry out desired chemical process. Compiles all necessary data and writes reports on results. Incumbents define objectives and interpret policies and objectives established by staff senior to the immediate supervisor and determine their effect on design and development requirements. At this level, the incumbent independently plans, designs, and carries out work to be done and often serves as a technical authority. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.006	Chemical Engineer II	Third of four levels of professional chemical engineering. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Conducts research or production work to develop or improve chemical processes or products. May include the manufacture of substances from basic materials and substances through a controlled chemical or physical change process. Includes the research, development, construction, and operation of equipment to carry out desired chemical process. Compiles all necessary data and writes reports on results. Incumbents plan and carry out the assignment and resolve most conflicts independently. Coordinates work with others as necessary. Interprets policies and requirements in terms of established objectives. May develop changes to plans and/or methodology. Provides recommendations for improvements in order to meet program objectives. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.007	Chemical Engineer III	Second of four levels of professional chemical engineering. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Conducts research or production work to develop or improve chemical processes or products. May include the manufacture of substances from basic materials and substances through a controlled chemical or physical change process. Includes the research, development, construction, and operation of equipment to carry out desired chemical process. Compiles all necessary data and writes reports on results. Incumbents plan and carry out the assignments in conformance with accepted policies and practices. Typically adheres to instructions, policies, precedents, and guidelines in exercising judgment to resolve commonly encountered work problems. May bring unusual findings or problems to the supervisor's or lead engineer for direction. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.008	Chemical Engineer IV	First of four levels of professional chemical engineering. The job typically requires a minimum of an engineering degree and less than 2 years of experience, or equivalent. Conducts research or production work to develop or improve chemical processes or products. May include the manufacture of substances from basic materials and substances through a controlled chemical or physical change process. Includes the research, development, construction, and operation of equipment to carry out desired chemical process. Compiles all necessary data and writes reports on results. Incumbent's work under direct supervision and within guidelines and previously established practices and procedures set by the supervisor or lead engineer. At this level, incumbents often refers problems not covered by instructions or guides to the supervisor or senior level for help or a decision. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.010	Design Engineer I	Fourth of four levels of design engineering. The job typically requires an engineering degree and 6+ years of experience or a master's degree and 1+ years of experience. Work is involved with the development or improvement of actual products or designs. Work may include creation of previously non-existent products or modification of existing products. Work includes selection and testing of materials, ingredients or components that will be suitable for the product. The typical cycle includes conceptualizing, developing prototypes, testing and perfecting designs. They are capable of clearly defining appropriate technical approaches and solutions to the most critical challenges. They are able to define critical project criteria to ensure project completion and have demonstrated leadership skills and mastery of financial principles. Work is stated in terms of objectives requiring project planning and judgment. They are responsible for all aspects of projects including financial budgets. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.011	Design Engineer II	Third of four levels of design engineering. The job typically requires an engineering degree and 4+ years of experience or a master's degree and 1+ years of experience. Work primarily is involved with the development or improvement of actual products or designs. Work may include creation of previously non-existent products or modification of existing products. Work includes selection and testing of materials, ingredients or components that will be suitable for the product. The typical cycle includes conceptualizing, developing prototypes, testing and perfecting designs. These engineers demonstrate creativity and ingenuity in applying engineering principles and practices. They are generally more proficient at solving problems in a timely manner. Assignments are broad in nature. They work under minimal supervision and are responsible for defining technical approaches to projects. They may act as lead on some projects and guide lower level engineers and technicians. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.012	Design Engineer III	Second of four levels of design engineering. The job typically requires an engineering degree and 2+ years of experience or a master's degree and less than 1 year of experience. Work primarily is involved with the development or improvement of actual products or designs. Work may include creation of previously non-existent products or modification of existing products. Work includes selection and testing of materials, ingredients or components that will be suitable for the product. Work may include responding to a customer request for a particular product or design. The typical cycle includes conceptualizing, developing prototypes, testing and perfecting designs. They are able to draw solutions from both formal training and experience. Work is varied in nature. Under general direction, they plan and perform engineering duties for part of a major project or for projects of moderate complexity. They may provide work direction to technicians and less experienced engineers. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.013	Design Engineer IV	First of four levels of design engineering. The job typically requires an engineering degree and less than 2 year of experience, or equivalent. Work primarily is involved with the development or improvement of actual products or designs. Work may include creation of previously non-existent products or modification of existing products. Work includes selection and testing of materials, ingredients or components that will be suitable for the product. Work may include responding to a customer request for a particular product or design. The typical cycle includes conceptualizing, developing prototypes, testing and perfecting designs. This is an entry-level position and requires knowledge and understanding of basic concepts and procedures. These engineers use established policies and procedures to complete work assignments. Work is somewhat routine with detailed instructions. Work is performed under close supervision. Engineers may be assigned an element of a project or well-defined tasks. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.015	Electrical/Electronic Engineer I	Fourth of four levels of professional electrical/electronic engineering. The job typically requires a bachelor's degree and 6+ years of experience, or equivalent. Responsible for the design, development, and testing of electrical systems and electronic devices. Conducts tests, analyzes test data, and writes test reports to record operating performance and provide data to support product compliance with customer or internal specifications and applicable standards. Develops detailed engineering specifications for new products. Incumbents define objectives and interpret policies and objectives established by staff senior to the immediate supervisor and determine their effect on design and development requirements. At this level, the incumbent independently plans, designs, and carries out work to be done and often serves as a technical authority. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.016	Electrical/Electronic Engineer II	Third of four levels of professional electrical/electronic engineering. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Responsible for the design, development, and testing of electrical systems and electronic devices. Conducts tests, analyzes test data, and writes test reports to record operating performance and provide data to support product compliance with customer or internal specifications and applicable standards. Develops detailed engineering specifications for new products. Incumbents plan and carry out the assignment and resolve most conflicts independently. Coordinates work with others as necessary. Interprets policies and requirements in terms of established objectives. May develop changes to plans and/or methodology. Provides recommendations for improvements in order to meet program objectives. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.017	Electrical/Electronic Engineer III	Second of four levels of professional electrical/electronic engineering. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Responsible for the design, development, and testing of electrical systems and electronic devices. Conducts tests, analyzes test data, and writes test reports to record operating performance and provide data to support product compliance with customer or internal specifications and applicable standards. May develops detailed engineering specifications for new products. Incumbents independently plan and carry out the assignments in conformance with accepted policies and practices. Typically adheres to instructions, policies, precedents, and guidelines in exercising judgment to resolve commonly encountered work problems. May bring unusual findings or problems to the supervisor's or lead engineer for direction. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.018	Electrical/Electronic Engineer IV	First of four levels of professional electrical/electronic engineering. The job typically requires a minimum of an engineering degree and less than 2 years of experience, or equivalent. Responsible for the design, development, and testing of electrical systems and electronic devices. Conducts tests, analyzes test data, and writes test reports to record operating performance and provide data to support product compliance with customer or internal specifications and applicable standards. May develop detailed engineering specifications for new products. Incumbent's work under direct supervision and within guidelines and previously established practices and procedures set by the supervisor or lead engineer. At this level, incumbents often refers problems not covered by instructions or guides to the supervisor or senior level for help or a decision. May interface with customer to ensure engineering compliance to define requirements and specifications.

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	Engineering	62.020	Controls Engineer I	Fourth of four levels of professional controls engineering. The job typically requires a bachelor's degree in Electrical or Electronic Engineering and 6+ years of experience, or equivalent. Possesses extensive knowledge of various hardware and software used in the control of manufacturing processes and equipment. Applies understanding of Programmable Logic Controllers (PLC), Ladder Logic, and Human-Machine Interfaces (HMI) to design, modify or improve control systems. Incumbents at this level are responsible for a number of diverse duties and projects. Defines objectives and interpret policies and objectives established by staff senior to the immediate supervisor and determines their effect on design and development requirements. With little or no supervision, plans, designs, and carries out work to be done and often serves as a technical authority. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.021	Controls Engineer II	Third of four levels of professional controls engineering. The job typically requires a Bachelor's degree in Electrical or Electronic Engineering and 4+ years of experience, or equivalent. Possesses broad knowledge of various hardware and software used in the control of manufacturing processes and equipment. Applies understanding of Programmable Logic Controllers (PLC), Ladder Logic, and Human-Machine Interfaces (HMI) to design, modify or improve control systems. Performs work that is varied and may be somewhat difficult in character. Interprets policies and requirements in light of established objectives. May develop changes to plans and/or methodology. Provides recommendations for improvements in order to meet program objectives. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.022	Controls Engineer III	Second of four levels of professional controls engineering. The job typically requires a bachelor's degree in Electrical or Electronic Engineering and 2+ years of experience, or equivalent. Possesses general knowledge of various hardware and software used in the control of manufacturing processes and equipment. Applies understanding of Programmable Logic Controllers (PLC), Ladder Logic, and Human-Machine Interfaces (HMI) to design, modify or improve control systems. Performs work of moderate complexity involving incumbent's plan and carry out the assignments in conformance with accepted policies and practices. Typically adheres to instructions, policies, precedents, and guidelines in exercising judgment to resolve commonly encountered work problems. May bring unusual findings or problems to the supervisor or lead engineer for direction. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.023	Controls Engineer IV	First of four levels of professional controls engineering. The job typically requires a Bachelor's degree in Electrical or Electronic Engineering and less than 2 years of experience, or equivalent. Possesses knowledge of various hardware and software used in the control of manufacturing processes and equipment. Applies understanding of Programmable Logic Controllers (PLC), Ladder Logic, and Human-Machine Interfaces (HMI) to design, modify or improve control systems. Works under direct supervision and within guidelines and previously established practices and procedures set by the supervisor or lead engineer. Refers problems not covered by instructions or guides to the supervisor or senior level for help or a decision. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.025	Industrial Engineer I	Fourth of four levels of professional industrial engineering. The job typically requires a bachelor's degree and 6+ years of experience, or equivalent. Responsible for the supervision, formulation, administration and coordination of industrial engineering projects designed to improve operating performance, reduce waste and delays and otherwise promote cost reductions on a company-wide basis. Activities involve using time study or standard data for a variety of machine, assembly and hand operations, production methods, equipment layout, material handling, and manpower, equipment and material utilization in order to improve operating performance. Incumbents define objectives and interpret policies and objectives established by staff senior to the immediate supervisor and determine their effect on design and development requirements. At this level, the incumbent independently plans, designs, and carries out work to be done and often serves as a technical authority. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.026	Industrial Engineer II	Third of four levels of professional industrial engineering. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Performs a variety of engineering assignments in work measurement for the establishment of standards. Plans and oversees utilization of production facilities and personnel in department or other subdivision of industrial establishment. Plans equipment layout, workflow and accident prevention measures to maintain efficient and safe utilization of plant facilities. Plans and oversees work study, time study and training programs to promote efficient manpower utilization. May work closely with other engineering disciplines in the development and application of robotics to increase quality, efficiency or volume. Incumbents plan and carry out the assignment and resolve most conflicts independently. May develop changes to plans and/or methodology. Provides recommendations for improvements in order to meet program objectives. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.027	Industrial Engineer III	Second of four levels of professional industrial engineering. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Under general supervision, performs a variety of engineering assignments in work measurement for the establishment of standards. Plans and oversees utilization of production facilities and personnel in department or other subdivision of industrial establishment. Plans and oversees work study, time study and training programs to promote efficient manpower utilization. May work closely with other engineering disciplines in the development and application of robotics to increase production quality, efficiency or volume. Incumbents plan and carry out the assignments in conformance with accepted policies and practices. Typically adheres to instructions, policies, precedents, and guidelines in exercising judgment to resolve commonly encountered work problems. May bring unusual findings or problems to the supervisor's or lead engineer for direction. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.028	Industrial Engineer IV	First of four levels of professional industrial engineering. The job typically requires a minimum of an engineering degree and less than 2 years of experience, or equivalent. Under supervision, performs a variety of engineering assignments in work measurement for the establishment of standards. Plans and oversees utilization of production facilities and personnel in department or other subdivision of industrial establishment. Plans and oversees work study, time study and training programs to promote efficient manpower utilization. May work closely with other engineering disciplines in the development and application of robotics to increase production quality, efficiency or volume. Incumbent's work under direct supervision and within guidelines and previously established practices and procedures set by the supervisor or lead engineer. At this level, incumbents often refers problems not covered by instructions or guides to the supervisor or senior level for help or a decision. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.030	Manufacturing Engineer I	Fourth of four levels of professional manufacturing engineering. The job typically requires a bachelor's degree and 6+ years of experience, or equivalent. Responsible for a number of diverse duties and projects which may include developing manufacturing methods and processes, writing operation sheets for products or tools, troubleshooting manufacturing problems, reviewing drawings and designs during the development phase, or preparing time studies and estimates for sales. Investigates, establishes, and implements requirements for equipment, tooling, materials, or methods of manufacturing, including make or buy decisions and facility layout as required for new or revised products. Incumbents define objectives and interpret policies and objectives established by staff senior to the immediate supervisor and determine their effect on design and development requirements. At this level, the incumbent independently plans, designs, and carries out work to be done and often serves as a technical authority. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.031	Manufacturing Engineer II	Third of four levels of professional manufacturing engineering. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Performs work that is varied and may be somewhat difficult in character, which may include developing manufacturing methods and processes, investigating and troubleshooting manufacturing problems, or reviewing drawings and designs during the development phase. Investigates, establishes, and implements requirements for equipment, tooling, materials, or methods of manufacturing, including make or buy decisions and facility layout as required for new or revised products. Helps plan, design, and detail floor layouts for efficient production. Incumbents plan and carry out the assignment and resolve most conflicts independently. Interprets policies and requirements in terms of established objectives. May develop changes to plans and/or methodology. Provides recommendations for improvements in order to meet program objectives. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.032	Manufacturing Engineer III	Second of four levels of professional manufacturing engineering. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Performs work of moderate complexity involving developing manufacturing methods and processes, investigating and troubleshooting manufacturing problems, or reviewing drawings and designs during the development phase. Investigates, establishes, and implements requirements for equipment, tooling, materials, or methods of manufacturing, including make or buy decisions and facility layout as required for new or revised products. Helps plan, design, and detail floor layouts for efficient production. Incumbents plan and carry out the assignments in conformance with accepted policies and practices. Typically adheres to instructions, policies, precedents, and guidelines in exercising judgment to resolve commonly encountered work problems. May bring unusual findings or problems to the supervisor's or lead engineer for direction. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.033	Manufacturing Engineer IV	First of four levels of professional manufacturing engineering. The job typically requires a minimum of an engineering degree and less than 2 years of experience, or equivalent. Performs work that is somewhat routine and that involves the development of manufacturing methods and processes, investigating and troubleshooting manufacturing problems, or reviewing drawings and designs during the development phase. Uses parts' drawings and engineering data to propose recommendation in equipment and processes for economical production. Incumbent's work under direct supervision and within guidelines and previously established practices and procedures set by the supervisor or lead engineer. At this level, incumbents often refers problems not covered by instructions or guides to the supervisor or senior level for help or a decision. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.035	Mechanical Engineer I	Fourth of four levels of professional mechanical engineering. The job typically requires a bachelor's degree and 6+ years of experience, or equivalent. Researches, plans, and designs mechanical and electromechanical products and systems, and directs and coordinates activities involved in fabrication, operation, application, installation, and repair of mechanical or electromechanical products and systems. Troubleshoots mechanical designs, assemblies and component problems and implements corrective measures. May assign tasks to other mechanical engineers and provides guidance with schedule, cost and specifications. Incumbents define objectives and interpret policies and objectives established by staff senior to the immediate supervisor and determine their effect on design and development requirements. At this level, the incumbent independently plans, designs, and carries out work to be done and often serves as a technical authority. May interface with customer to ensure engineering compliance to define requirements and specifications.

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	Engineering	62.036	Mechanical Engineer II	Third of four levels of professional mechanical engineering. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Researches, plans, and designs mechanical and electromechanical products and systems, and directs and coordinates activities involved in fabrication, operation, application, installation, and repair of mechanical or electromechanical products and systems. Troubleshoots mechanical designs, assemblies and component problems and implements corrective measures. Incumbents plan and carry out the assignment and resolve most conflicts independently. Coordinates work with others as necessary. Interprets policies and requirements in terms of established objectives. May develop changes to plans and/or methodology. Provides recommendations for improvements in order to meet program objectives. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.037	Mechanical Engineer III	Second of four levels of professional mechanical engineering. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Researches, plans, and designs mechanical and electromechanical products and systems, and directs and coordinates activities involved in fabrication, operation, application, installation, and repair of mechanical or electromechanical products and systems. Troubleshoots mechanical designs, assemblies and component problems and implements corrective measures. Incumbents plan and carry out the assignments in conformance with accepted policies and practices. Typically adheres to instructions, policies, precedents, and guidelines in exercising judgment to resolve commonly encountered work problems. May bring unusual findings or problems to the supervisor's or lead engineer for direction. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.038	Mechanical Engineer IV	First of four levels of professional mechanical engineering. The job typically requires a minimum of an engineering degree and less than 2 years of experience, or equivalent. Researches, plans, and designs mechanical and electromechanical products and systems, and directs and coordinates activities involved in fabrication, operation, application, installation, and repair of mechanical or electromechanical products and systems. Troubleshoots mechanical designs, assemblies and component problems and implements corrective measures. Incumbent's work under direct supervision and within guidelines and previously established practices and procedures set by the supervisor or lead engineer. At this level, incumbents often refers problems not covered by instructions or guides to the supervisor or senior level for help or a decision. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.040	Product Development Engineer I	Fourth of four levels of professional product development engineering. The job typically requires a bachelor's degree and 6+ years of experience, or equivalent. Leads development work, problem resolution and design of new products, models or mechanisms. Work involves the application of more than one pneumatic, electric, electronic, hydraulic, refrigeration, optical, chemical or mechanical factor. Working only from broad specifications, not only recommends and guides, but is responsible for scheduling, staffing and coordinating projects. Not a supervisory position. Incumbents define objectives and interpret policies and objectives established by staff senior to the immediate supervisor and determine their effect on design and development requirements. At this level, the incumbent independently plans, designs, and carries out work to be done and often serves as a technical authority. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.041	Product Development Engineer II	Third of four levels of professional product development engineering. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Under general supervision, is responsible for the development, problem resolution, and design of new products, models or mechanisms. Work involves the application of more than one pneumatic, electric, electronic, hydraulic, refrigeration, optical, chemical or mechanical factor. Coordinates development and design problems with research engineering, tooling, and manufacturing. Incumbents plan and carry out the assignment and resolve most conflicts independently. Coordinates work with others as necessary. Interprets policies and requirements in terms of established objectives. May develop changes to plans and/or methodology. Provides recommendations for improvements in order to meet program objectives. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.042	Product Development Engineer III	Second of four levels of professional product development engineering. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Under direction of a more senior engineer, is responsible for the development, problem resolution, and design of new products, models or mechanisms. Work involves the application of more than one pneumatic, electric, electronic, hydraulic, refrigeration, optical, chemical or mechanical factor. Coordinates development and design problems with research engineering, tooling, and manufacturing. Typically adheres to instructions, policies, precedents, and guidelines in exercising judgment to resolve commonly encountered work problems. May bring unusual findings or problems to the supervisor's or lead engineer for direction. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.043	Product Development Engineer IV	First of four levels of professional product development engineering. The job typically requires a minimum of an engineering degree and less than 2 years of experience, or equivalent. Responsible for the development, problem resolution, and design of new products, models or mechanisms. Work involves the application of more than one pneumatic, electric, electronic, hydraulic, refrigeration, optical, chemical or mechanical factor. Using standardized procedures, may design special parts of minor phases of projects or products. Incumbent's work under direct supervision and within guidelines and previously established practices and procedures set by the supervisor or lead engineer. At this level, incumbents often refers problems not covered by instructions or guides to the supervisor or senior level for help or a decision. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.045	Software Engineer I	Fourth of four levels of software engineer, advanced or principal level. The job typically requires a bachelor's of science degree and 6+ years of experience or a master's of science degree and 3+ years of experience. Develops and/or provides technical leadership in the development of software involving application of new technologies with significant technical risk. Provides technical consultation throughout the company in areas of expertise. Prepare detailed plans, which may span over a year for programs or complex projects. Interacts frequently at a high level with other functional groups, customers, vendors or industry peers. Initiates broad new development projects. Establishes program goals and defines plans and cost/schedule requirement. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.046	Software Engineer II	Third of four levels of software engineer. The job typically requires a bachelor's of science degree and 4+ years of experience or a master's of science degree and 1+ years of experience. Develops and/or provides technical leadership in the development of software involving application of new technologies with significant technical risk. Prepare detailed plans, which may span over a year for programs or complex projects. Determines test philosophy, goals and objectives. Interacts frequently with other functional groups, customers or vendors on matters involving significant company resources. Participates in the formation of project goals, scope and schedule. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.047	Software Engineer III	Second of four levels of software engineer. The job typically requires a bachelor's of science degree and 2+ years of experience or a master's of science degree and less than 1 year of experience. Develops software, choosing between alternative approaches with some originality and moderate technical risk. Prepares detailed plans, generally spanning several months. Designs and implements test procedures. Interacts on a regular basis with other functional groups and customers on technical and/or administrative matters. Participates in the formation of projects goals, scope and schedule. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.048	Software Engineer IV	First of four levels of software engineer; entry level. The job typically requires a bachelor's of science degree and less than 2 year of experience. Assists in the development of software involving routine application of proven, well-documented techniques with minimal technical risk. Prepares detailed plans, generally spanning several weeks. Conducts simple investigative analysis and tests. Acts as a team member with other functional groups to conduct software design reviews. May interface with customer to ensure engineering compliance to define requirements and specifications.
	Engineering	62.050	Application Engineer, Sr.	Second of two levels of professional application engineering job. The job typically requires a bachelor's degree in engineering, and 5+ years of experience, or equivalent. Under limited supervision, develops, plans and investigates practical problems involving the full use of company products in diverse manufacturing processes to conform to customer requirements. Conducts independent analysis of operating conditions and specifications proposed and requested by customers. Determines feasibility and product cost estimates from consideration of applicable policies and engineering requirements. Participates in the installation, operation and testing of equipment developed or modified in the field with sales and customer representatives.
	Engineering	62.051	Applications Engineer	First of two levels of professional application engineering job. The job typically requires a bachelor's degree in engineering, and less than 5 years of experience, or equivalent. Under general supervision, develops, plans and investigates practical problems involving the full use of company products in diverse manufacturing processes to conform to customer requirements. Conducts independent analysis of operating conditions and specifications proposed and requested by customers. Determines feasibility and product cost estimates from consideration of applicable policies and engineering requirements. Participates in the installation, operation and testing of equipment developed or modified in the field with sales and customer representatives.
	Engineering	62.055	Maintenance / Reliability Engineer	Experienced level of professional maintenance engineering. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Under limited supervision, develops and implements preventive maintenance programs that comply with recognized and generally accepted engineering practices. Collaborates with operations personnel in troubleshooting problems and implementing technology improvements, provides guidance and training as appropriate to promote proper operation and maintenance of equipment. Seeks compliance with all environmental, safety, and health requirements, and promotes a safe working environment.
	Engineering	62.060	Weld Engineer	Experienced level of professional weld/material engineering. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Develops welding techniques, procedures and application of welding equipment to problems involving fabrication of metals, utilizing knowledge of production specifications, properties and characteristics of metals and metal alloys and engineering principles. Under general supervision, responsible for performing welding qualification tests and interpreting those results including inspecting weld samples and/or working with other personnel to interpret weld quality. Provides direction to welding technicians during production and test welding runs. May be responsible for documenting weld specifications and working procedures.
	Field Service / Sales	63.001	Field Service Manager	Manager of field service. The job typically requires completion of a bachelor's degree and 3+ years of field service experience or a formal technical program and 5+ years of progressively responsible field service experience, or equivalent. Assigns work and directs staff who install, service and/or repair equipment at a customer location. Duties include managing staff performance, tracking project status, customer relations, staff recruiting and staff training. May serve as a technical expert to troubleshoot or modify customer installations.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Field Service / Sales	63.005	Field Service Engineer, Sr.	Second of two levels of field service engineering. This job typically requires a bachelor's degree in engineering and 4+ years of experience. Under minimal supervision, carries out engineering, analysis and related duties involving the installation, operation, maintenance, modification, and repair of company and/or customer products and equipment. Performs start-up and commissioning of complex machinery and equipment. Troubleshoots technical problems and issues and determines appropriate solutions and performs electrical, electronic, and mechanical repairs to complex equipment and/or products. Is a liaison for customer personnel and technicians in the field, and trains maintenance and operating crews on general operation and maintenance of the equipment or product. Interprets blueprints, schematics, wiring diagrams, and technical documentation. Provides training and direction to field technicians.
	Field Service / Sales	63.006	Field Service Engineer	First of two levels of field service engineering. This job typically requires a bachelor's degree in engineering and less than 4 years of experience. Under general direction, carries out engineering, analysis and related duties involving the installation, operation, maintenance, modification, and repair of company and/or customer products and equipment. Performs start-up and commissioning of complex machinery and equipment. Troubleshoots technical problems and issues and determines appropriate solutions and performs electrical, electronic, and mechanical repairs to equipment and/or products. Interacts with customer and engineering staff and may serve as an on-site representative to customer organization. Interprets blueprints, schematics, wiring diagrams, and technical documentation. Provides training and direction to field technicians.
	Field Service / Sales	63.010	Field Service Technician I	Third of three levels of field service technician work. The job typically requires completion of a formal technical program and 5+ years of previous experience, or equivalent. Work assignments are of greatest variety and complexity. Supervision received is limited. Incumbents work independently or as members of a team installing, servicing or repairing equipment at a customer location. Incumbents may suggest modifications of equipment or installation to meet customer requirements. Work may include instructing customer personnel in the correct operation of equipment. Work may include providing training and work direction for other technicians. Areas of specialization will include mechanical, chemical, electronic and others. Incumbents may use both specialized and standard computer applications in the performance of their duties. Work may include lifting, handling or maintaining equipment or operation of equipment. Civil Engineering Technicians and Photocopier Service Technicians are not included.
	Field Service / Sales	63.011	Field Service Technician II	Second of three levels of field service technician work. The job typically requires completion of a formal technical program and 2+ years of previous experience, or equivalent. Work assignments are varied, and of moderate scope and complexity. Supervision received is limited. Incumbents work independently or as members of a team installing, servicing or repairing equipment at a customer location. Areas of specialization will include mechanical, chemical, electronic and others. Incumbents may use both specialized and standard computer applications in the performance of their duties. Work may include lifting, handling or maintaining equipment or operation of equipment. Civil Engineering Technicians and Photocopier Service Technicians are not included.
	Field Service / Sales	63.012	Field Service Technician III	First of three levels of field service technician work. The job typically requires completion of a formal technical program and no previous experience, or equivalent. Work assignments are varied, but limited in scope and complexity. Work typically is under direction of more experienced staff. Incumbents assist with installation, servicing and repair of equipment at a customer location. Areas of specialization will include mechanical, chemical, electronic and others. Incumbents may use both specialized and standard computer applications in the performance of their duties. Work may include lifting, handling or maintaining equipment or operation of equipment. Civil Engineering Technicians and Photocopier Service Technicians are not included.
	Field Service / Sales	63.020	Sales Engineer	Applies technical expertise in support of the sale of complex technical products or equipment. The job typically requires a bachelor's degree and 3+ years of experience, or equivalent. Assists in the technical preparation of quotations and proposals to be submitted to customers. Acts as a key point-of-contact between the sales staff and the other engineering departments with regard to technical issues concerning bid and proposal efforts. May develop preliminary project schedules. May serve as a point of contact for non-routine technical issues on major accounts. Conduct technical presentations to customers on the company and our products. Identifies potential opportunities with existing and new customers.
	Field Service / Sales	63.025	Cost Estimator, Sr.	Second of two levels of cost estimator. Compiles estimates of cost on standard and special parts or products as a basis for pricing purposes. The job typically requires a bachelor's degree in business management or engineering and 6+ years of experience, or equivalent. Responsible for analyzing specifications including sketches, blueprints, bills of material or sample layouts, and calculating production costs for material and labor. May participate in design reviews. Prepares and maintains historical cost data. Creates complex cost models for cost estimating elements. Do not report building or construction cost estimators.
	Field Service / Sales	63.026	Cost Estimator	Second of two levels of cost estimator. Compiles cost estimates on standard parts and assemblies working from previously compiled information or information received from supervisor. The job typically requires a bachelor's degree in business management or engineering and 3+ years of experience, or equivalent. Responsible for analyzing specifications including sketches, blueprints, bills of material or sample layouts, and calculating production costs for material and labor. Creates moderately complex cost models for cost estimating elements. Do not report building or construction cost estimators.
	Technicians	64.005	Product Technician I - Lead	Fourth of four levels of product technician. Responsible for coordinating work assignments of technicians. The job typically requires a minimum of an associate's degree, or equivalent and 6+ years of experience. May be employed in a prototype, test or quality environment. Possesses extensive technical knowledge. May be responsible for test planning to meet project schedules. Serves as a liaison to management. May interact with customers or vendors. May train technicians.
	Technicians	64.006	Product Technician II	Third of four levels of product technician. Performs diverse and complex technical assignments. The job typically requires a minimum of an associate's degree, or equivalent and 4+ years of experience. May be employed in a prototype, test or quality environment. May perform calculations and conduct moderate analysis. Compiles and organizes technical data. May prepare reports and recommendations. Maintains testing equipment. Has clear understanding of procedures and techniques. Full proficient usage of equipment and machinery. May identify and resolve routine and moderately routine problems. Plans activities within specific guidelines to meet deadlines. Normally receives little or no instruction on routine activities, and receives general instructions on new assignments.
	Technicians	64.007	Product Technician III	Second of four levels of product technician. Under supervision, conducts and may design tests used to support engineering efforts. The job typically requires a minimum of an associate's degree, or equivalent and 2+ years of experience. May be employed in a prototype, test or quality environment. May provide technical assistance in the areas of design, layout and detail drawing, procurement of materials, construction and testing equipment of experimental models. Maintains testing equipment. Has basic understanding of procedures and techniques. Proficient usage of equipment and machinery required to perform job. Normally receives little or no instruction on routine activities. May receive detailed instruction on new assignments.
	Technicians	64.008	Product Technician IV	First of four levels of product technician. Under direct supervision, conducts and may design tests used to support engineering efforts. The job typically requires completion of a formal technical program and no experience, or equivalent. May be employed in a prototype, test or quality environment. May provide technical assistance in the area of design, layout and detail drawing, procurement of materials, construction and testing equipment of experimental models. Maintains testing equipment. Has basic understanding of procedures and techniques. Proficient usage of equipment and machinery required to perform job. Normally receives little or no instruction on routine activities. May receive detailed instruction on new assignments.
	Engineering Support	65.005	Engineering Change Coordinator, Sr.	Second of two levels of engineering change coordinator. Reviews, prepares and tracks engineering change requests. Coordinates engineering changes with product engineering and manufacturing. The job typically requires a bachelor's degree and 6+ years of experience, or equivalent. Monitors and releases approved engineering changes. Monitors engineering releases of approved changes to ensure timely incorporation of changes into production. Analyzes and modifies procedures/systems, resolves complex workflow issues and may represent department at project meetings. Also may lead, train and provide direction to other engineers. Uses automated tracking/release system.
	Engineering Support	65.006	Engineering Change Coordinator	First of two levels of engineering change coordinator. Reviews, prepares and tracks engineering change requests. The job typically requires a bachelor's degree and 3+ years of experience, or equivalent. Coordinates engineering changes with product engineering and manufacturing. Monitors and releases approved engineering changes. Monitors engineering releases of approved changes to ensure timely incorporation of changes into production. Uses automated tracking/release system.
	Engineering Support	65.010	Engineering Aide	Performs clerical work in connection with the coordination of engineering activities. The job typically requires an associate's degree and 2+ years of experience, or equivalent. May include collecting data on previous records of engineering developments. Makes computations and performs minor engineering calculations under supervision. Facilitates projects as an administrative aide to the engineering staff.
	Engineering Support	65.015	Documentation Control Clerk	Coordinates, monitors and expedites the flow of documents within the operation or between departments and customers. The job typically requires high school math and problem solving skills and 5+ years of related training and experience, or equivalent. Compiles and maintains controlled documents (i.e. engineering change orders) and related files to release blueprints, drawings, and engineering documents to manufacturing and other operating departments.
	Engineering Support	65.020	Technical Writer I	Third of three levels of professional technical writing. The job typically requires a bachelor's degree and 5+ years of experience, or equivalent. Using independent judgment and discretion, writes and edits material for reports, manuals, briefs, proposals, instructions, catalogs, and related technical publications concerned with work methods and procedures, and the installation, operation, and maintenance of machinery and other equipment. Observes production and developmental activities. Reviews manufacturers and trade catalogs, drawings, blueprints, parts lists, specifications, mock-ups, and product samples to integrate and delineate technology, operating procedure, production sequence and detail. Organizes material and completes writing assignments according to set standards regarding order, clarity, conciseness, style, and terminology. Reviews published materials and recommends work direction and training to writers with less experience.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Engineering Support	65.021	Technical Writer II	Second of three levels of professional technical writing. The job typically requires an associate's degree and 3+ years of experience, or a bachelor's degree and 2+ years of experience, or equivalent. Under limited supervision, writes, and edits material for reports, manuals, briefs, proposals, instructions, catalogs, and related technical and administrative publications concerned with work methods and procedures, and the installation, operation, and maintenance of machinery and other equipment. Observes production, developmental, and experimental activities to determine operating procedure and detail. Organizes material and completes writing assignments according to set standards regarding order, clarity, conciseness, style, and terminology. Reviews published materials and recommends revisions or changes in scope, format, content, and methods of reproduction and binding. May assist in layout and selecting photographs, drawings, sketches, diagrams, and charts to illustrate material.
	Engineering Support	65.022	Technical Writer III	First of three levels of professional technical writing. The job typically requires an associate's degree and less than 1 year of experience, or equivalent. Under general supervision, writes, and edits material for reports, manuals, briefs, proposals, instructions, catalogs, and related technical and administrative publications concerned with work methods and procedures, and the installation, operation, and maintenance of machinery and other equipment. Observes production, developmental, and experimental activities to determine operating procedure and detail. Interviews production and engineering personnel and reads material to become familiar with product technologies and methods. Studies blueprints, sketches, drawings, parts lists, specifications, mock-ups, and product samples to integrate and delineate technology, operating procedure, and production sequence and detail. Organizes material and completes writing assignment according to set standards regarding order, clarity, conciseness, style, and terminology.
	Quality Control / Assurance / Safety	66.001	Quality Director	Plans and coordinates all aspects of the companies quality program. This job typically requires a bachelor's degree and 8+ years of experience, or equivalent. Formulates and maintains quality assurance objectives, supervises and trains employees and engages in plant functions. Develops and analyzes statistical data and specifications to determine present product standards and establish proposed quality/reliability expectancy. Formulates and coordinates quality objectives with other organizational groups to obtain an economical product/service quality and reliability level. Plans, promotes, and organizes quality training and communication activities.
	Quality Control / Assurance / Safety	66.002	Quality Manager	Manager of the quality function. The job typically requires a bachelor's degree in business or engineering and 5+ years of experience, or equivalent. Manages the quality of incoming materials or components as well as finished goods, work in process, or services provided. Individuals supervised, directly or indirectly through a supervisor, will typically use precision measuring equipment, which may include electronic instruments, to check the measurements, chemical content, purity and other qualities of parts, assemblies or product. In non-manufacturing environments other measures of customer satisfaction or work accuracy, such as surveys or audits, may be utilized. Establishes department policies, control processes and quality programs within overall direction set by senior management. Exercises judgment in dealing with unusual cases or those involving significant cost. Works closely with design, training and process development staff to improve the quality of products and services.
	Quality Control / Assurance / Safety	66.003	Quality Supervisor	Supervisor of the quality function. The job typically requires a bachelor's degree in business or engineering and 5+ years of experience, or equivalent. Responsibilities include managing the nonconforming incoming materials or components as well as finished goods, work in process, or services provided. Provides direction, guidance and training to quality team members on quality methodologies, business objectives and practices to ensure productivity and quality goals are achieved. Uses precision measuring equipment, which may include electronic instruments, to check the measurements, chemical content, purity and other qualities of parts, assemblies or product. In non-manufacturing environments other measures of customer satisfaction or work accuracy, such as surveys or audits, may be utilized.
	Quality Control / Assurance / Safety	66.005	Quality Engineer, Sr.	Second of two levels of quality engineering. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Responsibilities include implementing quality control standards to be observed during design, manufacturing and testing of products. Audits the organization's policies, communications, programs and practices to ensure compliance is achieved. Incumbents plan and carry out the assignment and resolve most conflicts independently. Coordinates work with others as necessary. Interprets policies and requirements in terms of established objectives. May develop changes to plans and/or methodology. Provides recommendations for improvements in order to meet program objectives.
	Quality Control / Assurance / Safety	66.006	Quality Engineer	First of two levels of quality engineering. The job typically requires a bachelor's degree and less than 4 years of experience, or equivalent. Is distinguished from senior level quality engineer in that responsibilities and products are less complex and not as varied in nature, and there is no responsibility for supervision of their employees. Responsibilities include working with engineering to evaluate drawings, specifications and changes during the formative stages of the design output for factors affecting quality, reliability, production and operation of the product. Maintains a high understanding of quality requirements. Incumbents plan and carry out the assignments in conformance with accepted policies and practices. Typically adheres to instructions, policies, precedents, and guidelines in exercising judgment to resolve commonly encountered work problems. May bring unusual findings or problems to the supervisor's or lead engineer for direction.
	Quality Control / Assurance / Safety	66.008	Quality Coordinator	The job typically requires math and problem solving skills equivalent to a high school diploma or GED and 1+ years of related training or experience, or equivalent. Responsibilities include perform gage R&R studies, record and file results. Maintain customer complaint log and master sample inventory. Analyze customer and internal trends and data for continuous improvement. Ensure area of responsibility, equipment, inspection fixtures and documentation is organized, clean and in good working order.
	Quality Control / Assurance / Safety	66.010	ISO 9000/SPC/TQM Coordinator	Professional staff job with responsibility for coordinating designated quality initiatives, such as European standards (ISO), Statistical Process Control (SPC), or Total Quality Management (TQM). The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Responsible for planning, administering and implementing assigned projects, which may cross several functional areas. Typical duties include preparation and delivery of related training, measuring and recording organization performance progress, serving as a liaison to outside consultants and auditors and participating in vendor qualification. Typically does not supervise staff, but may provide work direction to individuals supporting a program.
	Quality Control / Assurance / Safety	66.012	Validation Engineer, Sr.	Second of two levels of professional validation engineer. This role typically requires a bachelor's degree in engineering and 6+ years of experience, or equivalent. Under minimal supervision, prepares plans (DVP/PVP) to ensure all product specifications, interface standards, OEM requirements, and diagnostic commands are met. Performs and evaluates validation tests on prototypes to verify that engineering designs meets pre-determined specifications and design goals. Analyzes validation test data to determine whether systems or processes have met validation criteria or to identify root causes of production problems. Coordinates the implementation or scheduling of validation testing with affected programs, departments and personnel. Studies product characteristics or customer requirements and confers with management to determine validation objectives and standards. Creates, populate, or maintain databases for tracking validation activities, test results, or validated systems.
	Quality Control / Assurance / Safety	66.013	Validation Engineer	First of two levels of professional validation engineer. This role typically requires a bachelor's degree in engineering and 3+ years of experience, or equivalent. Under general supervision, prepares plans (DVP/PVP) to ensure all product specifications, interface standards, OEM requirements, and diagnostic commands are met. Performs and evaluates validation tests on prototypes to verify that engineering designs meets pre-determined specifications and design goals. Analyzes validation test data to determine whether systems or processes have met validation criteria or to identify root causes of production problems. Coordinates the implementation or scheduling of validation testing with affected programs, departments and personnel. Studies product characteristics or customer requirements and confers with management to determine validation objectives and standards. Create, populate, or maintain databases for tracking validation activities, test results, or validated systems.
	Quality Control / Assurance / Safety	66.015	Test Engineer, Sr.	Second of two levels of professional test engineer. This role typically requires a bachelor's degree in engineering and 6+ years of experience, or equivalent. Under minimal supervision, conducts test and/or experiments leading to improvements of current products and development of new ones. This position is responsible for specific project work related to any number of tasks affecting the outcome of component integrity. Conducts quality tests on current products testing for performance safety factors, temperature conditions, and strength of specific parts and determination of proper lubricants. Defines the requirements of new test equipment and is often responsible for the design, layout, and fabrication of custom test equipment. Supports product technicians for test set up and collection of data.
	Quality Control / Assurance / Safety	66.016	Test Engineer	First of two levels of professional test engineer. This role typically requiring a bachelor's degree in engineering and 3+ years of experience, or equivalent. Under general supervision, conducts test and/or experiments leading to improvements of current products and development of new ones. This position is responsible for specific project work related to any number of tasks affecting the outcome of component integrity. May conduct quality tests on current products testing for performance safety factors, temperature conditions, and strength of specific parts and determination of proper lubricants. Defines the requirements of new test equipment and is often responsible for the design, layout, and fabrication of custom test equipment. Supports product technicians for test set up and collection of data.
	Quality Control / Assurance / Safety	66.019	Manager, Environmental Health & Safety	Manager in charge of the implementation and maintenance of the organization's environmental, health and safety programs. The job typically requires a bachelor's degree in industrial safety, safety sciences, or safety engineering and 8+ years of experience, or equivalent. Responsible for identifying environmental risks or issues and developing appropriate mitigation strategies. Implements and maintains the organization's environmental program including site compliance, health and safety program development, and compliance with applicable MIOSHA, OSHA, EPA and state / local requirements. Maintains required policies adhering to local, state, and federal EHS regulations. Oversees and participates in accident investigations to determine root cause and required corrective action. Conducts or coordinates worker training in areas such as environmental and safety laws and regulations, hazardous condition monitoring, and use of safety equipment.
	Quality Control / Assurance / Safety	66.020	Environmental, Health & Safety Engineer	Professional level environmental, health and safety engineer, typically requiring a bachelor's degree and 2+ years of experience, or equivalent. Utilizes engineering knowledge and technology to identify, solve, or minimize environmental, health and safety problems. Conducts detailed investigations of existing and potential safety and health hazards and makes recommendations for remedial and corrective measures. Performs a variety of engineering work in designing, installing, operating, and maintaining measuring mechanisms necessary to determine the level of pollutants or safety risks. May study accidents to determine courses and methods of prevention. Requires knowledge of applicable state and federal laws and regulations.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Quality Control / Assurance / Safety	66.025	Supplier Quality Manager	Manager in charge the supplier quality management (SQM) activities of the organization. The job typically requires a bachelor's degree in engineering and 8+ years of experience, or equivalent. Working with subordinate supplier quality personnel, is responsible for supplier qualification and certification, non-conformance management, supplier surveillance and other supplier quality initiatives. Leads and conducts supplier inspections and audits using accepted auditing principles. Maintains communication with suppliers, purchasing managers, and end-users on appropriate issues and improvements. Establishes department policies, control processes and supplier quality programs within overall direction set by senior management. Exercises judgment in dealing with unusual cases or those involving significant cost.
	Quality Control / Assurance / Safety	66.030	Supplier Quality Engineer, Sr.	Second of two levels of supplier quality engineering. The job typically requires a bachelor's degree and 5+ years of supplier quality experience, or equivalent. Under limited supervision, responsible for conducting supplier inspections and audits using accepted auditing principles and methods. Identifies or develops new suppliers through on-site assessments and APQP. Maintains communication with suppliers and internal staff on quality issues and improvements. Keeps records related to supplier inspections, audits, and corrective actions. Identifies and resolves issues related to Non Conformances and other quality issues. May provide technical assistance and training to other quality personnel.
	Quality Control / Assurance / Safety	66.031	Supplier Quality Engineer	First of two levels of supplier quality engineering. The job typically requires a bachelor's degree and less than 5 years of supplier quality experience, or equivalent. Under general supervision, responsible for conducting supplier inspections and audits using accepted auditing principles and methods. Identifies or develops new suppliers through on-site assessments and APQP. Maintains communication with suppliers and internal staff on quality issues and improvements. Keeps records related to supplier inspections, audits, and corrective actions. Identifies and resolves issues related to Non Conformances and other quality issues.
	Quality Control / Assurance / Safety	66.035	Top Management of Lean Enterprise	Executive leader of the company's lean program. The job typically requires a bachelor's degree and 8+ years of manufacturing or operations experience and 3+ years of lean and continuous improvement experience. The incumbent is responsible for identifying a lean implementation and management strategy, including a means to overcome barriers and identifying training needed to successfully adopt lean principles. Measures and reports progress of the lean effort. Typically reports to top management, such as the President, CEO, or the top operations executive. May lead, direct and manage others in carrying out the company's lean priorities.
	Quality Control / Assurance / Safety	66.040	Manager of Lean Enterprise	Manager in charge of implementation of lean principles in an organization. The job typically requires a bachelor's degree and 4+ years of manufacturing, engineering, and/or project management experience in a lean environment, including 2+ years of supervisory or team lead experience. Work includes overseeing implementation strategy, identifying day-to-day priorities, directing and managing staff to achieve objectives, providing guidance and advice to staff and company personnel on lean principles as requested, measuring progress against goals and presenting findings to management. Typically reports to top lean enterprise executive or President/CEO.
	Quality Control / Assurance / Safety	66.045	Continuous Improvement / Lean Coordinator	Professional staff job with responsibility for coordinating the implementation of lean enterprise plans oriented toward either production or office areas. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Responsible for planning, administering and implementing assigned projects, which may cross several functional areas. Uses process tools such as Value Stream Mapping, Five S, Kanban, and poka-yoke. Typical duties include preparation and delivery of related training, measuring and recording organization performance progress, serving as a liaison to outside consultants. Typically does not supervise staff, but may provide work direction to individuals supporting a program.
	Research / Scientific	67.005	Research Scientist, Sr.	Second of two levels of research scientist. The job typically requires a master's degree and 4+ years of experience, or equivalent. Formulates, recommends, and oversees applied and pure research programs and/or projects. Directs and conducts more complex research studies for both applied and educational setting using knowledge of mathematical, statistical, and physical science concepts and techniques. Incumbents plan and carry out the assignment and resolve most conflicts independently. Coordinates work with others as necessary. Interprets policies and requirements in terms of established objectives. May develop changes to plans and/or methodology. Provides recommendations for improvements in order to meet program priorities.
	Research / Scientific	67.006	Research Scientist	First of two levels of research scientist. The job typically requires a bachelor's degree or master's degree and less than 4 years of experience, or equivalent. Conducts research studies to develop theories or methods for use in educational and/or applied setting, utilizing knowledge of principles and concepts of various scientific and engineering disciplines. Plans and develops research models, using knowledge of mathematical, statistical, and physical science concepts and techniques. Incumbents plan and carry out the assignments in conformance with accepted policies and practices. Typically adheres to instructions, policies, precedents, and guidelines in exercising judgment to resolve commonly encountered work problems. May bring unusual findings or problems to the supervisor's or lead engineer for direction.
	Research / Scientific	67.008	Research Associate	The job typically requires a minimum of a bachelor's degree and less than 2 years of experience, or equivalent. Plans, organizes and conducts research in scientific, industrial, historical, or artistic fields. Analyzes research and prepares reports of completed projects for publications in technical journals, use in applied or theoretical research activities, or a government agency. Incumbent's work under direct supervision and within guidelines and previously established practices and procedures set by the supervisor or lead engineer. At this level, incumbents often refers problems not covered by instructions or guides to the supervisor or senior level for help or a decision.
	Research / Scientific	67.010	Chemist I	Fourth of four levels of professional chemistry work: top non-supervisor. The job typically requires an advanced degree in chemistry (often a doctorate degree) with 6+ years of experience, or equivalent. Requires advanced knowledge of a specialized field of chemistry. Solves the most complex technical problems using chemical tests requiring creative approaches in the application of procedures. Designs experiments, conducts research and analysis, develops formulas, processes, etc., uses specialized techniques. Identifies questionable research results and verifies the accuracy of data or directs others in so doing. Work assignments are of the greatest difficulty and largest financial impact. Provides work leadership and direction to other professional and technical staff working on projects critical to the organization.
	Research / Scientific	67.011	Chemist II	Third of four levels of professional chemistry work. The job typically requires a bachelor's degree in chemistry with 5+ years of experience or an advanced degree and 2+ years of experience, or equivalent. Requires considerable knowledge of a specialized field of chemistry. Solves complex technical problems using chemical tests requiring creative approaches in the application of procedures. Designs experiments, conducts research and analysis, develops formulas, processes, etc., uses specialized techniques. Identifies questionable research results and verifies the accuracy of data or directs others in so doing. Work assignments are of greater difficulty and larger financial impact. Provides work leadership and direction to other professional and technical staff with respect to project methodology and identification of project tasks.
	Research / Scientific	67.012	Chemist III	Second of four levels of professional chemistry work. The job typically requires a bachelor's degree in chemistry with 3+ years of experience or an advanced degree, or equivalent. Incumbents perform advanced troubleshooting or analyses using chemical tests requiring judgment to select from multiple possible approaches. Incumbents may lead research projects under the direction of a manager or supervisor. Work assignments are of greater difficulty or larger financial impact than those given to first level incumbents.
	Research / Scientific	67.013	Chemist IV	First level of four levels of professional chemistry work. The job typically requires a bachelor's degree in chemistry with less than 1 year of experience, or equivalent. Incumbents perform chemical tests and analyses using standard methods and generally prescribed procedures. Incumbents may carry out specific phases of more complex research projects under the direction of higher classified chemists.
	Research / Scientific	67.015	Laboratory Supervisor	The job typically requires a bachelor's degree and 6+ years of experience, or equivalent. Supervises and coordinates activities of personnel engaged in performing chemical and physical tests required for quality control of processes and products. Directs and advises personnel in special test procedures to analyze components and physical properties of materials. Compiles and analyzes test information to determine operating efficiency of process or equipment and to diagnose malfunctions. Confers with scientists or engineers to conduct analyses, interpret test results, or develop nonstandard tests. Incumbents define objectives and interpret policies and objectives established by staff senior to the immediate supervisor and determine their effect on design and development requirements. At this level, the incumbent independently plans, designs, and carries out work to be done and often serves as a technical authority.
	Research / Scientific	67.020	Lab Technician I	Third of three levels of laboratory technician work. The job typically requires completion of a formal technical program and 5+ years of previous experience, or equivalent. Work assignments are of greatest variety and complexity. Incumbents assist scientists or engineers with formulating and testing, or other activities relating to design or reliability. Areas of specialization will include mechanical, chemical, electronic and others. Incumbents may use both specialized and standard computer applications in the performance of their duties. Supervision received is limited. Work may include providing training and work direction for other technicians. Work may include lifting, handling or maintaining equipment or operation of equipment.
	Research / Scientific	67.021	Lab Technician II	Second of three levels of laboratory technician work. The job typically requires completion of a formal technical program and 2+ years of experience, or equivalent. Work assignments are varied, and of moderate scope and complexity. Incumbents assist scientists or engineers with formulating and testing, or other activities relating to design or reliability. Areas of specialization will include mechanical, chemical, electronic and others. Incumbents may use both specialized and standard computer applications in the performance of their duties. Work may include lifting, handling or maintaining equipment or operation of equipment. Supervision received is limited.
	Research / Scientific	67.022	Lab Technician III	First of three levels of laboratory technician work. The job typically requires completion of a formal technical program and no experience, or equivalent. Work assignments are varied, but limited in scope and complexity. Incumbents assist scientists or engineers with formulating and testing, or other activities relating to design or reliability. Areas of specialization will include mechanical, chemical, electronic and others. Incumbents may use both specialized and standard computer applications in the performance of their duties. Work may include lifting, handling or maintaining equipment or operation of equipment. Supervision is readily available and work is usually reviewed by more experienced staff.
	Research / Scientific	67.035	Chemical Technician I	Third of three levels of chemical process technician work. This job typically requires a minimum of an associate's degree, or equivalent and 4+ years of experience. Under limited supervision supports chemists and chemical engineers by assembling and operating laboratory apparatus for chemical synthesis, testing and analysis. Responsible for the evaluation and testing of materials using laboratory chemical, materials, and mechanical testing equipment and procedures. Documents work and test results using data acquisition and other computer resources as needed to summarize collected data and perform basic statistical analysis. Organizes records and summarize analytical data in laboratory notebooks and databases. Provides routine and preventative maintenance and service to processes, equipment, and instrumentation. May provide direction and support to other less experienced technicians.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Research / Scientific	67.036	Chemical Technician II	Second of three levels of chemical process technician work. This job typically requires a minimum of an associate's degree, or equivalent and 2+ years of experience. Under general supervision supports chemists and chemical engineers by assembling and operating laboratory apparatus for chemical synthesis, testing and analysis. Responsible for the evaluation and testing of materials using laboratory chemical, materials, and mechanical testing equipment and procedures. Documents work and test results using data acquisition and other computer resources as needed to summarize collected data and perform basic statistical analysis. Organizes records and summarize analytical data in laboratory notebooks and databases. Provides routine and preventative maintenance and service to processes, equipment, and instrumentation. May receive detailed instruction on new or complex assignments.
	Research / Scientific	67.037	Chemical Technician III	First of three levels of chemical process technician work. This job typically requires completion of a formal technical program and no experience, or equivalent. Under direct supervision supports chemists and chemical engineers by assembling and operating laboratory apparatus for chemical synthesis, testing and analysis. Responsible for the evaluation and testing of materials using laboratory chemical, materials, and mechanical testing equipment and procedures. Documents work and test results using data acquisition and other computer resources as needed to summarize collected data and perform basic statistical analysis. Organizes records and summarize analytical data in laboratory notebooks and databases. Provides routine and preventative maintenance and service to processes, equipment, and instrumentation. Normally receives little or no instruction on routine activities. Often receive detailed instruction on new or complex assignments.
	Construction Engineering	68.001	Construction Estimator	Experienced level construction estimator. Analyses drawings, specifications, proposals and other documentation to prepare accurate and competitive time, cost and labor estimates for construction projects. The job typically requires a bachelor's degree in engineering and 10+ years of construction estimating experience. Prepares estimates and supplementary information for potential projects. Develops a schedule and allocates resources to match bidding workload. Responsible for establishing and maintaining actual project performance data to facilitate historical analysis to improve estimating and performance accuracy. Workers typically possess a thorough understanding of construction practices, methods, trends and crew data.
	Construction Engineering	68.002	Construction Superintendent	Plans, directs, coordinates, and/or budgets, usually through subordinate supervisory personnel, activities concerned with the construction and maintenance of structures, facilities, and systems. The job typically requires a bachelor's degree and/or significant related experience. Participates in the conceptual development of a construction projects and oversees the organization, scheduling, and implementation. Conducts on-site construction meetings with contractors and clients and is responsible for the coordination and supervision of sub-contractors on construction projects. Responsible for the procurement of tools, equipment and materials and ensures delivery at specific times to conform to work schedules. Prepares, either directly or through subordinates, reports on progress, materials used and costs, and adjusts work schedules accordingly. Workers typically possess a thorough understanding of construction methods, scheduling, and blueprint reading.
	Construction Engineering	68.003	Construction Manager	Manager in charge of all phases of construction activities associated with the completion of assigned project from planning to execution. The job typically requires a bachelor's degree in engineering and 5+ years of construction management or construction administration experience. Directs preparation of work plans, supervises project teams, and manages projects budgets and/or schedules. Responsible for project planning and implementation; provides general management and direction for the design and construction staff and their designated projects. Documents and tracks project costs. Provides general direction and assistance with planning, estimating, scheduling and implementation of design, construction, or renovation projects. Coordinates and conducts project planning meetings with applicable groups to determine proposed scope of work including.
	Construction Engineering	68.004	Construction Foreman	Supervises carpentry, plumbing, electrical, concrete, painting, and related trades and participates in the construction, installation, modification, maintenance and repair of. The job typically requires a bachelor's degree in engineering and 5+ years of construction supervisory experience. Establishes the priority of tasks and supervises, instructs, demonstrates work to the skilled/unskilled labor and provides minor and common, practical engineering solutions in order to maintain continuity of work and progress of the project. Monitors the productivity of assigned labor. Responsibility of stored material, equipment, tools at site, and their cleaning, overhauling, repairing, maintenance and availability. Conducts inspections, issues change orders, and approves work in progress.
	Construction Engineering	68.010	Civil Engineer I	Fourth of four levels of professional of civil engineering. The job typically requires a bachelor's degree and 6+ years of experience, or equivalent. Plans, designs, and directs civil engineering projects such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation systems, pipelines, and powerplants. Provides resources and schedules in response to specified completion dates and technical applications. Prepares proposals and cost estimates and evaluates all project progress and recommends and changes, if needed, in final procedures. Incumbents define objectives and interpret policies and objectives established by staff senior to the immediate supervisor and determine their effect on design and development requirements. At this level, the incumbent independently plans, designs, and carries out work to be done and often serves as a technical authority.
	Construction Engineering	68.011	Civil Engineer II	Third of four levels of professional of civil engineering. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Plans, designs, and directs civil engineering projects such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation systems, pipelines, and powerplants. Provides resources and schedules in response to specified completion dates and technical applications. Prepares proposals and cost estimates and evaluates all project progress and recommends and changes, if needed, in final procedures. Incumbents plan and carry out the assignment and resolve most conflicts independently. Coordinates work with others as necessary. Interprets policies and requirements in terms of established objectives. May develop changes to plans and/or methodology. Provides recommendations for improvements in order to meet program objectives.
	Construction Engineering	68.012	Civil Engineer III	Second of four levels of professional of civil engineering. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Plans, designs, and directs civil engineering projects such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation systems, pipelines, and powerplants. Provides resources and schedules in response to specified completion dates and technical applications. Prepares proposals and cost estimates and evaluates all project progress and recommends and changes, if needed, in final procedures. Incumbents plan and carry out the assignments in conformance with accepted policies and practices. Typically adheres to instructions, policies, precedents, and guidelines in exercising judgment to resolve commonly encountered work problems. May bring unusual findings or problems to the supervisor's or lead engineer for direction.
	Construction Engineering	68.013	Civil Engineer IV	First of four levels of professional of civil engineering. The job typically requires a minimum of an engineering degree and less than 2 years of experience, or equivalent. Plans, designs, and directs civil engineering projects such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation systems, pipelines, and powerplants. Provides resources and schedules in response to specified completion dates and technical applications. Prepares proposals and cost estimates and evaluates all project progress and recommends and changes, if needed, in final procedures. Incumbent's work under direct supervision and within guidelines and previously established practices and procedures set by the supervisor or lead engineer. At this level, incumbents often refers problems not covered by instructions or guides to the supervisor or senior level for help or a decision.
	Sales / Marketing	71.000	Top Sales & Marketing Executive	Top sales and marketing executive where the functions are combined under one leader. Responsible for the overall management and direction of the sales and marketing functions and the entire range of market research and analysis, marketing programs, customer relations, advertising, sales planning and development, sales promotion, sales force development, sales compensation, and sales activities of the organizational unit. Formulates, recommends and implements policies and programs in the areas of forecasting, sales, pricing, marketing and product or service acceptance research, and related activities. This is normally a single incumbent job.
	Sales / Marketing	71.001	Top Sales Executive	Responsible for the overall management and direction of the sales functions and the entire range of sales planning and development, sales promotion, sales force development, sales compensation, and sales activities of the organizational unit. Formulates, recommends and implements policies and programs in the areas of forecasting, sales, pricing, marketing and product or service acceptance research, and related activities. This is normally a single incumbent job.
	Sales / Marketing	71.004	Top International Sales Executive	Responsible for establishing and maintaining sales outside of the United States. Establishes international dealer-sales organizations, distribution channels and service arrangements. Formulates sales objectives, policies and advertising programs designed to achieve maximum sales volume and profit goals. Establishes an effective sales organization and develops programs to promote international sales and the company's business image. Oversees design of international sales compensation programs. May prepare sales forecasts and operating budget proposals; approves conditions of sales when not in concert with regularly applied policies. Report executives domiciled in the US or paid on a US structure without expatriate total rewards packages. This is normally a single incumbent job, except that there may be multiples when the job is focused on a major market such as Europe or East Asia.
	Sales / Marketing	71.006	International Sales Representative / Account Executive	Fully seasoned sales professional, usually with 6+ years of progressively successful experience, performing a significant amount of international field promotional work and relationship management to sell and develop new business. Work involves 50%, or more international sales with regular international travel. May include work with current major accounts, development of new territories, new industries, or with customers where the full market potential or product acceptance has not been established. Demonstrates products / services and provides product application advice. Coordinates company technical engineering services to develop solutions to customers' needs. Prepares price quotations, communicates or negotiates terms and conditions of sales within limits of authority, and writes orders subject to company policy. Investigates product / service warranty claims and ensures resolution of customer complaints following marketing policies. Develops data relative to marketing trends, competitive products and pricing, and submits marketing reports to management. As required, prepares and submits reports on sales and marketing activities. Trains, instructs and orients new personnel and trainees.
	Sales / Marketing	71.007	General Sales Manager (2nd level of management)	Reports to a top sales or sales and marketing executive, and has another management layer below. Responsibility may extend to major regions with several subordinate regions. Generally provides direction, counsel, and guidance for plans in marketing, advertising, sales promotion, sales training, etc. as they are applied in the areas or regions of responsibility. Implements sales policies and ensures communication of new products or services, product variations and changes, and sales promotion and activities of a division or unit. May be responsible for creating and implementing sales / marketing programs.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Sales / Marketing	71.008	Sales Manager	This is the first level of sales management over a captive sales force or a network of independent sales representatives. The job reports to a General (2nd level) sales manager, or directly to a top sales executive, and may be responsible for a territorial or district unit, etc. Responsible for management and direction of a large segment of the overall sales volume. Directs staffing, training, and performance evaluations of Sales Reps, Inside Sales Reps, or Manufacturing Reps to develop and control sales program. Coordinates sales distribution by establishing sales territories, quotas, and goals, and advises dealers and distributors concerning sales and advertising techniques. Analyzes sales statistics to formulate policy and promote sales. Reviews market analyses to determine customer needs, volume potential, price schedules and discount rates.
	Sales / Marketing	71.009	National Accounts Manager	Develops and implements strategies for increasing sales and profits through national customers where a single point of contact with the customer is preferred over multiple regional contacts. Serves as a Representative for only national or major (key) accounts. Calls on national accounts, presents sales material and follows up on sales service. Reports to the Top Sales Executive or a General Sales Manager.
	Sales / Marketing	71.011	Outside Sales Representative / Account Executive, Sr.	Third of three levels of outside sales account executive/representative. Fully seasoned sales professional, usually with 5+ years of progressively successful experience, performing field promotional work and relationship management to sell and develop new business. May include work with current major accounts, development of new territories, new industries, or with customers where the full market potential or product acceptance has not been established. Demonstrates products / services and provides product application advice. Coordinates company technical engineering services to develop solutions to customers' needs. Prepares price quotations, communicates or negotiates terms and conditions of sales within limits of authority, and writes orders subject to company policy. Investigates product / service warranty claims and ensures resolution of customer complaints following marketing policies. Develops data relative to marketing trends, competitive products and pricing, and submits marketing reports to management. As required, prepares and submits reports on sales and marketing activities. Trains, instructs and orients new personnel and trainees.
	Sales / Marketing	71.012	Outside Sales Representative / Account Executive	Second of three levels of outside sales account executive/representative. Experienced level of sales professional with the ability to perform field promotional work to sell and develop new business accounts. Incumbents at this level typically make up the largest part of the sales force and are usually assigned to established territories or industries where company product lines are accepted, but where new customers or outlets need to be secured or existing accounts penetrated. Demonstrates products / services and provides product application advice. Coordinates company technical engineering services to develop solutions to customers' needs. Prepares price quotations, communicates or negotiates terms and conditions of sales within limits of authority, and writes orders subject to company policy. Investigates product / service warranty claims and ensures resolution of customer complaints following marketing policies. As required, informs the company relative to marketing trends, competitive products and pricing. Completes required activity and expense reports.
	Sales / Marketing	71.013	Outside Sales Representative, Jr.	First of three levels of outside sales account executive/representative. Under the supervision of the Sales Manager and sometimes the mentoring of more senior representatives, performs field promotional work to obtain sales in an assigned territory where the company and product line are established. May canvas out prospective new accounts. Demonstrates products / services and assists in the selection of products / services most applicable to customers' needs. Demonstrates and familiarizes established accounts with new products / services and developments. Quotes prices, terms, delivery dates, etc. on new or repeat orders subject to the approval of management. May investigate and report on warranty claims and complaints. Prepares periodic activity and expense reports.
	Sales / Marketing	71.017	Inside Sales Representative, Sr.	Second of two levels of inside sales representative. Fully seasoned inside sales professional, usually with 5+ years of progressively successful experience, performing promotional work and relationship management to sell and develop new business. May include work with current major accounts, development of new territories, new industries, or with customers where the full market potential or product acceptance has not been established. Duties include selling product or services to existing and new accounts using the telephone, e-mail, or mail as the primary media for contact and negotiation. At this level the degree of sales expertise is similar to a Senior Outside Sales Representative, but the use of technology reduces selling expense.
	Sales / Marketing	71.018	Inside Sales Representative	Second of two levels of inside sales representative. Experienced sales representative with a focus on selling to existing accounts. Incumbents are required to have strong communications skills and product/service knowledge. Duties include selling product or services to existing accounts, e-mail, or mail as the primary media for contact and negotiation. Incumbents may partner with outside sales staff to serve larger accounts. Do not report outbound telemarketers or telephone order takers here.
	Sales / Marketing	71.022	Route Sales Representative	Route Sales Representatives sell and deliver goods to clients along an established route. Routes may be daily or weekly or another regular interval. In addition, efforts may be made to recruit new clients along the route corridors or to expand the routes. The Route Sales Representative takes orders, estimates demand and seeks to sell additional quantities or varieties of products. Examples of products include food and beverages, uniforms, tools, materials, cleaning supplies, etc. Sales may include special promotions and product demonstrations. Work may include stocking shelves or storage areas at the client location. Customer satisfaction is an important factor in success. Qualifications typically include a good driving record, the ability to use electronic order management equipment, strong communication skills, and may include physical stamina where product is heavy and handling is required.
	Sales / Marketing	71.025	Sales/Marketing Assistant	Experienced level sales and marketing administrative assistant job. This job typically requires an associate's degree and 2+ years of experience, or equivalent. Incumbents perform administrative support work specific to sales and marketing department(s). Incumbents assist the department manager and other department staff by performing a variety of support duties, such as data collection, compilation, research, records maintenance, custom reports, sales reports, customer profiles or program reports. Incumbents may assist with preparation of marketing materials, maintain marketing materials inventory, serve as liaison with print shop vendors or distribute literature. Incumbents may set up audiovisual or telecommunications equipment. Incumbents must have the ability to exercise independent judgment and discretion. Incumbents make non-routine choices within established guidelines, with minimal supervision.
	Sales / Marketing	71.030	Order Processing Supervisor	Supervisor in charge of order processing, typically requiring a two year degree in Business and 3+ years of order processing experience, or equivalent. Responsible for managing non-exempt order processing staff. Specific tasks performed in the department include receiving orders by mail, telephone, fax, internet, city desk or direct sales staff and processing orders to the point of authorizing order fulfillment. Verifies credit, records payment receipts, processes credit card payments, quotes prices, and verifies product availability. Forwards processed orders to the proper department or vendor for fulfillment to a designated client and address.
	Sales / Marketing	71.035	Sales Order Clerk	Performs routine clerical duties required to receive, process, and complete orders from customers or sales department employees, using standard forms and following routing procedures. Enters information such as stock number, quantity, and price on standard order forms. Enters orders into a computer or record system and verifies for accuracy. May also verify credit, keep files on orders received, or send acknowledgments to customers of order completion.
	Sales / Marketing	71.038	Sales Trainer	Non-managerial job with responsibility for developing and administering sales training programs to the organization's sales trainees and sales personnel. Presents established and effective sales training methods, techniques, and ideas. Schedules and introduces presentations by internal or outside lecturers, motivational speakers, and sales or product specialists. Reports on progress of sales trainees and sales personnel. Assists in developing new training courses associated with the introduction of new products or services.
	Sales / Marketing	71.040	Proposal Writer, Sales	Experienced level of professional sales administration support where the primary responsibility is the development of sales related documents. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Researches and writes proposals and/or other sales materials designed to obtain new business. Works under limited supervision and has total project responsibility. Analyzes requests for proposals and other related materials to determine and ensure compliance with customer requirements. May create proposal management plans to ensure proposal schedules are met.
	Sales / Marketing	71.045	Advertising/Sales Promotions Manager	Manager of a marketing department with primary focus on advertising activities. The job typically requires a bachelor's degree and 8+ years of experience, or equivalent. Duties include selection of agencies, preparation of artwork and text, selection of advertising media outlets, management of vendor relationships and coordination with sales and design functions. Specific tasks may include reviewing creative proposals, monitoring quality of material, managing costs and assessing effectiveness. Within overall direction established by senior management, solves complex technical problems and develops and recommends new alternatives. Manages department staff and budgets.
	Sales / Marketing	71.048	Advertising Sales Representative	Sells classified and display advertising space for publication. Prepares list of prospects from leads in other papers and from old accounts. Obtains pertinent information concerning prospect's past and current advertising for use in sales presentation. Visits advertisers to point out advantage of own publication and exhibits prepared layouts with mats and copy with heading. May collect payments due. Usually designated by type of advertising sold as Sales Representative, Classified Advertising, Sales Representative, Display Advertising.
	Sales / Marketing	71.050	Telemarketing Manager	First line supervisor of a telemarketing operation. The job typically requires specialized training in supervision and 5+ years of job related training and experience, or equivalent. Supervises Telemarketing Representatives and related support staff. Working under management guidance, schedules work, assists with employee selection, reviews employee performance, administers work rules and recommends compensation, unless it is governed by contract. Responsible for managing department productivity and work quality. Recommends equipment upgrades, staffing adjustments and training programs. Provides training, monitors calls, maintains documentation of leads generated and oversees coordination with other functions, such as accounting, sales, production, distribution or merchandising. Do not report working supervisors or leads, where a majority of time is spent performing hands-on work of the department.
	Sales / Marketing	71.055	Telemarketing Sales Representative	Outbound telemarketing job. The job typically requires good verbal communications skills and the ability to accurately enter order information in the order management system, or equivalent. Calls may be random or to identified target business or consumer lists. The immediate objective may be to inform, sell, or pre-qualify contacts. Scripts are pre-written and supervision is readily available.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Sales / Marketing	71.060	Marketing Director	Director of professional marketing with responsibility for market research, advertising and marketing strategy development. The job typically requires a bachelor's degree and 10+ years of experience, or equivalent. Duties include oversight of all marketing functions where the sales department is organized as a separate entity or is delegated to brokers or independent sales representatives. Coordinates with sales and design functions to develop marketing strategies for new and existing products or services. Under top management guidance, develops creative ways to differentiate products or services. Manages marketing department staff and budgets.
D	Sales / Marketing	71.065	Marketing Research Manager	Organizes, directs, and counsels the organization in the development of new products, services, business strategies, or product quality standards. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Analyzes current and new markets, trends, and business climates in relation to new projects. May also be responsible for managing staff, assigning responsibilities, and reviewing performance. Monitors and reports to the company changes in government legislation or business environments which may effect products, services, or related concerns.
	Sales / Marketing	71.070	Marketing Research Analyst I (Advanced)	Third of three levels of professional marketing. This role's primary focus is on research and analysis activities. Typically this job requires a bachelor's degree and 5+ years of experience, or equivalent. Duties include collection of consumer or customer data from multiple sources as well as analysis of data and preparation of reports to assist with decision making. Specific tasks may include interviewing individuals, facilitating focus groups, designing and conducting surveys, designing databases and data mining. Works under general management guidance and has total project responsibility for the larger or more complex projects requiring advanced design and analysis. Provides training and work direction to other professional and support staff.
	Sales / Marketing	71.071	Marketing Research Analyst II (Experienced)	Second of three levels of professional marketing. This role's primary focus is on research and analysis activities. Typically this job requires a bachelor's degree and 3+ years of experience, or equivalent. Duties include collection of consumer or customer data from multiple sources as well as analysis of data and preparation of reports to assist with decision making. Specific tasks may include interviewing individuals, facilitating focus groups, designing and conducting surveys, designing databases and data mining. Works under limited supervision and has total project responsibility. May provide training and direction to support staff.
	Sales / Marketing	71.072	Marketing Research Analyst III (Entry)	First of three levels of professional marketing. This role's primary focus is on research and analysis activities. Typically this job requires a bachelor's degree and less than 1 year of experience, or equivalent. Duties include collection of consumer or customer data from multiple sources as well as analysis of data and preparation of reports to assist with decision making. Specific tasks may include interviewing individuals, designing and conducting surveys, designing databases and data mining. Receives considerable project direction from senior staff and management and may spend the majority of time working on assigned segments of a project.
	Sales / Marketing	71.075	Marketing Manager	Manager of professional marketing with a diverse set of marketing activities. The job typically requires a bachelor's degree and 8+ years of experience, or equivalent. Duties include research, analysis, advertising materials development, direct mail, website content development, organization of product expositions, exhibiting at trade fairs and conventions, proposal development and preparation of reports to assist with decision making. Working within overall direction established by senior management, solves complex technical problems and develops and recommends new alternatives. Manages department staff and budgets. This is distinguished from direct sales and marketing research jobs, but may include elements of each. See the National Executive Compensation Survey for the top marketing position.
	Sales / Marketing	71.077	Marketing Generalist I	Third of three levels of professional marketing with a diverse set of marketing activities. The job typically requires a bachelor's degree and 5+ years of experience, or equivalent. Duties include research, analysis, advertising materials development, direct mail, website content development, organization of product expositions, exhibiting at trade fairs and conventions, proposal development and preparation of reports to assist with decision making. Works under general management guidance and has total project responsibility for the larger or more complex projects requiring advanced design and analysis. Provides training and work direction to other professional and support staff. This is distinguished from direct sales and marketing research jobs, but may include elements of each.
	Sales / Marketing	71.078	Marketing Generalist II	Second of three levels of professional marketing with a diverse set of marketing activities. The job typically requires a bachelor's degree and 3+ years of experience, or equivalent. Duties include research, analysis, advertising materials development, direct mail, website content development, organization of product expositions, exhibiting at trade fairs and conventions, proposal development and preparation of reports to assist with decision making. Works under limited supervision and has total project responsibility. May provide training and direction to support staff. This is distinguished from direct sales and marketing research jobs, but may include elements of each.
	Sales / Marketing	71.079	Marketing Generalist III	First of three levels of professional marketing with a diverse set of marketing activities. The job typically requires a bachelor's degree and less than 1 year of experience, or equivalent. Duties include research, analysis, advertising materials development, direct mail, website content development, organization of product expositions, exhibiting at trade fairs and conventions, proposal development and preparation of reports to assist with decision making. Receives considerable project direction from senior staff and management and may spend the majority of time working on assigned segments of a project. This is distinguished from direct sales and marketing research jobs, but may include elements of each.
	Sales / Marketing	71.080	Business Development Manager	Manages and investigates partnerships, joint ventures, alliances, mergers & acquisitions, and/or new market initiatives. Identifies potential partners, evaluates deals with partners, and manages ongoing partnerships. Assists in development of new contracts. Identifies potential acquisition targets and aids the company's purchase of such targets. Helps develop process for new product development activities and identify new product development opportunities.
	Sales / Marketing	71.085	Public Relations Manager	Responsible for the administration of the presentation and representation of the company to the general public, customers, local communities, shareholders, and the financial community. The job typically requires a bachelor's degree in business administration, public relations, communications, or a related field and 5+ years of experience, or equivalent. Supervises the preparation of news releases and articles. Assists company personnel in the writing of speeches, letters and articles which are to be made public. May arrange interviews between company executives and the media. Directs the writing, editing and publishing of company publications. Assists in the drafting of the annual report to stockholders, quarterly dividend statements, financial advertising, and other stockholder materials. May act as the representative for the company or chief executive officer in the event of a disaster or any other occurrence for which the company may be responsible.
	Sales / Marketing	71.087	Public Relations Representative I	Second of two levels of professional public relations work. The job typically requires a bachelor's degree and 3+ years of experience, or equivalent. Under limited supervision, plans and directs development and communication of information designed to keep the public informed of an employer's programs, accomplishments, or point of view. Arranges for public relations efforts serving as in-house staff member or as outside consultant. Prepares and distributes fact sheets, news releases, photographs, scripts, video or audio recordings to media or public representatives. Purchases advertising space and time as required. Represents the employer during community projects and gatherings. May research data, generate ideas, write copy, lay out artwork, contact media representatives, or represent employer directly before the general public. May confer with production and support personnel to coordinate television spots and on-air promotions. May provide direction and training to other staff with less experience.
	Sales / Marketing	71.088	Public Relations Representative II	Second of two levels of professional public relations work. The job typically requires a bachelor's degree and less than 1 year of experience, or equivalent. Under general direction, plans and conducts public relations programs designed to create and maintain favorable public image for the employer or client. Prepares and distributes fact sheets, news releases, photographs, scripts, video or audio recordings to media or public representatives. Purchases advertising space and time as required. May research data, generate ideas, write copy, lay out artwork, contact media representatives, or represent an employer or client directly before the general public. May confer with production and support personnel to coordinate production of television spots and on-air promotions.
	Sales / Marketing	71.089	Social Media Coordinator	Experienced level of professional marketing work where the primary focus is social media networking. The job typically requires a bachelor's degree and 3+ years of experience, or equivalent. Under limited supervision, responsible for executing the social media strategy of the organization. Creates content across different social media platforms using multimedia, including video, images, and original content. Possesses broad knowledge of social media management platforms and other content management systems. Coordinates with internal departments to promote, sell, or build awareness of the organizations products or services. Monitors and analyzes social media campaigns to determine their effectiveness. Provides reports and analysis on feedback gained about the organization from social media monitoring.
	Sales / Marketing	71.090	Customer Service Director	Director of a customer service function. The job typically requires a bachelor's degree in business or a related field and 8+ years of experience in a customer service role with management experience, or equivalent. Plans, directs and controls the customer service function in order to meet company goals. Selects, develops, retains, and directs qualified supervisory and professional staff. Responsible for planning, prioritizing, and setting goals.
	Sales / Marketing	71.091	Customer Service Manager	Manager of a customer service function. The job typically requires a bachelor's degree with 5+ years of experience, or equivalent. Develops and recommends customer service policies and procedures and seeks senior management approval when needed. Applies experience and judgment in the interpretation and application of direction established by senior management. Issues of major impact or technical complexity are researched and presented to upper management or referred to the appropriate internal experts for resolution. Typical customer questions are focused on account status, technical product application, service information, pricing or adjustments. Manages department staff and budget.
	Sales / Marketing	71.092	Customer Service Supervisor	Supervisor of a customer service function. The job typically requires an associate's degree with 5+ years of experience, or equivalent. The incumbent fields the most technical or complex service questions from customers and applies experience and judgment in the interpretation and application of guidelines established by senior management. Issues of major impact or technical complexity are researched and presented to upper management or referred to the appropriate internal experts for resolution. Typical customer questions are focused on account status, technical product application, service information, pricing or adjustments. Assists with employee selection and reviews employee performance. Do not report working supervisors or leads, where a majority of time is spent performing hands-on work of the department.
	Sales / Marketing	71.093	Customer Service Representative I (Advanced)	Third of three levels of customer service work. The job typically requires an associate or bachelor's degree with 2+ years of experience, or equivalent. Handles the more technical or complex service questions from customers and applies judgment in resolving service, warranty or technical problems falling within established limits of authority and knowledge. Issues of greater impact or technical complexity are researched and presented to management or referred to the appropriate internal experts for resolution. Typical customer questions are focused on account status, technical product application or service information, pricing or adjustments. May provide work direction to others.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Sales / Marketing	71.094	Customer Service Representative II (Experienced)	Second of three levels of customer service work. The job typically requires high school graduate reading, communication, math and problem solving skills and 2+ years experience. Incumbents receive questions from customers and follow established procedures to provide answers or refer calls to appropriate staff. Typical questions are focused on order status, product information, account status, pricing, product or service. Incumbents require limited supervision.
	Sales / Marketing	71.095	Customer Service Representative III (Entry)	First of three levels of customer service work. The job typically requires high school graduate reading, communication, math and problem solving skills and no previous experience, or equivalent. Incumbents receive questions from customers and follow established procedures to provide answers or refer calls to appropriate staff. Typical questions are focused on order status, product information, account status, pricing, product or service. Incumbents follow established procedures and have readily available supervision.
D	Sales / Marketing	71.100	Call Center Manager	Manages, trains, and evaluates performance of call center staff. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Establishes schedules, work procedures and recommends improvements to increase efficiency. May be responsible for handling the most complex customer telephone inquiries.
	Sales / Marketing	71.105	Call Center Representative I	Second of two levels of call center representative. Under general supervision, handles more complex inbound and outbound telephone inquiries. Relies on limited experience and judgment to answer customer questions concerning account errors, available products and services and to ensure customer satisfaction and retention. Requires a high school education or equivalent and 2-4 years of experience.
	Sales / Marketing	71.106	Call Center Representative II	First of two levels of call center representative. Under direct supervision, handles routine inbound and outbound telephone inquiries. Relies on instructions and pre-established policies to answer customer questions concerning product or service pricing, selling and ordering. Requires high school education or equivalent and less than 2 years of experience.
D	Sales / Marketing	71.110	E-Commerce Manager	Manages, coordinates and implements e-commerce solutions and strategies to meet the organizations e-commerce objectives. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Manages acquisitions and implementation of technologies for e-commerce application development. Schedules development, cost/benefit analysis, priority planning and establishes work plans. Supervises information systems professionals and consultants.
D	Creative / Advertising	74.001	Art Director	Responsible for producing high quality creative art. The job typically requires a bachelor's degree and 5+ years of experience, or equivalent. Has strong computer graphics skills to produce comprehensives for presentation to clients. Has knowledge of producing photography and art and is able to supervise photo studios and art studios. Through interviews and research, works with clients to produce graphics concepts.
D	Creative / Advertising	74.002	Creative Director	Responsible for the quality of all creative work produced. The job typically requires a bachelor's degree and 5+ years of experience, or equivalent. Directs all activities of subordinates within their responsibility to maintain standards of creative excellence. Senior level of client contact and presentation.
D	Creative / Advertising	74.003	Creative Manager	Responsibilities include copy writing and art direction. The job typically requires a bachelor's degree and 3+ years of experience, or equivalent. May be responsible for editing and content of all manuscripts pertaining to their service line or brand. Oversees all art and photography reviews and budgets pertaining to their area.
	Creative / Advertising	74.010	Graphic Artist	Experienced commercial artist. The job typically requires a two or four-year liberal arts degree and 3+ years of experience, or equivalent. Incumbents will draw, sketch or modify images of merchandise or models for use in catalogs, advertising, technical manuals, displays or web sites. Incumbents may scan, edit, crop or otherwise modify images. Incumbents may use brushes, air brushes, computer graphics applications or other media to accomplish the desired end result.
	Creative / Advertising	74.012	Multimedia Designer	Experienced Multimedia Designer. The job typically requires a two or four-year liberal arts degree with 3+ years of experience, or equivalent. Responsible for the design and development of interactive content/designs for multiple platforms including web, smart devices, and/or desktop applications. May create still and animated graphics for sales collateral, print and online display ads, email, logos, web pages, presentations and corporate video. Maintains awareness of relevant topics such as typography, illustration, photography, color theory, motion graphics, writing/editing, and multimedia authoring tools. Responsible for fully-functional final products.
D	Creative / Advertising	74.014	Photographer	Experienced photographer. The job typically requires a high school diploma and 2+ years of related training or experience, or equivalent. Schedules, coordinates and provides photographic services, including stills, motion pictures and videotapes to support sales, promotions and other organization-wide needs. Provides related processing, studio and darkroom services. Collaborates with outside vendors as needed. Maintains files of projects. Arranges for the repair and maintenance of supplies and equipment.
	Creative / Advertising	74.016	Technical Illustrator	Experienced technical illustrator. The job typically requires specialized training or experience. Incumbents will draw, sketch or modify images for use in technical manuals or web sites. Drawings may include exploded layouts of product to accompany user instructions. Incumbents may use computer graphics applications or other media to accomplish the desired end result.
	Creative / Advertising	74.020	Copywriter	Commercial copywriter. The job typically requires a two or four-year liberal arts degree and 1+ year of experience, or equivalent. Duties include writing copy for advertising, brochures, catalogs, marketing letters or other publications. Work is reviewed by an editor or other experienced staff. Do not report trainees.
	Creative / Advertising	74.025	Editor	Responsible for overseeing the development, writing, and editing of material for various organization's publications. The job typically requires a master's degree in journalism or communications and 3+ years of experience, or equivalent. Ensures that all materials meet established standards as to appearance and content. Obtains cost estimates and collaborates in the selection of illustrators and printers and approves their work.
	Creative / Advertising	74.026	Assistant Editor	Assistant to the Editor. The job typically requires a bachelor's degree in journalism or communications and 1+ years of experience or equivalent. Responsible for reading copy or proofing to detect and correct errors in spelling, punctuation, and syntax. Verifies facts, dates, and statistics, using standard reference sources.
	Creative / Advertising	74.030	Desktop Publishing Supervisor	Supervises team of desktop document technicians. Provides project management within the desktop design group requiring coordination and interaction with other agency groups such as creative, account, print production, product information and traffic. Responsible for overall project quality as well as cost and time estimates.
	Creative / Advertising	74.031	Desktop Publisher	Experienced desk-top publishing operator job. The job typically requires a high school diploma and 2+ years of related training or experience, or equivalent. Duties include preparation of more complex report documents, or other printed media, and the judgment to lay out pages in a pleasing and efficient manner. Incumbents use advanced features of software publishing applications. Incumbents may prepare web page layouts.
D	Creative / Advertising	74.035	Production Supervisor Advertising	Coordinates activities of design, illustration, photography, and paste-up personnel to prepare advertisements for publication. The job typically requires a high school diploma and 3+ years of related training or experience, or equivalent. Supervises workers engaged in pasting-up advertising layouts in art department or studio. Determines arrangement of art work and photographs and selects style and size of type, considering factors such as size of advertisement, design, layout, sketches, and method or printing specified. Examines layout proofs for quality of printing and conformance to layout.
D	Creative / Advertising	74.037	Media Manager	Plans and administers media programs in advertising department. The job typically requires a bachelor's degree and 4+ years of experience, or equivalent. Confers with representatives of advertising agencies, product managers, and corporate advertising staff to establish media goals, objectives, and strategies within corporate advertising budget. Confers with advertising agents or media representatives to select specific programs and negotiate advertising to ensure optimum use of budgeted funds and long-term contracts.
	Behavior Health	81.001	Psychiatrist	Provides patient care through psychiatric evaluation and consultation, prescription of medication and recommendations for medical follow up. This job requires a medical degree from an accredited school of medicine with specialty training in psychiatry and completion of an accredited psychiatry residency program. Incumbents are Board Certified by the American Board of Psychiatry and Neurology in general psychiatry. Maintains current medical licenses and typically has a minimum of 1-2 years of experience as a clinical psychiatrist. Knowledgeable of the principles and practices of psychiatry including individual, group and family psychotherapy. Maintains accurate and current notes in the Mental Health records of all patients seen and produces reports of evaluation and/or treatment, as required.
	Behavior Health	81.002	Psychologist	Provides patient care through the evaluation, diagnosis, and treatment of psychological and neuropsychological disorders in individuals, families or groups. This job requires a Doctorate in clinical or counseling psychology from an American Psychological Association (APA) accredited program and completion of an APA accredited internship/residency. Maintains a current license in psychology and has a minimum of 1-2 years of experience as a clinical psychologist. Responsible for applying psychological procedures and techniques such as interviewing, behavioral assessment, and psychological testing. Maintains accurate and current notes in the Mental Health records of all patients seen and produces reports of evaluation and/or treatment, as required.
	Behavior Health	81.010	Social Services Supervisor / Manager	First-level supervisor of professional and paraprofessional social work staff. The job typically requires a master's degree in social work (MSW) and 3+ years of experience and at least a year as a social worker, or equivalent. Licensed as a Master's Social Worker in the State of Michigan. Plans department work, assigns caseloads, supervises, and coordinates the activities of social services workers and volunteers. Participates in the development of overall goals, objectives, and policies of the social services program. May provide training on procedures, policies, and regulations. May assist on more difficult cases. Evaluates performance and provides feedback to staff members.
	Behavior Health	81.015	Social Worker – MSW Licensed (Macro)	Advanced level professional social work job. The job typically requires a master's degree in social work (MSW), plus experience. Licensed as a Master's Social Worker in the State of Michigan. Seeks to improve the social or health services of communities, groups, or organizations through interventions, community programs, and organizational analysis. Develops and analyzes social welfare policy and provides training on community needs and may provide work direction to social work paraprofessionals in social work functions; and performs related work as assigned. May provide referrals to appropriate community services or financial assistance. Provides accurate and understandable interpretations of policies and regulations to clients. Maintains proper records according to organization, state, and federal guidelines.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
	Behavior Health	81.016	Social Worker – MSW Licensed (Clinical)	Advanced level professional social work job. The job typically requires a master's degree in social work (MSW), plus experience. Licensed as a Master's Social Worker in the State of Michigan. Performs responsible and difficult professional casework providing intensive social work case services involving complex social problems and treatment plans; directs service programs and may provide work direction to social work paraprofessionals in social work functions; and performs related work as assigned. May provide a wide array of social work functions such as assessment interview, counseling, psychotherapy, case evaluation, or adoption services. Determines appropriate methods of treatment, and/or provides other social services to individuals, groups, or families. May provide referrals to appropriate community services or financial assistance. Provides accurate and understandable interpretations of policies and regulations to clients. Maintains proper records according to organization, state, and federal guidelines.
	Behavior Health	81.020	Social Worker – BSW Licensed	Professional social worker job. The job typically requires a bachelor's degree in social work (BSW) and experience of 2 years or less. Licensed as a Bachelor's Social Worker in the State of Michigan. Provides a wide array of social work functions such as assessment interviews, psychosocial assessments, client counseling, case evaluation, adoption services, and/or provides other social services to individuals, groups, or families. May provide referrals to appropriate community services, including financial assistance or healthcare. Provides accurate and understandable interpretations of program policies and regulations to clients. Maintains proper records according to organization, state, and federal guidelines.
	Behavior Health	81.025	Social Service Technician/Unlicensed SW position	Under the direction of professional social service staff or supervisors, interviews clients to gather appropriate financial, medical and psychological information, sometimes during on-site visits. The job typically requires 2+ years of combined training and experience, or equivalent (not licensed). Provides paraprofessional casework services to clients, including planning, implementation, and evaluation of services needed. Assists clients in identifying appropriate community resources available. Maintains proper and accurate case records through documentation. Provides periodic follow-up to case plan. Adheres to all Federal, State, and local laws and regulations. Requires high amount of confidentiality. Sometimes called Case Aide.
D	Medical	82.001	Medical Director	Directs, plans, and coordinates activities of employees engaged in medical services. The job typically requires a Doctorate from an accredited school of medicine (M.D.) or osteopathy (D.O.). Current unrestricted State of Michigan doctor of medicine (M.D.) or doctor of osteopathy (D.O.) license. Enforces medical services and safety regulations and advises staff and supervisors on administrative changes. Recommends measures to improve methods, performance, and quality of medical service, and suggests changes in working conditions to increase efficiency.
D	Medical	82.004	Pediatrician	Provides patient care to infants, children, adolescents and young adults. The job typically requires a Doctorate from an accredited school of medicine (M.D.) or osteopathy (D.O.). Current unrestricted State of Michigan doctor of medicine (M.D.) or doctor of osteopathy (D.O.) license. Evaluates patients, performing examinations to determine presence of disease and to establish preventative health practices.
D	Medical	82.005	Staff Physician	Diagnoses and treats work-related illnesses and injuries of employees. The job typically requires a Doctorate from an accredited school of medicine (M.D.) or osteopathy (D.O.). Current unrestricted State of Michigan doctor of medicine (M.D.) or doctor of osteopathy (D.O.) license. Examines patient, orders various tests, analyses diagnostic images to provide information on patient's condition. Analyzes reports and findings of tests and exams, and diagnoses the patient's condition. Administers or prescribes treatments or medication. Conducts fitness-for-duty physical examinations and examines disability cases periodically to verify progress. Oversees all medical records and reports.
	Medical	82.006	Physician's Assistant	Under the direction of a physician, provides specified healthcare services to patients. The job typically requires a Bachelor of Science Degree from an accredited program for Physician Assistants, or the equivalent. Licensed as a Physician Assistant by the State of Michigan. Obtains detailed history and performs physical examinations. Performs or orders X-rays, electrocardiograms, laboratory tests and other diagnostic procedures, and interprets results. Administers such therapeutic regimens, home care and health maintenance. Maintains required records.
D	Medical	82.010	Dietary Manager	Directs and coordinates food service activities of hospital, nursing home, or related facility. The job typically requires a bachelor's degree in nutrition or dietetics. Licensed as a Dietitian by the State of Michigan. Ensures that menus and department policies conform to nutritional standards and government and establishment regulations and procedures. Reviews patient diet information and discusses requests, changes, and inconsistencies with patient, professional staff, or resident food committee. Inspects food and food preparation and storage areas, using thermometers and knowledge of health and sanitation regulations. Computes operating costs for own information and for information of administrative personnel.
D	Medical	82.015	Dietitian	The Dietitian or Nutritionist works with food service or nutritional programs to assist in the promotion of health and control of disease through healthy food choices and preparation. The job typically requires a bachelor's degree in nutrition or dietetics. Licensed as a Dietitian by the State of Michigan. May develop menus and serving portions that are designed for individuals or groups. May provide technical direction to a department providing quantity food services. May consult with healthcare professionals regarding nutrition. May also counsel individuals or conduct nutritional research.
D	Medical	82.020	Cytotechnologist	Stains and mounts slides and examines human body cells to detect evidence of cancer or other diseased conditions. The job typically requires a bachelor's degree and have completed an accredited educational program. May be a Certified Cytotechnologist. Receives blood specimens sent to laboratory or draws blood from patient. Centrifuges blood specimens in test tubes and capillary tubes to separate cells and sediment from blood serum. Classifies slides, records classification, and presents slides with unusual cell structures to pathologist for further examination.
D	Medical	82.021	Phlebotomist	Properly identifies patient, draws blood samples and sends to laboratory for analysis. The job typically requires a high school diploma and have completed an accredited phlebotomy program or 6+ months of experience. May be a Certified Phlebotomist. May perform special tests such as clotting time, bleeding time and glucose tolerance tests, and reports results. Maintains records of tests performed and blood samples taken.
	Medical	82.022	Laboratory Aide	Under general supervision and according to policies and procedures, prepares simple stains, solutions, and culture media. The job typically requires a high school diploma and 6+ months of experience, or equivalent. Keeps records of specimens held in the laboratory. Cleans laboratory equipment such as glassware, metal instruments, small instruments, sinks, etc. May perform a variety of clerical duties including but not limited to answering telephones, scheduling appointments and maintaining patient records.
	Medical	82.023	Histotechnologist	The job requires certification as Histotechnician or Histotechnologist, or Clinical Specialist in Histotechnology, with one or more years of work experience. Responsible for the preparation of laboratory specimens for microscopic evaluation by the pathologist through the use of microtomy, histochemistry, special staining and other appropriate techniques.
	Medical	82.024	Medical Technologist	Under general supervision and according to policies and procedures, performs medical laboratory tests, procedures, experiments, and analyses to provide data for diagnosis, treatment, and prevention of disease on patient specimens. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Certified as a Medical Technologist by the American Society for Clinical Pathology, or equivalent. Verifies instrument functioning by checking and calibrating specific lab instruments and documents data.
	Medical	82.025	Lab Technician	Under close supervision, performs routine medical laboratory test on patient specimens to provide data for use in diagnosis and treatment of disease. The job typically requires an associate's degree and 6+ months of experience, or equivalent. Certified as a Medical Laboratory Technician by the American Society for Clinical Pathology, or equivalent. Prepares and maintains accurate records of patient specimens received. Maintains laboratory equipment and performs quality control and cleaning procedures per guidelines.
	Medical	82.030	Nursing Director	Responsible for the overall direction, coordination and evaluation of nursing care and services provided to patients. The job typically requires a bachelor's degree and 8+ years of experience, or equivalent. Licensed as a Registered Nurse in the State of Michigan. Responsibilities include maintaining standards of care, financial management and maximizing revenue as well as attracting, developing and retaining top talent. Ensures that regulatory requirements/standards are communicated, implemented and monitored.
	Medical	82.031	Nursing Manager	Responsible for assessing, planning, directing and evaluating patient care. The job typically requires a bachelor's degree and 5+ years of experience, or equivalent. Licensed as a Registered Nurse in the State of Michigan. Provides input into review/revision of staff development and competency maintenance programs/plans. Ensures that regulatory requirements/standards, policies and procedures are communicated to subordinate staff and implemented.
	Medical	82.032	Nursing Supervisor	Responsible for supervising and coordinating nursing activities as well as evaluating patient care. The job typically requires an associate's degree and 5+ years of experience, or equivalent. Licensed as a Registered Nurse in the State of Michigan. Duties include ensuring that care is carried out as directed and that treatment administered in accordance with physician's instructions and adequate coverage exists on all shifts. Ensures that regulatory requirements/standards, policies and procedures are met.
D	Medical	82.035	Head Nurse	Directs nursing activities in an organized patient care unit. The job typically requires an associate's degree and 3+ years of experience, or equivalent. Licensed as a Registered Nurse in the State of Michigan. Assigns duties to professional and auxiliary nursing personnel in accordance with physicians' instructions, and supervises and evaluates their performance. Supervises the preparation and maintenance of patient clinical records, and compiles reports on staff performance and medical services rendered. Maintains established inventory standards for medicines, solutions, supplies and equipment, and accounts for narcotics.
	Medical	82.036	Registered Nurse (RN)	Registered Nurse (RN) working in healthcare, or with a specialization in public health or occupational health. The job typically requires up to 4 years of training, although some programs are 2 years, or equivalent, and passing a licensing examination. Incumbents work under the direction of physicians, nursing supervisors or company medical officers and perform duties such as triage, direct patient care, dispensing medication, public health screening and assessment, immunizations, employment physicals, management of workers' compensation cases, including light duty or other return-to-work programs for injured or sick employees. Incumbents may lead a first response team in responding to workplace injuries or employee illness. Incumbents may perform administrative duties associated with workers compensation and OSHA reporting requirements. Incumbents may train employees in first response and CPR.
	Medical	82.037	Licensed Practical Nurse (LPN)	Licensed Practical Nurse (LPN) working in healthcare, public health or occupational health. The job typically requires up to 2 years of training, or equivalent, and passing a licensing examination. Incumbents assist physicians, company medical officers or RN's with duties such as direct patient care, conducting public health clinics, employment physicals, treating workplace injuries, or assisting with management of workers' compensation cases. Incumbents may conduct first response training or CPR. Incumbents may assist with records management, government report preparation or similar administrative tasks.

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D	Medical	82.038	Nurse Anesthetist	The job typically requires up to four years of training, although some programs are two years, or equivalent, and passing a licensing examination. State of Michigan Nurse Specialty Certification as a Nurse Anesthetist. Assembles necessary supplies and equipment, and administers intravenous, spinal, and other anesthetics prior to surgical, medical or dental procedures. Monitors patient reactions and vital signs during and after anesthesia, and takes remedial action when warranted. Submits postoperative report on patient condition, and maintains records of anesthetics administered.
	Medical	82.039	Nursing Assistant	Performs various patient care activities and related nonprofessional services necessary in caring for the personal needs and comfort of patients. Bathes, dresses and undresses patients, and assists with personal hygiene. Transports and drapes patients for examinations and treatments. Takes and records temperatures, pulse, etc., as directed. Changes bed linen and runs errands. May clean, sterilize, store, and prepare treatment trays and other supplies.
D	Medical	82.040	Nurse Practitioner	Provides general medical care and treatment to patients under the direct supervision of a Physician. Performs physical examinations, orders, interprets and evaluates diagnostic tests, records physical findings and formulates diagnosis. Prescribes or recommends medications or other forms of treatment according to patients health care needs. Typically requires a 4-year degree and 2+ years of experience or equivalent and passing a licensing examination. <u>State of Michigan Nurse Specialty Certification as a Nurse Practitioner</u>
	Medical	82.041	Nurse Midwife	Provides medical care and treatment relating to childbirth and the processes associated with it. The job typically requires a degree from an accredited School of Nursing and/or Nurse Midwifery program and 3+ years of Labor and Delivery experience, or equivalent. Maintains certification by the American College of Nurse-Midwives (ACNM). Performs initial examination with physician, primary care, gynecological and family planning services, preconception care, care during pregnancy, childbirth and the postpartum period, and care of the normal newborn during the first 28 days of life.
N	Medical	82.042	Certified Medical Assistant	The job typically requires a high school diploma, completion of an accredited Medical Assistant program and relevant experience. Certified as a Medical Assistant by the American Association of Medical Assistants (AAMA), American Medical Technologists (AMT) or the National Center for Competency Testing (NCCT). Takes and records patient vital signs, collects specimens, drapes patient for examination, prepares treatment trays, and otherwise assists physician in exams and treatments.
C, D	Medical	82.043	Medical Assistant	The job typically requires a high school diploma, completion of an accredited Medical Assistant program and relevant experience. Takes and records patient vital signs, collects specimens, drapes patient for examination, prepares treatment trays, and otherwise assists physician in exams and treatments.
	Medical	82.044	Admissions / Registrar / Admitting Clerk/Representative	Greets, secures and inputs patient information into relevant databases. Announces visitors and directs them to the proper location when authorized. The job typically requires high school graduate level communication and problem solving skills with previous experience of less than 1 year, or equivalent. Compiles patient material that may include, but not be limited to, basic identification, medical history, emergency contact, attending physician, insurance coverage and payment, and enters patient information into a database.
D	Medical	82.045	Medical Records Clerk	Analyzes, compiles, codes, indexes and stores permanent medical records of patients. Searches for requested recorded medical information and verifies eligibility of access to records. The job typically requires a high school diploma or equivalent.
D	Medical	82.046	Medical Transcriptionist	Transcribes physician-dictated medical notes, progress reports, letters, etc. The job typically requires a high school diploma or equivalent.
D	Medical	82.047	Medical Insurance Biller	Submits electronic and/or hard copy medical claims, codes procedures and diagnoses, makes follow-up on claims. May coordinate payment arrangements for patient portion of claim. The job typically requires a high school diploma or equivalent.
D	Medical	82.048	Utilization Review Technician	Performs Utilization review in accordance with the hospital's UR plan to assure compliance with accrediting agencies and federal regulations. Assists in preparing and disseminating reports, answering correspondence and maintenance of appropriate records. The job typically requires up to four years of training, although some programs are two years, or equivalent, and passing a licensing examination.
	Medical	82.055	Pharmacy Director	Responsible for planning, directing and organizing all activities of employees engaged in compounding, mixing, packaging, labeling, and dispensing prescribed medications, drugs, and other pharmaceuticals. Position typically requires a bachelor's degree in Pharmacy or business and 8+ years of experience, or equivalent. Licensed as a Pharmacist in the State of Michigan. Ensures compliance with State and Federal legal requirements, government regulations and professional standards. Consults with and advises staff regarding drugs and pharmaceuticals.
D	Medical	82.056	Pharmacist	Compounds and dispenses medications and other pharmaceuticals. The job typically requires a bachelor's degree and 1+ years of experience, or equivalent. Licensed as a Pharmacist in the State of Michigan. Prepares and maintains all necessary records on prescriptions, patient charges and inventory. Provides information to the staff members on drugs and pharmaceuticals.
D	Medical	82.057	Pharmacy Technician	Under close supervision, fills routine orders for unit doses and prepackaged pharmaceuticals. Counts, packages and labels unit doses for inspection by pharmacist and fills routine orders for non-prescription pharmaceuticals. The job typically requires a high school diploma or equivalent. Licensed as a Pharmacy Technician in the State of Michigan. Assists pharmacists as directed, including filling orders and preparing labels.
D	Medical	82.058	Pharmacy Assistant	Assists in filling pharmacy orders. The job typically requires a high school diploma or equivalent. Checks and prices incoming merchandise. Stores or displays pharmacy items in proper locations. Assists in the care and maintenance of pharmacy equipment and supplies. Types and files reports, and completes forms as directed. Assists in maintaining inventory.
	Medical	82.065	Physical Therapist	The job typically requires completion of an accredited Physical Therapy education program, or equivalent. Certified by the Federation of State Boards of Physical Therapy. Organizes and conducts medically prescribed physical therapy programs to restore function, prevent disability following disease, injury or loss of body part, and helps patient reach maximum performance levels. Plans therapy involving physical exercise, massage, heat, water, etc. Utilizes various equipment and prosthetic and orthotic devices.
	Medical	82.067	Physical Therapist Assistant	Under the guidance of a Physical Therapist, assists in execution of designated physical therapy treatment plans. The job typically requires completion of an accredited Physical Therapy Assistant education program, or equivalent. Certified by the Federation of State Boards of Physical Therapy. Performs program support services, such as transporting patient, assembling equipment, and preparing and maintaining work areas.
	Medical	82.070	Occupational Therapist	Helps patients/clients improve their ability to perform tasks in living and working environments. The job typically requires a master's degree in Occupational Therapy, or equivalent. Certified by the National Board for Certification in Occupational Therapy. Works with individuals who suffer from a mentally, physically, developmentally, or emotionally disabling condition. Occupational therapists use treatments to develop, recover, or maintain the daily living and work skills of their patients. The therapist helps clients not only to improve their basic motor functions and reasoning abilities, but also to compensate for permanent loss of function.
	Medical	82.075	Certified Occupational Therapist Assistant (COTA)	Under the guidance of an Occupational Therapist, assists in administering specific therapeutic treatment and standardized tests. The job typically requires an associate's degree and 6+ months of experience, or equivalent. Certified by the National Board for Certification in Occupational Therapy. Performs program support services, such as transporting patient, assembling equipment, and preparing and maintaining work areas.
	Medical	82.080	Speech and Language Therapist	Specializes in diagnosis and treatment of speech and language problems, and engages in scientific study of human communication. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Diagnoses and evaluates speech and language skills as related to educational, medical, social, and psychological factors. Plans, directs, or conducts rehabilitative treatment programs to restore communicative efficiency of individuals with communication problems of organic and non-organic etiology.
D	Medical	82.085	Home Care Attendant	Cares for elderly, convalescent, or handicapped persons in patient's home, performing any combination of tasks. The job typically requires a high school diploma and 1+ years of experience, or equivalent. Changing bed linens, washing patient's laundry, or cleaning patient's quarters. May purchase, prepare and serve food following prescribed diet. Assists patient in and out of bed, into a wheelchair, dresses and bathes patient. Massages patient and applies preparations and treatments. Accompanies ambulatory patients outside home, serving as a guide.
	Medical	82.095	Case Manager	Facilitates communication between members/families, providers, medical staff and/or others with information relating to benefits utilization and health needs. The job typically requires a bachelor's degree and 3+ years of experience as a registered nurse. Interacts with members/families, providers, medical staff and/or others in order to develop, implement, authorize, and document treatment plans that include treatment goals, interventions, and expected clinical outcomes.
	Medical	82.100	MRI Technologist	Operates a magnetic resonance scanner to obtain images for use by physicians in the diagnosis and treatment of patients. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Transfers, positions and instructs patients regarding the procedure. Selects appropriate imaging techniques, and operates console and peripheral hardware. Enters and monitors patient data. Transfers images from disk to magnetic media to produce transparency.
	Medical	82.105	Radiology Technologist	Operates radiographic equipment to obtain film images for use by physicians in the diagnosis and treatment of illness and injury. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Certified by the American Registry of Radiologic Technologists. Transfers, positions, and instructs patients regarding procedure. Position imaging equipment and adjust controls to set exposure time and distance, according to specification of examination. Prepares and maintains records and files as directed. Cleans and adjusts equipment.
	Medical	82.110	Ultrasound Technologist	Operates ultrasound equipment to obtain photo or video images of internal organs for use by physicians in the diagnosis and treatment of patients. The job typically requires an associate's degree and 2+ years of experience, or equivalent. Transfers, positions, and instructs patients regarding procedure. Schedules and coordinates tests and prepares and maintains operational logs. Records test results and updates patient records for referring physicians. Maintains and calibrates equipment, and orders necessary supplies.
	Medical	82.115	CT Technologist	Operates computed tomography (CT) equipment to obtain produce cross-sectional radiographs of patient's body for use by physicians in the diagnosis and treatment of illness and injury. The job typically requires a high school diploma and 2+ years of experience, or equivalent. Transfers, positions, and instructs patients regarding procedure. Review and evaluate radiographs to determine if images are satisfactory for diagnostic purposes.

2018 Changes: C-New Job Code D-Revised Description N-New Position	Job family	Job code	Job title	Description
D	Medical	82.120	Paramedic	Administers life support care to sick and injured persons in pre-hospital setting as authorized and directed by physician. The job typically requires a high school diploma, completed a state-approved Paramedic program and valid drivers license. Licensed as a Paramedic in the State of Michigan. Assesses nature and extent of illness or injury to establish and prioritize medical procedures to be followed or need for additional assistance. Restores and stabilizes heart rhythm on pulse less, nonbreathing patient, using defibrillator. Monitors cardiac patient, using electrocardiograph. Initiates intravenous fluids to administer medication or drugs, or to replace fluids lacking in body. Administers injections of medications and drugs, following established protocols.
D	Medical	82.125	Dispatcher, Emergency	Under general supervision, receives emergency and non-emergency calls, dispatches closest most appropriate ambulance to calls, and maintains radio communications with all ambulance crew and supervisors as needed. The job typically requires a high school diploma or equivalent. Allocates EMS resources properly as the need arises by application of appropriate decision making rules and approved protocols. Maintains written dispatch logs and operates dispatch programs. Usually holds EMD certification and/or EMT license as a requirement.
	Banking	83.001	Branch Manager - Large Branch	Responsible for overseeing branch personnel, achieving branch goals, and ensuring branch guidelines and policies are followed. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Develops and maintains client relationships. Responsible for the general maintenance and operation of the branch facilities. Ensures compliance with Federal and State laws as well as bank policies and procedures. This position manages a large branch as defined by revenue or a branch with more than 12 branch employees.
	Banking	83.002	Branch Manager - Small Branch	Responsible for overseeing branch personnel, achieving branch goals, and ensuring branch guidelines and policies are followed. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Develops and maintains client relationships. Responsible for the general maintenance and operation of the branch. Ensures compliance with Federal and State laws as well as bank policies and procedures. This position manages a small branch as defined by revenue or a branch with fewer than 12 branch employees.
	Banking	83.005	Assistant Branch Manager - Large Branch	Assistant Branch Manager is responsible for the day-to-day operations and supervision of staff at assigned branch. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Often provides recommendations on assigning and controlling work, hiring and firing, and performance reviews of branch staff. May assist the Branch Manager in planning, directing, and managing the business development, marketing, and service activities of the branch. Performs duties that include auditing and verification of new accounts and file maintenance performed by staff.
	Banking	83.006	Assistant Branch Manager - Small Branch	Assistant Branch Manager is responsible for the day-to-day operations and supervision of staff at assigned branch. The job typically requires a bachelor's degree and 2+ years of experience, or equivalent. Often provides recommendations on assigning and controlling work, hiring and firing, and performance reviews of branch staff. May assist the Branch Manager in planning, directing, and managing the business development, marketing, and service activities of the branch. Performs duties that include auditing and verification of new accounts and file maintenance performed by staff.
	Banking	83.010	Teller Supervisor	Responsible for managing the office in the absence of the Branch Manager. (See above for definition of Small/Large branch) The job typically requires at least a high school diploma and 2+ years of experience, or equivalent. Supervises activities of the teller operations by assigning work, answering questions, solving complex issues, helping with complex transactions and sensitive member relations problems. Monitors work flow of the teller department to assure timely and accurate completion of duties and responsibilities. Often acts as backup to the Assistant Branch Manager and/or Branch Manager as needed, including handling complex customer issues.
	Banking	83.015	Head Teller	Coordinate and supervise all aspects of teller operations within the branch. The job typically requires at least a high school diploma and 2+ years of experience, or equivalent. Often serves as the lead teller and may have responsibility for the vault and its operations. Assists other tellers in solving complex transactions or problems and often serves as an operational reference.
	Banking	83.016	Teller I	Second of two levels of bank teller. This role performs transactional duties to serve customers by receiving or paying out funds. The job typically requires at least a high school diploma and 1+ years of experience, or equivalent. Maintains transactional records. Provides cash receipts and payment services in accordance with established policies and procedures. May assist or provide direction to other tellers. In smaller branches, may act as Head Teller.
	Banking	83.017	Teller II	First of two levels of bank teller. This role performs transactional duties to serve customers by receiving or paying out funds. The job typically requires at least a high school diploma and 6 months of experience, or equivalent. Maintains transactional records. Provides cash receipts and payment services in accordance with established policies and procedures.
	Banking	83.025	Portfolio Administrator	Experienced level of financial services work, typically requiring a degree and 2+ years of experience, or equivalent. Provides support to the Portfolio/Investment Officers with responsibility for the management of assigned client relationships. Calculates and processes statistical data and reports such as returns by period, yields, etc. Typically is responsible for the set-up and maintenance of client accounts. May schedule client meetings and prepare written collateral. May be responsible for inputting buy/sell trades as instructed by Portfolio Managers/ Investment or other staff. Responsible for the processing of client cash contributions and withdrawal. Monitors client accounts with regard to cash positions, audits daily trade activities, identify errors, reconciles discrepancies, and ensures accuracy of transactions. May be responsible for portfolio rebalancing under the supervision of more senior staff.