



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

2018

Wage and Salary Survey Job Descriptions

Confidential

Engineering Scientific and Technical Support
Administration and Office Support Positions
Production, Maintenance, Logistics, and Service Positions
Supervisory, Management and Professional Positions



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

JOB DESCRIPTIONS

***Please note that Entry Level denotes 0-2 years' experience, Level I > 2 to 5 years' experience and Level II > 5 years' experience.**

Job categories in this survey:

- ◆ Engineering, Scientific and Technical Support Positions
- ◆ Administrative and Office Support Positions
- ◆ Production, Maintenance, Logistics, and Service Positions
- ◆ Supervisory, Management and Professional Positions

ENGINEERING, SCIENTIFIC AND TECHNICAL SUPPORT POSITIONS

1401 APPLICATION ENGINEER – Development, plan and investigate practical application problems involving the full use of company products in diverse manufacturing process to conform to customer requirements. Conduct independent analysis of operating conditions and specifications proposed by customer, or through request of customer representative. Determine feasibility and product cost estimates from considerations of applicable policies and engineering requirements. Participate in the installation, operation and testing of equipment developed or modified in the field with sales and customer representatives. Respond to customer inquiries for quotation or proposals on special types of equipment or product modifications.

1403 AV Engineer – System design and consultation for visual display systems and associated equipment including computer-related control systems, audio components and software. Research, develop and/or test audio visual hardware and software systems that can be deployed into control room environments. May oversee the manufacturing and installation of audio visual display related equipment and components.

1405 DESIGN ENGINEER – Plans and designs products and/or systems. Designs tooling for mass-produced parts. Uses design experience in reducing material and labor costs on existing products. Assists in proposal preparation for new products. Performs engineering liaison with other departments.

1406 PRODUCT ENGINEER – Is responsible for the integration of materials, methods, and tools necessary to bring new products to the company portfolio.

1407 SOFTWARE ENGINEER – Specializes in a few areas of development, such as networks, operating systems, databases or applications, and each area requires fluency in its own set of computer languages and development environments.

1409 ELECTRONICS ENGINEER – Designs new products and maintains current engineering designs for the manufacturing of vacuum and gaseous tubes, semi-conductor and other solid-state devices and electronic equipment. Designs electrical circuits. Designs test apparatus and devises procedures to evaluate electronic equipment. Specializes in applications of electronic technology. Directs field operation and maintenance of electronic equipment, and recommends design changes according to operational evaluation to correct errors or to accommodate changes in system requirements.

1410 ELECTRICAL ENGINEER LEVEL I – Under direct supervision and using standard procedures, designs specific parts or minor phases of a project and performs related engineering duties as directed. Translates technical data received into usable data applicable to assignment; coordinates activities of technicians or lower rated engineering personnel assigned to project. Work involves limited responsibility; some evaluation, originality or ingenuity required. Researches, designs, develops, tests and supervises the manufacture and installation of electrical equipment, components or systems, computers and related equipment and systems for commercial, industrial, military or scientific use. May involve design, construction and installation of illuminating, communications and electric transport systems or the R & D and manufacture of electronic devices, controls and circuits or the application of systems supplemented by controls of resistive, inductive and capacitive type. Typical titles include Engineer, Test Engineer, Design Engineer, Systems Engineer and Product Development Engineer.

1411 ELECTRICAL ENGINEER LEVEL II – Under occasional supervision, plans and performs engineering projects, including responsibility for engineering a part of a major project. Conducts the development of each assignment, coordinates manpower assigned to activity. Has some latitude for un-reviewed action or decision. Assignments are broad in nature, usually requiring



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

appreciable originality and ingenuity. Research, design, develop, test, and supervise the manufacture and installation of electrical and electronic equipment, components or systems, computers and related equipment and systems for commercial, industrial, military or scientific use. May involve design, construction and installation of illuminating, communication (wire) and electronic transport systems or the R & D and manufacture of electronic devices, controls and circuits or the application of systems supplemented by controls of resistive, inductive and capacitive type. Typical titles include Senior Engineer, Senior Test Engineer, Research Engineer, Senior Designer, Staff Engineer and Assistant Project Engineer.

1413 MECHANICAL ENGINEER, LEVEL I – Under direct supervision and using standard procedures, designs specific parts or minor phases of a project and performs related engineering duties as directed. Translates technical data received into usable data applicable to assignment; checks drawings for technical accuracy; coordinates activities of technicians or lower rated engineering personnel assigned to project. Work involves limited responsibility; some evaluation, originality or ingenuity required. Area of application typically includes generation, transmission and utilization of gas, heat and mechanical power; the design and production of tools, fixtures, machinery and their products; the construction, installation and maintenance of facilities and equipment. Typical titles include Engineer, Engineer/Tooling and Equipment, Design Engineer, Process Engineer and Product Development Engineer.

1414 MECHANICAL ENGINEER, INTERMEDIATE LEVEL II– Under occasional supervision, plans and performs engineering projects. May be responsible for engineering a part of major project. Conducts the development of each assignment, coordinates manpower assigned to activity. Has some latitude for un-reviewed action or decision. Assignments are broad in nature, usually requiring appreciable originality or ingenuity. Area of application typically includes: generation, transmission and utilization of gas, heat and mechanical power; the design and production of tools, fixtures, machinery and their products; the construction, installation and maintenance of facilities and equipment. Typical titles include Senior Engineer, Senior Tool and Equipment Engineer, Research Engineer, Senior Designer, Staff Engineer and Assistant Project Engineer.

1415 MECHANICAL ENGINEER, LEVEL III – Performs detailed phases of design engineering work for a project of moderate size and complexity. The incumbent must be fully competent in all conventional aspects of engineering and be capable of planning and conducting tasks requiring independent judgment in the evaluation, selection and substantial adaptation and modification of standard engineering techniques, procedures and criteria. May also plan, schedule, coordinate and oversee the work of lower-level engineers who assist with particular projects. Normally requires a 4-year engineering degree and typically 5 - 10 years related experience (or equivalent working knowledge/experience). This includes proficiency in utilizing various computer software packages and automated engineering and design equipment.

1416 MECHANICAL ENGINEER, LEVEL IV – Acts as a staff specialist in providing technical guidance for complex or unique assignments. The incumbent must be capable of applying diversified knowledge of engineering principles and practices and independently making decisions on significant engineering problems or methods. May also plan, organize and supervise engineering activities for a project of significant size and complexity. Normally requires a 4-year engineering degree and typically 10+ years related experience (or equivalent working knowledge/experience). Incumbent must be cognizant of the capabilities and limitations of various computer software packages and automated engineering and design equipment to effectively direct their use for diverse engineering assignments. Professional registration is normally required at this level.

1420 INDUSTRIAL ENGINEER, ENTRY LEVEL – Area of application typically includes: planning, justification and layout of equipment, machinery and work stations in addition to determining most efficient and economical flow of work. Conduct, establish, interpret and administer time and motion studies, position evaluations, production standards and incentive systems. Devise and install inventory control systems, cost records, and auxiliary production devices, jigs and fixtures. B.S. Degree (Engineering Discipline) or equivalent and 1 to 3 years' experience Typical Titles: Time Study Engineer; Methods and Process Engineer; Standards Engineer.

1421 INDUSTRIAL ENGINEER, LEVEL I – Area of application typically includes: planning, justification and layout of equipment, machinery and work stations in addition to determining most efficient and economical flow of work. conduct, establish, interpret and administer time and motion studies, position evaluations, production standards and incentive systems. Devise and install inventory control systems, cost records, and auxiliary production devices, jigs and fixtures. B.S. Degree (Engineering Discipline) or equivalent and 3 to 8 years' experience or - M.S. Degree and 1 to 3 years' experience. Typical Titles: Senior Industrial Engineer; Senior Time Study Engineer; Senior Methods and Process Engineer; Senior Standards Engineer.

1422 INDUSTRIAL ENGINEER, LEVEL II – Area of application typically includes: planning, justification and layout of equipment, machinery and work stations in addition to determining most efficient and economical flow of work. Conduct, establish, interpret and administer time and motion studies, position evaluations, production standards and incentive systems.



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

Devise and install inventory control systems, cost records, and auxiliary production devices, jigs and fixtures. B.S. Degree (Engineering Discipline) or equivalent and over 8 years' experience or - M.S. Degree and 3 to 5 years' experience or Ph.D. Degree and 1 to 3 years' experience. Typical Titles: Supervising Engineer; Project Engineer; Plant Industrial Engineer; Leader, Production Engineer.

1427 MANUFACTURING ENGINEER, ENTRY LEVEL – This is a mostly a non-degree position. Responsible for a number of diversified duties which could include the following: writing operation sheets for company products and tools used in manufacturing process, investigate and trouble shoot manufacturing problems and develop most economical methods and processes, review new drawings and design during the development phase and make recommendations and modifications where advisable to conform to production capabilities and limitations and minimize cost, revise and update operation sheets, prepare time studies and estimate for sales, engineering and production departments, evaluate and initiate orders for new machinery and equipment required in the manufacturing process, programming and tooling of numeric controlled equipment. .0 - 3 years' experience.

1428 MANUFACTURING ENGINEER, LEVEL I – This is mostly a non-degree position. Responsible for a number of diversified duties which could include the following: writing operation sheets for company products and tools used in manufacturing process, investigate and trouble shoot manufacturing problems and develop most economical methods and processes, review new drawings and design during the development phase and make recommendations and modifications where advisable to conform to production capabilities and limitations and minimize cost, revise and update operation sheets, prepare time studies and estimate for sales, engineering and production department, evaluate and initiate orders for new machinery and equipment required in the manufacturing process, programming and tooling of numeric controlled equipment. 3 - years' experience.

1429 MANUFACTURING ENGINEER, LEVEL II– This is mostly a non-degree position. Responsible for a number of diversified duties which could include the following: writing operation sheets for company products and tools used in manufacturing process, investigate and trouble shoot manufacturing problems and develop most economical methods and processes, review drawings and design during the development phase and make recommendations and modifications where advisable to conform to production capabilities and limitation and minimize cost, revise and update operation sheets, prepare time studies and estimate for sales, engineering and production departments, evaluate and initiate orders for new machinery and equipment required in the manufacturing process, programming and tooling of numeric controlled equipment. 6 or more years' experience.

1440 FACILITIES ENGINEER – Directs and coordinates manufacturing processes in industrial plant; determines space requirements for various functions and plans or improves production methods including layout, production flow, tooling and production equipment, materials, fabrications assembly methods and manpower requirements. Communicates with planning and design staffs concerning product design and tooling to assure efficient production methods. Estimates production times and determines optimum staffing for production schedules. Applies statistical methods to estimate future manufacturing requirements and potential. Approves or arranges approval for expenditures. Reports to management on manufacturing capabilities, production schedules, and problems to facilitate decision-making.

1445 PROJECT ENGINEER – Directs, coordinates and exercises functional authority to plan, organize, control integrate and complete engineer projects within department. Organizes project staff to project requirements. Assigns project personnel to specific phases such as technical plans and design and testing according to engineering abilities. Compares design to company standards, engineering principles and customer contract. Coordinates development and scheduling activities with design resolution and problem testing. Controls expenditures within limits of budget. Completes reports.

1446 PROJECT MANAGERS – The role of the project manager is to plan, execute and finalize projects according to strict deadlines and within budget. This includes acquiring resources and coordinating the efforts of team members and third-party contractors or consultants in order to deliver projects according to plan. The Project Manager will also define the project's objectives and oversee quality control throughout its life cycle. Create and maintain an information technology project plan that communicates tasks, milestone dates, status and resource allocation. Utilize software life-cycle methodology. Coordinate delivery of development and production releases that meet quality assurance standards. Assist technical team in design and development tasks. Assist test team in creating test plans and testing efforts.

1450 QUALITY CONTROL ENGINEER LEVEL I AND II – Interpret contract specifications (CAD95), develop and implement procedures to meet quality assurance requirements; prepare inspection procedures: check lists and instructions for inspectors and shop. Insure quality assurance specifications are met by engineering, manufacturing and other involved functions. Develop



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

inspection procedures and quality acceptance standards. Develop and assist in implementing testing procedures and in analyzing and interpreting test results. Assist in development of inspection training programs and in training of inspection personnel.

1470 SAFETY ENGINEER – Inspect factory operations and physical conditions of the plant, and initiate action to eliminate industrial hazards and reduce accident frequency. Investigate accidents to determine cause and method of prevention, and prepare reports to management. Direct a program to educate supervision and employees in safety. May organize and direct work of safety committees.

1476 SALES ENGINEER LEVEL I & II – Contact customers to explain and sell company product of an engineering character. Assist in engineering a special product or products and estimate jobs and quote prices. Interpret customer requirements and orders for engineering and production departments, performing liaison duties between company and customer. Prepare orders and necessary sketches and data sheets for estimating price or for design of equipment. Prepare reports on contacts made and other pertinent data. Provide service after sale regarding delivery, service, quality or other problems that may arise.

1478 TECHNICAL SERVICE ENGINEER – Inspects, repairs, and maintains functional parts of mechanical equipment and machinery, using hoists, hand tools, gauges, and testing devices. Inspects defective equipment and diagnoses malfunctions. May disassemble and reassemble equipment.

1501 DESIGN DRAFTER (CAD) LEVEL I – Under general supervision, performs routing drafting assignments, which require the application of fundamental drafting techniques in accordance with established standards and procedures. Assignments are designed to further develop the incumbent's job knowledge and abilities. Detailed instructions are provided by immediate supervisor for new or more complex assignments. Typical duties and responsibilities include: (1) preparing routine engineering or construction drawings (comprised of basic arrangements, layouts, flowsheets, assemblies, isometrics, etc.) from rough sketches or from general engineering and design information utilizing manual of computer-assisted drafting/design techniques; (2) referencing information from vendor prints, catalogs, technical manuals, etc. and interfacing with engineering as required and (3) performing related engineering support tasks. Must be able to take a basic idea, sketch, or method and develop it into a detailed and complete engineering or construction drawing utilizing manual and/or computer-assisted techniques. Normally requires a high school graduate with Vo-Tech training in basic drafting technology and minimal related experience, or a 2-year degree in drafting/design technology.

1503 DESIGN DRAFTER (CAD) LEVEL II – With minimal supervision, performs a variety of moderately difficult to difficult drafting assignments that require the application of advanced drafting techniques in accordance with industry standards and codes. Detailed instructions are provided by immediate supervisor for assignments that may involve basic design concepts. Typical duties and responsibilities include: (1) preparing moderately-difficult to difficult engineering or constructions drawings, utilizing manual and computer-assisted drafting/design techniques; (2) determining material needs and performing necessary calculations using accepted formulas and references as directed by immediate supervisor; (3) detailing minor design elements which have not been clearly defined in layouts or sketches; and (4) reviewing manufacturers or fabricators prints for conformance with contract specifications. Must demonstrate a proficiency in utilizing CAD equipment for standard applications and be versatile in performing difficult drafting assignment. Normally requires a 2-year degree in drafting/design technology and 3 - 5 years prior drafting/design experience, or a minimum of 6 - 8 years on the job drafting/design training.

1505 DESIGN DRAFTER (CAD) LEVEL III – With minimal supervision, performs a variety of moderately - difficult to difficult drafting/design assignments which require the application of advanced drafting and/or fundamental design techniques in accordance with industry standards and codes. Guidance provided by immediate supervisor for assignments involving more complex design concepts. Typical duties and responsibilities include: (1) preparing difficult engineering or construction drawings, utilizing manual and computer assisted drafting/design techniques, where only minimal information and very rough sketches are provided; (2) determining material needs and performing necessary calculations using accepted formulas and references; (3) detailing design elements which have not been clearly defined in layouts or sketches; (4) reviewing manufacturers or fabricators prints for conformance with contact specifications and (5) checking work assigned to lower level drafting/design personnel for accuracy. Must demonstrate a proficiency in utilizing CAD equipment for standard applications, be versatile in performing difficult drafting assignments, and have a working knowledge of fundamental design concepts. Normally requires a 2-year degree in drafting/design technology and 8 years prior drafting/design experience, or a minimum of 9 - 10 years on the job drafting/design training.

1507 DESIGN ENGINEER LEVEL I, II AND III – Under general direction, performs moderately difficult to difficult assignment that requires the application of advanced design techniques in accordance with industry standards and codes. Typical duties and



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

responsibilities include; (1) establishing design criteria for assigned project requiring the application of basic engineering principals, material properties, and a familiarity with construction, installation and maintenance procedures; (2) preparing detail and layout drawings and sketches of unusual, complex or original designs requiring the application of theoretical and practical engineering knowledge; (3) determining material needs and performing necessary calculations using accepted formulas and references; (4) reviewing manufacturers or fabricators prints for conformance with contract specifications; (5) providing lower lever design/drafting personnel; with design sketches for preparation of finished design drawings, general layouts, and guidance in refining technical requirements; and (6) checking work assigned to lower lever design/drafting personnel for accuracy. Must demonstrate a sound understanding of design concepts with minimal engineering input and a proficiency in utilizing manual and computer assisted techniques for moderately difficult to difficult design applications. Normally requires a 2-year degree in drafting/design technology and 10+ years prior drafting/design experience, or a minimum of 12 - 15 years on the job drafting/design training.

1510 NC/CNC PROGRAMMER – Prepares numerical control tape programs. Analyzes method sheets and performs calculations, establishes feed and speeds and N/C layout, develops language and processes programs. Provides shop support: coordination, tools, machine techniques, operator training, and coordination of new equipment start-up. Analyzes methods for N/C productions: reviews methods, assists in tool design, personnel relationships.

1515 PLC TECHNICIAN – Design, program, repair and maintain programmable logic controller (PLC) systems used within manufacturing and service industries ranging from industrial packaging to commercial car washes and traffic lights. Applies electronic theory, principles of electrical circuits, electrical testing procedures, engineering mathematics, physics, and related knowledge to layout, build, test, troubleshoot, and repair production equipment.

1518 CNC TECHNICIAN – Produces machined parts by programming, setting up, and operating a computer numerical control (CNC) machine; maintaining quality and safety standards; keeping records; maintaining equipment and supplies. Preparing and operating CNC machines to perform tasks such as drilling, grinding, milling etc. Understanding specifications of the task at hand and the desired result by reading blueprints, mechanical drawings etc.

1520 QUALITY CONTROL TECHNICIAN – Under direction of supervisor, assigns work, instructs and coordinates the activities of the quality control section and assists with the application and monitoring of established inspection procedures and methods. Compiles, tabulates and summarizes inspection data for analysis, prepares and offers constructive analyses relative to variable and deviations from prescribed standards of quality. Maintains charts, graphs and statistical records having to do with quality, nature and causes of defects. Expedites and follows up procedural changes and inspections and performs such liaison between quality control and the inspection department. Duties consist mainly of technical functions in support of basic engineering procedures.

1524 FIELD SERVICE TECHNICIAN, ENTRY LEVEL – Performs location installation, start-up, service and repair operations on products manufactured by the company in accordance with directives and policies governing such services. May be involved with custom products produced to engineering specifications as to design and application or standard products of complex and involved design in a diversified line. May also perform same service for products manufactured by other companies.

1530 TECHNICIAN, LEVEL I – Sets up test equipment and conducts routine tests. Records and organizes test data. Fabricates, assembles or tests simple mechanical or electrical devices. Does other related work as assigned. Work is performed under direct supervision of a more experienced employee, for example, a senior technician or engineer. Requires high school graduate or equivalent with preliminary training in mathematics and engineering principles and theory. Must possess manual dexterity. 0 - 2 years' experience.

1531 TECHNICIAN, LEVEL II – Conducts laboratory evaluations and analyses. Prepares reports and may make recommendations on experiments and/or tasks. Assignments may include technical liaison within a laboratory or with other laboratories and manufacturing. May be involved in the planning, construction, test and analysis of complex devices or experimental designs in a technical field. On occasion may be required to give technical direction to technicians or model makers. Requires some technical guidance. Requires high school plus two-year technical school (graduate) or equivalent. This job normally requires minimum of 5 years as technician or related laboratory technical work.

1550 TECHNICAL WRITER – Under general direction of department supervisor, prepare instruction and descriptive material for the operation and maintenance of the complex types of equipment. Analyze each order, collect and correlate information. Plan the instruction book format and direct the preparation of illustrative material and typed copy for the final printing. Arrange for



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

the preparation of special instruction book drawings, photographs and artwork. Prepare instruction book specifications for vendors and printers when requesting quotation. Check and proof-read copy.

1603 CHEMIST LEVEL I AND II – Area of application typically includes: a variety of chemical analyses, tests and investigations in connection with the determination of compositions organic and inorganic compounds/mixtures and properties of materials. Research, development and establishment of techniques, methods and procedures for controlling new and/or improved materials, products and chemical processes. B.S. Degree (Scientific Discipline).

1610 DESIGNER (Apparel) – Responsible for the development of creative, original designs for specific product lines.

1611 GRAPHICS DESIGNER (Apparel) – Creates computer-generated illustrations for specs, virtual designs, price lists, heat transfers, and custom embellishments. Develops style packages composed of flat technical drawings.

ADMINISTRATIVE AND OFFICE SUPPORT POSITIONS

2001 ACCOUNTING CLERK, BOOKKEEPER LEVEL I – Maintains a complete and systematic set of records pertaining to one phase of business transactions. Performs the more routine calculations and posting duties in accounting, such as accounts payable or receivable, checking, posting and balancing accounting entries.

2002 ACCOUNTING CLERK, BOOKKEEPER, LEVEL II – Maintains a complete and systematic set of all business transactions of an establishment. Verifies and records all transactions and independently resolves discrepancies, prepares reports, vouchers and reconciles accounts. Must be proficient in automated accounting systems, computer and software knowledge. May supervise assistant bookkeeper and/or other accounting clerical.

2005 ACCOUNTS PAYABLE CLERK – Processes accounts payable including maintaining records of amounts owed, verifying invoices, computing discounts, coding expenses and preparing vouchers for payment. Totals accounts, prepares account statements, and maintains files and other reports as required.

2006 EXECUTIVE ASSISTANT – Reports to the President/CEO or other senior upper management position. Generally, the top-level administrative professional requiring high school education or GED plus related experience of at least 5+ years. Assists the top executive by performing a variety of support duties, such as screening calls, conference or 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 use computer applications for word processing, spreadsheets, databases, graphics, web page content, etc. Must use independent judgment and exercise discretion, regarding confidential matters. May provide work direction to other support staff.

2008 ARTIST (GRAPHIC ARTIST) – Under supervision, specializes in creating graphic presentations including slides, view graphs, visual aids and other related creative artwork. Uses standard drafting tools, airbrush, mechanical and hand lettering devices and other artist aids with a high degree of skill. Recommends new techniques, processes or products to ensure quality and economy of projects.

2010 BUYER LEVEL I – Prepares and places purchase orders for group of standard commodities, supplies and materials of low dollar value and standard price are pre-negotiated, assists Buyer on expediting and quoting.

2011 BUYER LEVEL II – Responsible for purchasing and negotiating materials, equipment, and supplies from vendors. Evaluates vendor quotes and services to determine most desirable suppliers. May require a bachelor's degree and 2-5 years of experience in the field or in a related area. Familiar with standard concepts, practices, and procedures within a particular field. Relies on limited experience and judgment to plan and accomplish goals to perform a variety of tasks. Works under general supervision. A certain degree of creativity and latitude is required. Typically reports to a supervisor or manager.

2012 BUYER LEVEL III – Responsible for purchasing and negotiating materials, equipment, and supplies from vendors. Evaluates vendor quotes and services to determine most desirable suppliers. May require a bachelor's degree and 5-8 years of experience in the field or in a related area. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. A wide degree of creativity and latitude is expected. May report to an executive or a manager.



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

2015 CLERK, GENERAL ADMINISTRATIVE B – General classification of all jobs not otherwise classified where a limited number of simple clerical procedures are performed. Follows established routines or detailed instructions and has no latitude for independent action or decision regarding changes in methods of performing work. Immediate supervision is available at all times. Necessary use of computing machines or other office appliances may be considered part of the job.

2016 CLERK, GENERAL ADMINISTRATIVE A – Compiles and maintains records of business transactions and office activities for establishment, performing a variety of clerical duties while utilizing knowledge of systems and procedures. May copy data and compile records and reports, tabulate and post data in record books and computes wages, taxes, premiums, commissions and payments. May also record orders for merchandise or services, give information to and interview customers, claimants, employees, and sales personnel and handle various cash-related activities. Typically operates office machines such as copy and fax machines. Opens and routes incoming mail, answers correspondence and prepares outgoing mail.

2027 COST ESTIMATOR – Makes estimates of labor cost on total cost of apparatus, devices or services from general engineering data, for the purpose of preparing bids for contracts for sales prices, or to determine the selection of a product design. Estimates are made on the basis of previous cost data and knowledge of the manufacturing processes involved. May determine the kind and number of workers required from general engineering data, drawings, and/or verbal descriptions. May review finished blueprints to insure adherence to specifications or may follow up production methods to insure the minimum number of workers are being employed.

2028 COST ACCOUNTANT – Monitors and reports on cost activities of production and contracts. Prepares closing entries associated with inventory, PPV and cost of sales. Assists in inventory adjustments, year-end physical inventory and valuations and year-end audits. Assists in budgeting production costs and sets factory overhead.

2031 CUSTOMER SERVICE REPRESENTATIVE, LEVEL I – This position is an entry-level position. Ordinarily incumbents perform at this level before promotion to more responsible custom service positions. Generally, this position is responsible to perform a majority of duties as outlined in the Customer Service Representative job description with exceptions which may include: assignment too small or less prominent accounts, more closely supervised, more record keeping and clerical duties, etc. and may consult with more senior customer service representatives with regard to customer problems, procedures and general company procedures and practices.

2032 CUSTOMER SERVICE REPRESENTATIVE, LEVEL II – Under general supervision performs many customer service related duties including receiving customer orders, giving price quotes, providing information on production and shipping schedules, giving limited suggestions or technical advice, etc. to customers. At times may need to ask for advice and guidance on customer service related issues. Incumbent still learning the company products, customer requirements, procedures and practices. Coordinates activities between customers and various company functions. Both the complexity and number of accounts increases. Maintains the appropriate records and logs, consults on credit matters, may prepare required marketing or sales reports, confers with appropriate management level relative to quote information and suggest methods or procedures to assure customer satisfaction.

2033 CUSTOMER SERVICE REPRESENTATIVE, LEVEL III – Independently performs all related customer service duties as assigned including receiving customer orders, giving price quotes, providing information on production and shipping schedules, providing limited suggestions or technical advice, etc. to customers. When possible, adjusts mistakes and solves problems for customers within assigned scope of authority. Refers only major problems to their supervision. Also, this incumbent is required to have thorough knowledge of company products, customer requirements, procedures and practices. Coordinates activities between customers and various company functions and may be assigned major customer accounts or large new accounts. Maintains the appropriate record and logs, consults on credit matters, may prepare required marketing or sales reports, confers with appropriate management level relative to quote information and suggests methods or procedures to assure customer satisfaction. Seasoned customer service representative.

2040 DATA AND/OR ORDER ENTRY CLERK – Enters data into electronic data processing system for sales orders, plant floor material or labor control, accounts payable, accounts receivable, payroll.

2045 ESTIMATOR LEVEL I – Makes estimates on the labor costs and the total cost of any apparatus, devices or services for the purpose of preparing bids for contracts and pricing or to determine the selection of a product design. Makes estimates on the basis of previous cost data and an overall knowledge of the manufacturing processes involved. May determine the kind and number of workers required from general engineering data, drawings or verbal descriptions. May review finished blueprints to



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

insure adherence to specifications or may follow up production methods to ensure that the minimum number of workers is being employed.

2046 ESTIMATOR LEVEL II – Same as above but with five plus years' experience.

2057 EXPEDITER, PRODUCTION – Follows progress of orders through plant in accordance with requirements indicated on production schedules. Directs delivery of materials from stock rooms or pick-up stations to production sections as required. Checks to see that orders leave departments or operation groups as scheduled, expedites deliveries when necessary. Contacts first level production supervisor relative to special handling, availability of material, delays, and changes in promise dates; material control section for material shortages and vendor delivery promises. Anticipates probably delivery failures and takes action to avoid occurrence. Supply progress reports to production control section.

2060 EXPEDITER, PURCHASE (INSIDE AND/OR OUTSIDE) – Insures that merchandise, supplies, and equipment are shipped by supplier on promised shipping date, performing dates, such as checking purchase orders for delivery dates communicating with supplier to ascertain whether materials were shipped on promised date, or to ensure that goods will be shipped when promised, and communicating with transportation company to make sure that no delay takes place in transit. Also follows up purchase orders for supplies and equipment, involving travel and personal contact with suppliers, plants and warehouses. Checks specific delivery information and availability of materials and substitutes items. May inspect material to ascertain agreement with specifications.

2067 INDUSTRIAL NURSE (RN) AND INDUSTRIAL NURSE (LPN) – Assists physicians with clinic and physical examinations, renders professional services of a medical nature under direction of physicians, and administers first aid in emergency cases. May visit ill and injured employees at their homes. Maintains medical history and records of accidents. Requires graduate nurse training.

2068 INVENTORY DATA PROCESSOR – Responsible for maintaining accurate accounting of receipts and finished products through audits and actual processing of all related information and documents. The responsibilities also include timely distribution of necessary information to the production, quality assurance and finance departments. The position requires problem solving skills and consistent accuracy at all times.

2070 MAIL CLERK – Prepares incoming mail for distribution and outgoing mail for mailing; opens, sorts and stamps time on incoming mail; seals and stamps outgoing mail. May perform a variety of related duties such as distributing and collecting mail, run copying machines or other general office clerical duties.

2073 ORDER CLERK – Receives orders for product by mail, phone or personal contact. Quotes prices to customers and makes out standard order sheet listing requirements.

2075 PAYROLL CLERK – Performs necessary clerical duties related to process payroll transactions to produce a payroll. Reviews time sheets and/or timecards, inputs, maintain employee master file and related coding/deduction tables and files. May prepare payroll tax reports, 941, W-2 as required. Proficient with automated and/or computer software.

2076 HUMAN RESOURCE ASSISTANT LEVEL I – Answers routine questions related to personnel and interpret policy where clear-cut procedures and rules exist. Duties may pertain to a particular aspect of personnel or may be of a generalist nature, such as: compiling and maintaining salary and other personnel statistics or programs, maintaining files of performance appraisals, job descriptions, wage reviews, etc. and handling claims relating to worker's compensation, unemployment insurance, prescreening applicants for employment, and compiling statistics for EEO purposes, insurance billings. Performs clerical duties of a difficult and confidential nature.

2077 HUMAN RESOURCE ASSISTANT LEVEL II – Provides support in functional areas of a human resources department, which may include recruitment and employment, personnel records, employee and/or labor relations, job evaluation, compensation management, benefits administration, organization development and training. May require an associate's degree in a related area with 2-4 years of experience in the field or in a related area. Has knowledge of commonly-used concepts, practices, and procedures within a particular field. Relies on instructions and pre-established guidelines to perform the functions of the job. Works under immediate supervision. Primary job functions do not typically require exercising independent judgment. Typically reports to a supervisor or manager.



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

2078 HUMAN RESOURCES GENERALIST LEVEL I – Administers organization's policies and programs relating to: recruitment, employee development/training, safety, wage and benefit administration and employee relations.

2079 HUMAN RESOURCES GENERALIST LEVEL II – Administers human resources policies and procedures that cover two or more functional areas. Collects and analyzes HR data, and then makes recommendations to management. Processes paperwork for functional area according to established procedures. May prepare internal employee communications regarding compensation, benefits, or company policies. May require a bachelor's degree in a related area and 2-4 years of experience in the field or in a related area. Familiar with standard concepts, practices, and procedures within a particular field. Relies on limited experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision; typically reports to a manager. A certain degree of creativity and latitude is required.

2080 PRODUCTION PLANNER, Experienced LEVEL II – Responsible for: production scheduling for all types of manufacturing operations. Plans detailed operations and production schedules from blueprints, engineering and/or sales orders, change notices and production releases. Established production sequence and lead-time of each operation to meet shipping dates and daily production schedules. Coordinates projects and expedites orders and schedule. Knowledge of automated planning and scheduling systems using terminal or computer.

2081 PRODUCTION PLANNER LEVEL I – Responsible for: production scheduling standard or repetitive types of manufacturing operations. Plans detailed operations and production releases. Establishes production sequence and lead-time of each operation to meet shipping dates and daily production schedules. Coordinates projects and expedites orders and schedule. Knowledge of automated planning and scheduling systems.

2082 SALES CORRESPONDENT – In-plant contact for outside sales force and customers in all matters pertaining to pricing, order status and expediting of customer orders. Handles correspondence with customer regarding orders. Processes orders received by mail and/or phone.

2083 SALES ORDER COORDINATOR/CLERK – Receives and processes orders for products by mail, phone or personal contact. Quotes prices, delivery dates and makes out standard order sheets via manual and/or system entry.

2084 SALES REPRESENTATIVE LEVEL I – Performs promotional work to obtain sales in assigned territory where the company and product/service line acceptance is established and to canvas prospective new accounts. Demonstrates products or services and assists in selecting the ones best suited to customers' needs for new accounts as well as established accounts. Quote prices, terms, delivery dates, etc. subject to the approval of a supervisor. May investigate and report on warranty claims and complaints. Prepares periodic activity and expense reports. Usually works under the supervision of a senior representative.

2085 SALES REPRESENTATIVE LEVEL II – Same as above but with five plus years' experience.

2086 SALES REPRESENTATIVE LEVEL III – Performs promotional work to sell and secure new customers in new territories and usually handles major accounts. Prepares quotations, terms of sale, delivery dates, service obligations, etc. and writes orders subject to approval of the company. Keeps the company informed about competition and prepares periodic reports as required. Trains, instructs and orients new personnel and trainees.

2087 SUPPLY CHAIN COORDINATOR – Manage the buying and delivery process of goods or services on behalf of your company, or a specific client or clients. Responsible for overseeing and supervising the supply chain staff, providing guidance and ensuring that all staff are performing high-quality work that meets company standards. The Supply Chain Coordinator usually works closely with the Sales Director to ensure the best supply chain solutions are achieved.

2088 LOGISTICS COORDINATOR – Communicates effectively, organize personnel, and assist with training as required, whilst also organizing budgets and courier expenses. Ensures that quality assurance checks are completed and maintained. You may also be required to assist clients with product selection and pricing to improve transportation routes. A Logistics Coordinator is especially responsible for monitoring deliveries, ensuring customer satisfaction and maintaining accurate logs of all transportation and goods.

2089 ADMINISTRATIVE ASSISTANT LEVEL I – Performs diversified secretarial duties for senior level executive (chief executive officer or executive responsible for a major function or geographic operation.) Takes and transcribes dictation of a



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

complex and confidential nature and assist in designated administrative details, using initiative and judgment. Requires knowledge of company policies, practices and organization. May direct the work of clerical employees.

2090 ADMINISTRATIVE ASSISTANT LEVEL II – Performs a variety of administrative functions. Schedules appointments, gives information to callers, and takes dictation. Composes memos, transcribes notes, and researches and creates presentations. Generates reports, handles multiple projects, and prepares and monitors invoices and expense reports. May assist with compiling and developing the annual budget. Requires a high school diploma with 2-4 years of experience in the field or in a related area. Familiar with standard concepts, practices, and procedures within a particular field. Relies on experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision. A certain degree of creativity and latitude is required. Typically reports to a supervisor or manager.

2092 TELEPHONE OPERATOR, RECEPTIONIST – Operates an automatic, manual or cordless switchboard (usually single position) at entrance to plant or office and acts as receptionist. Uses judgment, tact and courtesy in meeting public and directing them to the proper people. Handles all calls and keeps records of the transactions when necessary. May handle in plant communications, such as paging and public-address systems. Familiarity with personnel and their location is essential. May do incidental typing or clerical work.

2095 TRAFFIC CLERK – Performs a variety of duties involving the checking of all freight bills with delivery receipts and bills of lading. Checks freight bills for rates, weights, and charges. Prepares tracers on shipments in transit or overdue. May issue shipping instructions and routings to vendors for shipment. Assists in selecting best routings and most economical method of incoming and outgoing shipments. Files claims with carriers. Allocates freight charges to proper jobs and accounts.

2098 TRAINING SPECIALIST – Assists in the development of courses and instructional materials for use in training company employees on assigned vocational or personal development topics. Assists in the determination of training needs in assigned area and analyzing the subject matter and the employee group to be trained. Develops a training plan and then produces a complete course of instruction, including lesson plans and teaching aids. May also develop training materials, brochures, articles, etc. Is typically concerned primarily with the training of office and/or factory production level employees. Excludes specialists in management development. Usually assigned to a department function or skills area.

PRODUCTION, MAINTENANCE, LOGISTICS, AND SERVICE POSITIONS

3007 ASSEMBLER, BENCH OR FLOOR, HEAVY – Diversified assembly of very intricate apparatus, machines or equipment with a large range of component parts. Considerable adjusting, aligning and fitting to very close tolerance and strict inspection standards, which may involve filing, scraping, machining, tapping, drilling, reaming, in addition to hand and simple power tools. May plan erection or assembly procedure, working from blueprints, drawings, specifications, etc. Usually is responsible for testing or inspecting assembled unit.

3008 ASSEMBLER, BENCH OR FLOOR, LIGHT – Performs repetitive and standard assembly operations of several components, involving little or no fitting on a very limited variety of parts. Coordination, rather than mechanical ability and knowledge are required. Tolerances usually liberal. Requires use of hand and simple power tools.

3009 ASSEMBLERS I (entry level) – Assembling and/or adjusting of several parts on a semi-repetitive basis where single or very similar technique are required, including wiring of small units from detailed verbal instructions. Requires a limited degree of skill and job training of approximately 3 to 6 months or simpler work involving considerable physical effort.

3010 ASSEMBLERS II (mid-level) – Ordinary assembling and/or adjusting using a variety of hand and simple power tools; adjusting spring tensions, spacing, aligning, etc., where a limited range of techniques is required. Includes wiring of semi-repetitive units of small or medium size; involves intermediate degree of skill and job experience of approximately six months to one year. May involve working from simple prints, wiring diagrams, etc. or simpler work involving a considerable physical effort.

3011 ASSEMBLERS III (most complex) – Erecting, assembling, fitting, scraping and aligning requiring a skilled mechanic on large apparatus, machine tools, engines, large motors, large ball bearing assemblies, etc., using complicated wiring diagrams. High degree of responsibility for details on complicated assemblies and expensive apparatus not easy to inspect after assembly.



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

- 3015 AUTO/TRUCK MECHANIC** – Repair gasoline or diesel-powered automobiles and trucks. Performs such duties as disassembling and overhauling engines, transmissions, clutches, rear ends, and other assemblies, replacing worn or broken parts, grinding valves, adjusting brakes, tightening body bolts, aligning wheels, etc. Lubricates vehicles and performs other duties in connection with maintenance and operation of motor vehicles, as required. Does not include finished body and fender work, re-upholstery and painting.
- 3016 BALE OPERATOR** – Operates machine that compresses and binds loose materials to facilitate handling. May truck or carry
- 3017 BINDERY MACHINE WORKERS** – Operates specific bindery equipment to finish printed products. These types of equipment may include cutter, folder, gatherer-stitcher-trimmer, drill, collator.
- 3021 BRAZER** – Performs minor set-ups and operates the calibration and embossing machines. Changes dies, fixtures, and gauges as required. Makes adjustments to equipment to meet product specifications. Loads and unloads machine. Checks product visually, with fixed gauges and/or with prints. Moves material within the work area. Performs preventive maintenance on equipment when required. Maintains records as required.
- 3034 CHEMICAL PROCESS/BATCH OPERATOR** – Responsible for operation of process equipment, tending or controlling units or systems that process chemical and/or allied substances into intermediate or finished products. End product is liquid.
- 3036 CHIPPER AND FINISHER** – Chips and grinds excess metal from casting surfaces using hand or portable power tools.
- 3040 CNC OPERATORS, HORIZONTAL BORING MILL** – Setup and operate tape control machine performing boring, milling, drilling, and reaming, tapping operations on various materials. Install fixtures, setup job, loads control tape, trial runs job and edits tape. Makes preliminary check of first piece, adjust tools to proper dimensions, and submit finished operation for inspection approval. Manually position and remove tools as prescribed by tape if necessary.
- 3042 CNC OPERATORS, LATHE OPERATOR** – Sets up and operates a computerized controlled lathe capable of performing multiple machining and cutting operations. Loads work and control tape and trial runs jobs, edits tape. Uses precision measuring instruments to setup machine items. Takes corrective action and repositions as required.
- 3044 CNC OPERATORS, MACHINING** – Sets up and operates a computerized controlled machining center capable of performing multiple machining operations. Loads work, checks numerical data, and total runs jobs. Use precision measuring tools to verify machining operations. Takes corrective action and repositions as required.
- 3045 CNC OPERATORS, ROUTER** – Sets up and operates multi-axis, numerically controlled routing machine to cut and slope workpieces. Selects and positions work piece on machine bed. Compares numerical data displays with specifications on operation sheets, and uses scales, gauges, and micrometers to verify machining operations.
- 3046 COLLATOR OPERATORS** – Sets up and operates a multi-station collator to assemble, glue and cut to length continuously printed pages, forms, etc., which may include carbon and carbonless paper, into multi-part units. May operate other in line equipment such as number verification units, label applications.
- 3051 CRANE OPERATORS** – Operates crane to hoist and remove materials, raise and lower heavy weights. Performs other related operations.
- 3053 CUPOLA OR FURNACE TENDER** – Has charge of cupola operation or air furnace melting. Responsible for metal temperature and rate of melt or for determining when metal is ready to be tapped.
- 3056 CUTOFF SAW OPERATOR** – Any Industry.
- 3060 SAND BLAST OPERATORS** – Operates degreasing tank to remove oil, grease and other surface foreign matter from sheet metal parts, machined parts, castings, and assemblies following prescribed routing. Distill and clean tank periodically. Repetitive work.
- 3064 DIEMAKER** – All around experience making drawing dies and medium size punching dies of irregular shapes, forming dies, etc., involving some calculations, using all types of tool room equipment.



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

3080 ELECTRICIANS, MAINTENANCE I (entry to mid-level complexity of work) – Performs work involving installation, maintenance and repair of light, test, power and automatically controlled circuits of standard design or moderate degree of complexity. Maintains controls on elevators and conveyor systems. Repairs AC & DC motors. Installs conduit and busbar work. Works from wiring diagrams or schematic drawings of moderate complexity.

3081 ELECTRICIANS, MAINTENANCE II – Lays out construction wiring or installs and maintains complicated electrical generating transmission or control equipment such as power house substation or complicated production installations, switch gear, etc. Works from intricate wiring diagrams or schematic drawings. Is considered an expert at wiring and troubleshooting complicated machines and equipment including electrical test apparatus. May involve high-tension work. Under minimum supervision.

3082 ELECTRONICS ASSEMBLERS – Assembles electronic equipment from blueprints, wiring diagrams or verbal instructions. Mounts components to panel chassis or cabinet using hand tools. Solders or crimps lead wire of components to specified terminals. Cuts and strips wires, jumper wires. Routes, fastens pre-cut jumper wires and cables to contact points. Solders pre-cut wires to multiple pin connectors, laces wires. Resolders connections, replaces wires

3086 ELECTRONIC TECHNICIANS, LEVEL I – Performs technician duties to test, troubleshoot and repair standard electronic systems. Setup and operate test equipment in accordance with standard test procedures. May provide guidance to production personnel to resolve technical problems. Normally requires an Associate Degree in Electronics plus 1 to 2 years of experience.

3087 ELECTRONIC TECHNICIANS, EXPERIENCED – Performs highly technical duties to test, troubleshoot and repair complex and sophisticated electronic sub-assemblies, modules and systems. Provide technical expertise to production or field personnel to assist in resolving technical problems. May be involved with the adaptation or design of complex test equipment and development of related procedures and documentation. Normally requires an Associate Degree in Electronics plus 3 to 5 years' experience.

3091 EXTRUDER OPERATORS, ANY INDUSTRY – Setup and run an extruder with proper tooling to yield extruded output with proper dimensions. This includes adjustment of the extruder dies, and cooling water to maintain correct temperatures. Operator must also know feeding techniques, as well as control and coiling of machine output. Prepare compound for input to extruder. Load and unload post cure ovens with extruded output. Have knowledge of setting proper cures. Inspect extruded product on line and prior to shipment to customer.

3094 FABRICATING MACHINE OPERATORS – Sets up and operates a full range of sheet metal working machines such as shears, bending brakes, roll formers, slitters, nibblers, small punch presses, reamers and crimpers to produce a wide variety of close tolerance products. Selects operation sequences and tools when not prescribed. Checks work using scales, squares, protractors, templates and samples or by fitting mating parts together. Makes machine adjustments.

3096 FRONT-END LOADER OPERATOR – Operates straight or articulated rubber-tired tractor-type vehicle equipped with front-mounted hydraulically powered bucket or scoop to lift and transport bulk materials to and from storage areas, to feed conveyors, hoppers, or chutes, and to load trucks or railcars. Performs routine maintenance on loader, such as lubricating, fueling and cleaning.

3098 GRINDERS – Operates and sets up one of several types of precision grinding machines to grind internal and external surfaces of metal parts to a smooth and even finish and to required dimensions. Fine finish work involved.

3105 HEAT TREATERS – Operates heat-treating furnaces for treating steel castings. Operates various types of heat treating furnaces to obtain the desired conditions or properties on a variety of chain, parts, and assemblies. Loads and unloads items into equipment. Follows standard operating procedures or special instructions. Regulates carburizing fluid and furnace controls. Keeps products separated and visually checks production periodically. Detects faulty operation and takes corrective action or reports to supervision. Checks case depth and hardness per heat treat specifications. Regulates controls to maintain predetermined temperatures. Loads castings on cars for the furnace and unloads it when heat treatment is completed. Repairs linings of furnaces and performs general service on operating parts.

3108 HELPERS, PRODUCTION – Assists regular operators on production by performing specific or general duties, usually of lesser skills, such as keeping worker supplied with materials, tools and supplies. Routine machine operations such as feeding or unloading machine. Requires close supervision.



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

- 3109 HELPERS, MAINTENANCE** – Performs duties such as locating tools and materials, positions work and performs other simple and routine operations. Generally, works under direction of a tradesman such as carpenter, electrician, and machine repairman.
- 3115 INSPECTORS I (entry level)** – Final inspection for quality, appearance and performance of diversified and/or expensive equipment. Plan inspection procedures and develop inspection devices. Responsible for decisions as to appearances and performances, deviations from standard specifications or allowable tolerances, acceptance or rejections. Determine reasons for defects.
- 3116 INSPECTORS II (mid to Sr. level)** – Final inspection for quality and appearance of highly diversified parts and assemblies and performance of complicated products. Plan inspection procedures; devise unusual measuring or gauging setups. May apply broad knowledge of product application in exercising responsibility to decide on allowable variations from specification or standards; determine reasons for defects.
- 3117 INSPECTORS, ELECTRO-MECHANICAL ASSEMBLY** – Final inspection of electrical and/or electronic assemblies and sub-assemblies for workmanship, dimensional check, tolerances and performance. Checks wiring for soldering, location, connection, etc. Reads complex blueprints and diagrams. Uses judgment and discretion to determine allowable variations from specification.
- 3122 INVENTORY COORDINATORS** – Responsible for cycle count documentation and updating, inputting inventory adjustments to bins, correcting inventory data in system, help in maintaining a 99% inventory accuracy. The incumbent is also required to maintain and update procedure manual to be reviewed by the Warehouse Supervisor.
- 3123 JANITORS** – Sweeps and cleans shop area, washrooms and offices and removes chips and refuse. May wash floors and windows.
- 3124 JOURNEY TEST OPERATORS** – Under the general direction of a Production Supervisor, a Journey Test Operator will need to have assembly knowledge, the ability to read schematics for and troubleshoot hydraulic and electrical systems and have successfully completed any and all software training for products built in the plant.
- 3125 LABORERS, HEAVY** – Unskilled worker engaged in handling materials, loading and unloading cars, shoveling and digging, using hand tools and doing miscellaneous heavy work involving frequent use of muscular strength. Works under direct supervision.
- 3126 LABORERS, LIGHT** – Performs a miscellaneous number of routine unskilled jobs in which substantial physical activity is a major requisite. Works under direct supervision. Does not include machine or process labor.
- 3127 LASER BEAM MACHINE OPERATOR** – Operates laser beam machine for welding or cutting components. Positions metal components, enters instructions to computer and moves fixture to proper position. Clears optics and replaces used flash tubes.
- 3130 LATHE OPERATORS, ENGINE** – Machines a wide variety of large complicated and expensive castings, forging and parts. Close tolerances on numerous inter-related dimensions. Difficult set-ups and aligning of irregular shaped parts. Plans and lays out considerable range of unusual and difficult lathe operations. Selects speeds, feeds; devises tooling for varying materials and conditions.
- 3135 LEAD PERSONS (GROUP LEADER)** – Oversees, directs and participates in production on an individual production line or one segment of operations such as warehouse loading dock, order selection, etc. Functionally supervises and assigns personnel to specific areas. Maintains basic production or other output records. Insures quality of product. Typically, does not have authority to hire, fire or take disciplinary action.
- 3140 LOGISTICS OPERATIVES** – Cross functionality to pick product, pack product for shipment, provide value added services and other general order fulfillment tasks. May include an element of shipping, receiving, and requiring use of basic powered industrial equipment, such as fork lift, walkie, pallet jack.



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

- 3145 MACHINE OPERATORS I (INCLUDING SET-UP)** – Operates machine requiring a high grade of skill to change the shape or condition of new materials. Must also be able to setup machine as required. Does not include other machine jobs listed in survey.
- 3146 MACHINE OPERATORS II (OPERATES ONLY)** – Operates machine requiring a normal amount of skill, to change the shape or conditioning of new materials. Does not include other machine jobs listed in survey, or to set up machine.
- 3148 MACHINISTS, MAINTENANCE I** – Produces replacement parts and new parts in making regular and emergency repairs of metal parts of machinery and equipment. Shapes metal parts to precise dimensions within close tolerances prescribed. May fit and assemble parts into machine. Do not include production machinist.
- 3149 MACHINISTS, MAINTENANCE II** – Set up and operate a variety of machine tools to produce precision parts and instruments. Includes precision instrument makers who fabricate, modify, or repair mechanical instruments. May also fabricate and modify parts to make or repair machine tools or maintain industrial machines, applying knowledge of mechanics, shop mathematics, metal properties, layout, and machining procedures.
- 3150 MACHINISTS, PRODUCTION I** – Without supervision, performs machining and fitting operations on all kinds of metal parts and machines. Lays out work from sketches and written specifications. Highly diversified work involving very close tolerances. Sets up and operates all types of machine tools. Skillfully uses all machinists' hand tools.
- 3151 MACHINISTS, PRODUCTION II** – With minimum supervision, sets up and operates various types of machine tools. Diversified work. Ordinary tolerances. Performs necessary hand operations.
- 3155 MACHINE SET-UP** – Sets up, may operate occasionally, a variety of machines such as lathes, mill, drills. Installs fixtures, loads tape and may make minor adjustments. Will troubleshoot problems of other machine operators. May train new employees and is qualified to perform other duties in the department to support production and quality requirements.
- 3156 MAINTENANCE MECHANIC, MULTI-CRAFT I** – Performs a variety of ordinary plant maintenance, repair and installation operations as assigned and directed by a maintenance foreman. Moves and installs by means of hoists, dollies, bars, trucks, rollers, etc. any and all items of light machinery and equipment. Assists in moving, aligning and installing heavy equipment, repairing and building foundations, etc. Lubricates motors, conveyers, trucks, power trucks and various other plant equipment. Installs insulation around pipes, tanks and boilers. Assists in or performs ordinary maintenance on boilers, heating and ventilating equipment, compressors, sprinkler systems, washers and blowers and fire fighting equipment. Performs general building maintenance work such as repairs to floor, stairs, roof, windows, etc. Operates pipe threader and cutter and works on plumbing and pipeline assignments.
- 3158 MAINTENANCE MECHANIC, MULTI-CRAFT II** – Repairs and maintains, in accordance with diagrams, sketches, operation manuals and manufacturer's specifications, machinery and mechanical equipment such as engines, motors, pneumatic tools, conveyor systems and production machines using hand tools, power tools and precision-measuring and testing instruments. Dismantles devices to gain access to and remove dimensional requirements, using rules, calipers, etc. Repairs or replaces defective parts. Lubricates and cleans parts. May set up and operate lathe, drill press, grinder and other metal working tools to make and repair parts.
- 3159 MANUFACTURING QUALITY SPECIALISTS** – Assists in achieving a 9.5 quality rating on all manufactured products. Works with the quality teams to identify root causes and be a resource to supervisors for corrective actions when appropriate. Trains all employees in their area of expertise such as new hires, transfers and employees needing additional training as a result of quality errors and poor performance evaluations. Required to keep their specialty skills for the area they are assigned current and accurate and assist the line frequently as direct labor.
- 3160 MATERIAL HANDLERS** – Performs duties of some variety in unloading, moving and storing a variety of materials, parts or products. Check incoming materials for proper identification, reports shortages or damaged items. Moves materials between departments and make deliveries to stockroom or shipping room following routing, delivery tickets, and orders. May operate power fork trucks in moving, stacking, loaded pallets in designated storage areas. May operate walking crane or hoist in unloading incoming materials and storing in racks. (See warehouse person.) Can also be used in production.
- 3161 MAINTENANCE AUTO TECHNICIANS** – Proficient in understanding electrical, mechanical, and PLC ladder logic. Ability to interpret electrical, hydraulic, and pneumatic schematics to troubleshoot and maintain complex automated material



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

handling equipment. Proficient with the use of all tools required to maintain this system of conveyors and automated storage and retrieval systems. Follow acceptable safe maintenance practices.

3162 MECHANICAL GALVANIZE OPERATOR – Operates mechanical galvanizing equipment to produce the specified finish on chain and assemblies. Bundles chain to specified lengths. Maintains proper solution PH, proper barrel tilt and rotation, proper parts to media ratio, and proper solution chemistry and consistency needed to meet specifications. Cleans barrel, tank, dryer, pit, and general work area as required. Performs quality checks on each batch to ensure proper galvanizing. Measures, adds, and adjusts chemicals for each batch. Correctly measures different lengths of product and packages after galvanizing. Properly labels buckets and other containers with product.

3163 MECHANICAL DESIGNER – Supports lead engineer in assessing and updating customer requirements and plan mechanical design tasks. Develop product concepts according to technical requirements, and evaluated different concepts for best option using DFA & 6sigma methods. Consider design rules & standards, incorporate technical calculations and simulations and test design results. Define materials and production processes for new components, initiate and follow up patent analysis and identify ideas for patents. Create and plan prototype and documentation, perform and maintain design FMEA, risk assessment, and define SC, CC. Create and change series documentation, maintain serial devices and propose design changes and redesign ideas for cost reduction. 3 years' experience in automotive product engineering.

3164 MECHANICAL TESTER – Support lead engineer in assessing customer test requirements, analyze the designs, define verification and simulations and support D-FMEA activities. Develop test concepts, test specifications, plan, design, and document test equipment, and coordinate production, approve and maintain test equipment. Build time and cost plan for prototypes, check prototypes to control plan, instruct supporting personnel, and supervise tests according to plan. Evaluate test results against functional, quality, and reliability requirements. Support design engineer for design improvements and creating of series documentation. 3 years' experience in automotive product engineering.

3165 MILLING MACHINE OPERATORS – Performs a variety of work on milling machines varying from manually controlled to fully automatic. Operates and sets up all types of milling machines except single-purpose millers.

3166 MILLWRIGHTS, MAINTENANCE – Installs and moves equipment requiring accurate aligning and balancing. Performs difficult rigging. Assembles, disassembles mechanical units. May prepare foundations for installation of machines, including selection of shafts, pulley and belts. Installs, repairs and maintains power drives and components.

3168 MIXERS – Prepares accurately and mixes properly the various batters, icings, fillings and crusts used to create the different products.

3173 MOLDING MACHINE OPERATORS, PLASTICS – Under regular supervision of foreman or direction of setup leader operates semi-automatic molding machines for repetitive production of a variety of plastic parts and components. Place preformed or weigh balanced raw material in pre-heater. Position necessary mold inserts. Place heated material in mold. Position molded items on shrink fixtures as required. Deflash finished parts as required, using deflashing tools provided. Count pieces and record number on simple forms. Install inserts in molded part when necessary. Occasionally use grit blaster for deflashing. Follow established routines or verbal instructions. Refer all unusual conditions to setup leader or foreman.

3175 OILER – Lubricates, with grease or oil, all moving parts on various kinds of machinery.

3180 PACKERS – Responsible for stacking and piling goods into their correct containers and preparing them for shipment using various equipment. Cleans and prepares containers before placing goods in them. 1) Mark and label containers, container tags, or products, using marking tools. 2) Measure, weigh, and count products and materials. 3) Examine and inspect containers, materials, and products in order to ensure that packing specifications are met.

3184 PACKERS, HEAVY – Packs a variety of items in cartons, boxes or other containers preparatory to shipment or storage. Involves moderately heavy physical effort. May require counting, visual inspection, folding, wrapping, inserting enclosures, closing and sealing containers and applying labels or identifying data. Does not include crating, shipping or loading.



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

- 3186 PACKER (MACHINE)** – Tends machine that performs one or more packaging functions, such as filling, marking, labeling, banding, and tying. Packing or wrapping containers. Observes operation to defect malfunction and makes minor adjustments or repairs.
- 3188 PAINTERS, MAINTENANCE** – Uses brush or spray equipment to apply paint, varnish or finishing compound to any exterior or interior surfaces. Works without direct supervision.
- 3189 PAINTERS, SPRAYER** – Mix paints, enamels or lacquers to specified colors, consistencies and viscosities for spraying or brushing. Prepares surfaces and applies a wide variety of coatings to obtain high grade and decorative finish on parts or products. Skill required to match colors in shading, two toning, hand graining and in distribution and baking of special and unusual finishes.
- 3201 PATTERNMAKERS, ANY INDUSTRY** – Works from drawings to fabricate patterns. Using a variety of techniques, machines, and tools. Verifies conformance to specifications.
- 3203 PLASTICS MOLDERS** – Set-up and operate hand injection and compression molding machines to produce a limited variety of parts from a limited variety of plastic materials. Operated power injection and compression molding machines set up by others. Performs assembly and hand or machine finishing operations on molded parts having critical dimensions; assemble and encapsulate in molds or preformed plastic cavities, a variety of small moderately complex shaped assemblies, where problems of air entrapment are not normally encountered; mix plastics of encapsulation and cure parts following detailed specifications. Perform repetitive work without much additional instruction, though new work assignments are usually accompanied by detailed and specific instruction. May use micrometers and various fixed gauges and a limited variety of laboratory glassware. Also uses bench equipment such as grinders, buffers, fixtures and hand tools.
- 3204 PIPE FITTERS, MAINTENANCE** – Lays out, installs and maintains piping for complicated equipment such as power house piping, refrigeration piping, accumulators, high pressure steam piping (50 lbs. and over), installs pressure regulators and other controls. Under minimum supervision.
- 3224 PRESS OPERATORS I** – Able to read press set up instructions, perform set up based on instructions. Follow and fulfill production schedules assignments; perform preventive maintenance, resolution, or repair.
- 3225 PRESS OPERATORS II** – Performs set up, tear down, PM work with minimum supervision. Coordinates with maintenance team on complex issues. Follow and fulfill production schedules assignments; perform preventive maintenance, resolution, or repair.
- 3230 PUNCH PRESS, SET-UP/OPERATOR** – Perform blanking, piercing and forming operation on various standard parts. Setup of press done by others; may adjust air or mechanical knockout devices. Operate press. Determine when dies need sharpening.
- 3237 SAW OPERATOR** – Performs a variety of skilled duties involved to cut, plane and shape material for new products, special tooling and production runs for saw department. Works from prints, sketches, shop orders, verbal instructions and a broad knowledge of shop practices and equipment. Plans sequence of operations, sets up and operates a wide variety of saw department equipment such as but not limited to: shapers, planers, routers, saws and grinders. Lays out and makes special patterns, jigs, and fixtures, performs minor repair on machinery. Lays out and sets up work for lesser skilled operators. Selects appropriate wood or production runs. Oils and cleans machines and helps clean shop as required. May pick own materials and return finish products to designated areas.
- 3254 SHEET METAL WORKER/MACHINE OPERATOR** – Plans, lays out, fabricates, assembles, installs and/or repairs sheet metal parts, equipment and products. Reads and interprets blueprints, selects gauge and type of sheet metal and lays out and marks dimensions. Sets up and operates metal fabricating machines such as brakes, rolls, shears, saws and presses to cut, bend, straighten on form metal plates sheets and structural shops according to blueprints and specifications. Includes MIG, TIG and spot welding.
- 3257 SHIPPER/RECEIVING COORDINATORS** – Receives, stores, records, and delivers or has delivered incoming materials to proper location. Unloads material from delivering carrier, checks against packaging slips, verifies count,



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

description and general condition of incoming material. Identifies material as on hold pending receiving inspection, stores material or sees that it is delivered. Notifies Purchasing and/or Receiving Inspection of incoming material as required. Maintains receiving records. Weighs, packs, and prepares for shipment items being returned. Coordinates with appropriate personnel routing of incoming raw/unfinished material, secures proper shipping documents, and completion of routing for outside processing and secures proper shipping documents. Serves as back-up for Receiving Inspection function.

3268 STOCK CLERKS – Receives, stores and issues equipment, material, merchandise or tools in a stockroom or storeroom. Checks incoming order against items as listed on requisitions or invoices; counts, grades or weighs articles. Periodically takes inventory and keeps records.

3275 SOLDERER – Melts and applies solder along adjoining edges of work pieces to solder joints, using soldering iron, gas torch, or electric-ultrasonic equipment. Grinds, cuts, buffs, or bends edges of work pieces to be joined to ensure snug fit, using power grinder and hand tools. Removes work pieces from molten solder and holds parts together until color indicates that solder has set. Cleans work pieces, using chemical solution, file, wire brush, or grinder. Cleans tip of soldering iron, using chemical solution or cleaning compound. Melts and separates soldered joints to repair misaligned or damaged assemblies, using soldering equipment.

3276 TEST LAB OPERATORS – Performs physical tests on various manufactured and purchased components, which include, but are not limited to breaking force tests, proof tests, weld bend tests, deformation tests, hardness tests, and case depth reading. Operates tensile test equipment, Brinell and Rockwell hardness testers, induction heater, and other measuring devices. Performs required tests, determines achievement of requirements, and records and maintains appropriate test records. Collects production samples and communicates test results to manufacturing areas in a timely manner. Maintains accurate production and labor records.

3278 TOOL AND DIE MAKER ENTRY LEVEL – Analyses, lays out metal stock, sets up and operates machine tools and fits and assembles parts to fabricate and repair metalworking dies, cutting tools, jigs and fixtures, gauges, and machinists hand tools, applying knowledge of tool and die design and construction, shop mathematics, metal properties, and layout and assembly procedures: Sets up and operates machine tools such as: lathes, milling machines, shaper and grinder to machine parts and verifies conformance of machined parts to specifications. Usually requires the completion of a state recognized program, 0-4 years of service.

3279 TOOL AND DIE MAKER, EXPERIENCED – Same duties as above. May assist in the training and development of others. Usually 5 years or more experience.

3282 FORKLIFT OPERATOR – Operates electric or gasoline driven industrial trucks with or without elevating platforms and crane attachments. Includes loading and unloading motor trucks, freight cars, and similar conveyances and transporting materials and products within confines of plant.

3283 TRUCK DRIVERS, CDL REQUIRED – Drives truck within a city or industrial area to transport and deliver goods to and from designated locations. May also load and unload truck. Prepares receipts, verifies orders, and may collect payment for delivery. May also inspect and repair vehicle. Commercial Driver's License Part A or Part B (CDLA or CDL B) required.

3290 TRUCK DRIVERS, NO CDL REQUIRED – Drives truck within a city or industrial area to transport and deliver goods to and from designated locations. May also load and unload truck. Prepares receipts, verifies orders, and may collect payment for delivery. May also inspect and repair vehicle. Commercial Driver's License(CDL) not required.

3295 X-RAY TECHNICIANS, any industry – Operates x-ray equipment.

3301 WAREHOUSE PERSONS – Performs duties related to the removal or storage of material, parts, equipment, machinery or tools from or to a warehouse. Loads or unloads material, etc. from truck or freight car as required. May preserve items for storage as specified or directed. Counts, identifies, records, stores items to be placed in or removed from warehouse. Operates overhead crane and forklift truck for movement of heavy items. Performs other related duties connected with a warehouse operation.



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

- 3305 WASTE TREATMENT OPERATORS** – Controls heat exchange unit, pumps, compressors and related equipment to decontaminate, neutralize and dispose of waste liquids collected from chemical processing operations. May record data, such as number of gallons of waste pumped into sewer system of storage tanks or reduced by heat exchange unit.
- 3307 SECURITY GUARD** – Guards against fire, theft, and illegal entry. Makes periodic inspection tours about building and grounds, examining doors, windows, and gates to see that they are properly secured, and continually watches for irregularities, such as broken water pipes. Usually registers at regular watch stations. May perform general maintenance duties, such as sweeping floors, or supervise others in these duties. May fire boilers or do other similar duties.
- 3319 WELDER, ARC OR GAS I** – Perform, under minimum supervision, the job of welding, brazing and cutting ferrous and non-ferrous metals under all conditions and from various positions involving welds which will be subject to excessive pressure and load requirements in connection with constructing, modifying and repairing a wide variety of plant equipment and machines. Interpret difficult drawings, sketches, orders and work from complicated samples & instructions.
- 3320 WELDER, ARC OR GAS II** – Set up and perform arc and gas welding on simple and average items of a wide variety such as general plant work, but does not involve work on pressure vessels. Work involves working from instructions, samples, simple sketches and prints using simple, improvised set-ups or fixtures as required.
- 3321 WELDER, RESISTANCE OR SPOT** – Spot-weld metal products of a diversified nature with unusual size and shape, where no fixtures are provided.
- 3322 WELDER, SHEET METAL** – Lays out, fits end welds fabricated, cast and forged components. Selects equipment and plans layout, assembly and welding. Lays out, positions, aligns and fits components together. Bolts, clamps and tack weld parts to secure in position for welding.
- 3324 WIRE EDM OPERATOR** – Sets up and operates wire EDM machine with minimum supervision. Reads and interprets blueprints, engineering specifications and shop orders to determine machine setup.
- 3325 WIRERS (CONTROL PANEL ASSEMBLER)** – Assembles and wires control panels and systems, working line-to-line or from schematic drawings. Works under general supervision. Has the knowledge and technical understanding of all the various types of material, equipment and components utilized in control systems. Must be able to determine and perform component layout and routing of wiring.
- 3330 ROBOTIC WELDER TECHNICIANS** – Set up one or more robotic welders to weld metal work pieces to specification, work with engineers to read and interpret blueprints, planning sheets, sketches and related technical data to determine weld fixtures requirements, set-up procedures, control settings and welding methods and sequences.
- 3340 INSTALLERS, SERVICE TECHNICIAN WORKER** – Sets up and installs original equipment manufacturers and vendors purchased products per customer specifications at customer sites and facilities.
- 3350 PRINTING – PREPRESS TECHNICIAN WORKER** – Set up printing presses to produce film, plate or electronic proofs. Prepress Technicians/Operators format and proof text and images submitted by designers and clients into finished pages that can be printed. Includes traditional printing forms like flexography, gravure, letterpress or lithography. In general, printing technicians are responsible for reviewing the quantity and specifics of an order, calibrating color controls, arranging pages and operating the equipment. Additional duties may also include cutting, compressing and assembling printed pages for publication. May produce printing plates. Good communication skills, ability to troubleshoot and address customer concerns and attention to detail.
- 3355 PRINTING – DIGITAL OPERATOR** – A digital print press operator uses digital printing machines and software programs to effectively create materials per client request. In fulfilling these requests, operators may change many variables in the printing press set-up, such as dimension, color or contrast. Often, successful digital print operators have numerous printing projects going at the same time and create schedules to reflect these various deadlines. In addition, operators may also need to play the role of a digital press repairman if maintenance on one of the machines is required. Responsible for creating the specified print material, maintaining the printing equipment and keeping inventory readily stocked. Print operators may be required to fix the printing machines that they use, which may involve either hardware or software repair.



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

3360 SCREEN PRINTING OPERATORS – Automatic-silk-screen printer Operates automatic screen-printing machine to print multicolor designs on textiles: Mounts screens in specified sequence on machine. Pours printing paste onto screens or fills automatic feed pan. Turns knob to set machine speed and adjusts swing and pressure of squeegees, using hand tools, according to type of design and cloth being printed. Starts machine and conveyor belt that carries textile articles under screens. Inspects articles being printed to detect colors out of register (alignment). Turns screws to adjust position of screens so that each color is printed in allotted spaces in design. Removes foreign matter from screens to prevent irregular flow of printing paste. Tapes holes in coated portion of screen if leak develops.

3365 PRINTING OPERATORS – Operate or tend various types of printing machines, such as offset lithographic presses, letter or letterset presses, flexographic or gravure presses, to produce print on paper or other materials such as plastic, cloth, or rubber.

SUPERVISORY, MANAGEMENT AND PROFESSIONAL POSITIONS

5001 PRODUCTION / ASSEMBLY I (SUPERVISOR) – Supervises jobs requiring little or no previous job experience, technical knowledge or training. Employees supervised perform simple highly repetitive assembly operations such as stamping, riveting, cutting, assembling parts with nuts and screws, simple adjusting and fitting to insure free action of moving parts, simple repetitive connecting and soldering.

5002 PRODUCTION / ASSEMBLY II (SUPERVISOR) – Supervises jobs requiring moderate mechanical ability and/or fairly complex knowledge of products and assembly procedures and practices. Employees supervised are generally required to have some job experience and training in assembly of standardized precision products, sub-assemblies of small or medium size parts involving a number of parts, or erection of larger units having a limited number of parts. Requires fitting and adjusting to meet operating requirements of product; reading of simple to average blueprints and specifications; and use of hand and simple power tools.

5003 PRODUCTION / ASSEMBLY III (SUPERVISOR)– Responsible for supervising shop employees in a manufacturing and assembly environment. This position plans and assigns work, implements policies and procedures and recommends improvements in production methods, equipment, operating procedures and working conditions to meet deadlines. Supervises and coordinates activities of staff engaged in manufacture of components or finished goods. Plan flow of work within department and establish procedures and establish and maintain a safe and clean work environment.

5004 CONTROLLERS – Directs financial activities of organization or subdivision of organization. Prepares, or directs preparation of, reports which summarize and forecast company business activity and financial position in areas of income, expenses and earnings. Directs determination of depreciation rates to apply to capital assets. May manage accounting department.

5005 ELECTRICAL, MAINTENANCE (SUPERVISOR) – Supervises electricians who install, maintain and repair electrical equipment and apparatus. May include electrical sub-stations and power lines.

5007 FIRST LEVEL GENERAL FOREMAN – Supervises employees working at positions requiring relatively little technical knowledge or training. Plans priorities of work and schedules accordingly. Promotes safety attitudes and practices. Diagnoses and schedules machine maintenance. Maintains quality and quantity of production. Maintains good housekeeping. Makes necessary work changes to increase efficiency.

5009 FOUNDRY, GENERAL (SUPERVISOR) – Supervises jobs requiring a moderate to high degree of skill in foundry production operations such as pouring molten metal, charging, tending and tapping of cupola, operation of molding machines, shake out and the use of molding tools.

5013 INSPECTION AND/OR QUALITY CONTROL (SUPERVISOR) – Supervises jobs requiring an average to high degree of skill and knowledge of inspection and quality control procedures and techniques involved in the inspection of products and/or purchased materials. Work requires knowledge of use of micrometers, gauges, Vernier's and other similar instruments and/or application of results obtained to improvement of inspection methods and quality

5015 LABORS (SUPERVISOR) – Supervises jobs requiring no mechanical or trade knowledge in the maintenance of clean buildings and grounds. Jobs supervised may include: cleaning of premises, movement and handling of materials, loading and



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

unloading freight cars and trucks, removal of chips, collection and disposal of trash, snow removal, upkeep of lawns, parking lot and driveways. May also supervise firefighting and operation of heating equipment.

5017 MACHINE SHOP, GENERAL (SUPERVISOR/MANAGER) – Supervises a range of jobs in a machine shop. Employees supervised may set up and/or operate a variety of machines such as turret lathes, screw machines, milling machines, drill presses, grinding machines, punch presses.

5019 MAINTENANCES, GENERAL (SUPERVISOR) – Supervises a range of maintenance jobs such as normal building, equipment, and plant property maintenance operations of carpentry, electrical, painting, pipe and stem fitting and millwrights.

5020 MECHANICAL, MAINTENANCE (SUPERVISOR) – Supervises machinists who install, maintain and repair machine tools, mechanical equipment and apparatus. May include the building of new special machinery and/or responsibility for a preventative maintenance program.

5025 PROJECT MANAGERS – The role of the project manager is to plan, execute and finalize projects according to strict deadlines and within budget. This includes acquiring resources and coordinating the efforts of team members and third-party contractors or consultants in order to deliver projects according to plan. The Project Manager will also define the project's objectives and oversee quality control throughout its life cycle. Create and maintain an information technology project plan that communicates tasks, milestone dates, status and resource allocation. Utilize software life-cycle methodology. Coordinate delivery of development and production releases that meet quality assurance standards. Assist technical team in design and development tasks. Assist test team in creating test plans and testing efforts.

5026 TECHNICAL PRODUCT MANAGERS – Maintain budget responsibilities, plan and allocate engineering resources, and ensure project staffing. Manage and ensure product maturity by fulfillment of customer specifications, customer and company quality requirements, and safety regulations and legal requirements. Set up and ensure project time plan related to product engineering activities is in alignment with functions and initiate and manage technical meetings with customers and suppliers. Initiate CVM, ensure System-, Interface-, and Design FMEAs are done on time and supports P-FMEA. Prepare and design product engineering processes, assure targets are met, ensure on time product validation and prototype activities, and set up and achieve product costs and design to cost activities and supplier selection process.

5027 SUPPLY CHAIN MANAGERS – Promotes the design, development, and implementation of warehouse, distribution and logistics solutions. They manage labor costs, personnel productivity, inventory levels, data accuracy and stocking strategies. They measure and report on the effectiveness of departmental activities and operations. tries to minimize shortages and keep costs down. The job is not only about logistics and purchasing inventory and make recommendations to improve productivity, quality, and efficiency of operations.

5028 VISION SPECIALISTS – Propose, lead, plan, direct, and implement projects involving vision and measurement system. Provide internal and external and external vision and measurement system technical support and training.

5029 STRATEGIC MANAGERS – Responsible for planning and directing an organization's strategic vision across the business, and long-range goals. Conducts organizational reviews to identify strengths and weaknesses and to evaluate operational effectiveness.

5030 SITE MANAGERS – Responsible for overall site supervision and site project management of hydro power plant equipment installations, upgrades and maintenance. Site scope may include hydro-turbine, generator, control equipment and all electrical and mechanical support equipment. Ensures work is performed in accordance with contractual requirements, schedule, quality standards and within budget. Also held accountable to maintain healthy, continuous improvement work environment so that best project management and technical practices are developed, incorporated and shared across the organization.

5031 LOGISTICS MANAGERS – Oversees warehouse, inventory control, material handling, customer service, transportation and planning workers. They hire, train and evaluate employees. Managers prepare worker schedules and ensure warehousing and distribution workers follow safety rules.

5032 SHIPPING AND/OR RECEIVING (SUPERVISOR) – Supervises normal shipping, receiving packing operations of assembling orders, packing and/or crating for shipment, counting materials received and keeping records.



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

- 5037 TOOL AND DIE (SUPERVISOR)** – Supervises a range of job classifications related to the manufacture and repair of dies, jigs, fixtures, templates and tools in tooling, tool grinding and heat treating. Jobs supervised require a very high degree of mechanical and technical skill and comprehensive knowledge of processes involved in the work performed.
- 5041 WAREHOUSE SUPERVISOR / MATERIALS SUPERVISOR** – Directs warehousing of raw materials and/or finished goods, equipment, supplies, etc. Establishes operational procedures for activities such as verification of incoming and outgoing shipments, handling and disposition of materials, maintenance of inventory. Confers with department heads to insure coordination of warehouse activities with activities such as production, sales, records control and purchasing.
- 5045 DISTRIBUTION MANAGERS** – Has a key role within an organization as this role primarily deals with the storage and distribution of goods. A Distribution Manager you would be planning and managing the movement of goods in a supply chain.
- 5101 ACCOUNTING SUPERVISORS** – Responsible for supervising the operation of the accounting department or a specific section of accounting in the larger installations. Assigns and audits work of accountants, accounting clerks, etc. Personally handles more important, confidential accounting matters. Assists in the development of policies, systems, etc. May hire transfer or terminate employees. Responsible for administering company personnel policies. Recommends salary adjustments and promotions
- 5102 TAX ACCOUNTANTS** – Responsible for preparing and filing sales tax returns. The incumbent will insure tax compliance, handle sales tax audits, maintain tax records, review and maintain exemption certificates, keep current on tax laws and advise management on sales tax issues. Normally requires a 4-year degree in Accounting and 3+ years of sales tax accounting experience.
- 5103 ACCOUNTING SUPERVISORS, GENERAL LEDGER** – Supervises and assists accountants or accounting clerks in the coordination and posting to general ledger information concerning business transactions that have been recorded in separate ledgers by others. Compiles or supervises the compilation of various reports. Balances and closes books.
- 5104 ACCOUNTANT** – Prepares asset, liability, and capital account entries by compiling and analyzing account information. Documents financial transactions by entering account information. Recommends financial actions by analyzing accounting options and substantiates financial transactions by auditing documents. Responsible for general ledger and monthly closing processes, maintaining cost accounting systems, monthly reconciliations and journal entries, assist in preparing financial statements. May be responsible for operating the payroll system.
- 5105 ADVERTISING SPECIALISTS** – Organizes the company's internal functions to execute various advertising objectives. Controls the production of selected direct-mail programs, the administration of outside vendors, and organizes and executes the media plan for the company and/or division. Additionally, gathers analyzes and reports statistical information concerning his/her division to help define target markets, products and customer groups.
- 5107 ADVERTISING MANAGERS** – Directs the preparation of long and short-range advertising program. Meets with managers and merchandising staff to review sales promotion events and merchandise lines. Prepares advertising treatment in accordance with nature of merchandise, price lines, season or event and potential customers. Coordinates advertising program with advertising agency. Reviews advertising copy and prepared layouts for newspapers and other printed media and prepares material for radio and television when needed. Represents the company in day-to-day contact with newspaper and other media for details of composition, format, and processing. Checks and corrects proofs, refers to managers for prices, descriptions and cuts. Controls master advertising files and materials.
- 5109 BUSINESS UNIT MANAGER** – Oversee the direction of the business unit. Manage “go to market” strategy including demand for products and services, identify potential customers, pricing, profitability, and customer satisfaction. Determine and manage resource requirements, direct product development and monitor trends that indicate the need for new products and services.
- 5110 IT MANAGERS** – Responsible for analyzing and directing all IT related activities of the organization with supervisory responsibilities for all staff assigned to the IT department. This position is accountable for ensuring continuity of computer services for computer users throughout the organization through planning, technical leadership, and project coordination. Manages IT activities by identifying, recommending, developing, implementing, and supporting cost-effective technology solutions. Defines



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

and implements IT policies and procedures, and provides administrative direction and support for daily operations in the IT department.

5112 COMPUTER OPERATIONS SUPERVISORS – Supervises personnel engaged in setting up and operating of EDP and peripheral equipment. Checks machine malfunctions and takes corrective action to insure compliance with established methods and procedures. May be responsible for scheduling the utilization of computer units to insure maximum use of the equipment. Recommends improvements in programs and procedures to simplify or maximize efficiency of operations. Directs training of personnel in operation of equipment used. Arranges for maintenance of equipment and revises work schedules accordingly.

5114 ACCOUNTING SUPERVISORS – Responsible for supervising cost section of the accounting department. Assigns and audits work for cost clerks. Develops and organizes cost methods and procedures and related records. Personally, handles the more important and difficult cost procedures and analyses. May hire, transfer, and terminate employees and make salary adjustments and promotions. Responsible for administering company personnel policies in the unit.

5116 CREDIT AND COLLECTION MANAGER LEVEL I – Responsible for credit approval of customers and prospective customers. Implements collection procedures of receivables. Establishes credit limitations on customer's accounts and recommends amount of working capital necessary to finance accounts receivable and to provide reserves against bad debts. Supervises adjustment of customer claims. Could assist customers in obtaining financial assistance. May supervise accounts receivable ledger. Typical titles: Credit Manager, Credit Supervisor.

5117 CREDIT AND COLLECTION MANAGER LEVEL II – Need 5 years of experience. Hiring and managing members of the team, Planning, evaluating, implementing and continuously improving all aspects of credit & collection functions and processes, Assisting in formulation of specific collection objectives and achievement of same, Ensuring professional relationships are established and maintained with clients and attorneys, Working closely with CFO to respond to credit and collection concerns with existing and potential clients, Direct interaction with selected clients in resolving receivables delinquencies

5118 DATA ENTRY SUPERVISORS – Responsible for key entry performance on a daily and weekly basis. Directly supervises all key entry personnel. Plans work and establish schedules and priorities to get the work keyed in accordance with the accounting schedules and other user requirements. Responsible for quality and service levels. Accumulates and maintains key entry records. Produces status reports as required.

5120 CUSTOMER SERVICE SUPERVISORS – Supervises the preparation of all orders for manufacturing. Responsible for work of order analysts and clerks involving the editing of all incoming orders as to pricing, discounting, and coding. Clarifies and checks customer orders for completeness of specifications and requests additional information when necessary. Contacts sales, engineering, accounting, shipping and/or production control departments on order changes and order processing and deliveries. Prepares reports and memos related to sales orders.

5126 DESIGN ENGINEERING MANAGERS – Directs and coordinates engineering activities for the design of products manufactured and/or subcontracted by the company. Reviews designs to reduce costs and cooperates with other departments to ensure that product designs are compatible with production capabilities and customer requirements. Maintains required records and schedules. Responsible for quality assurance and control of engineering designs.

5127 DIRECTORS – Provides leadership and direction to Managers and Supervisors of their respectful departments. Observes and evaluates performance of personnel. May hire, transfer or terminate employees. Recommends salary adjustments and promotions. Responsible for overall administration of company personnel policies for the office group. Could require technical expertise depending on the department.

5030 MARKETING MANAGERS – Responsible for developing, implementing and executing strategic marketing plans for an entire organization (or lines of business and brands within an organization) to attract potential customers and retain existing ones. Manages marketing for organization, which may include websites, press releases, and promotion of the company while providing project support for new and existing projects.

5135 ENVIRONMENTAL MANAGERS – Develops, implements and coordinates policies on matters involving air, water and land conservation which are of joint concern to the company and the public. Provides advice to management on the practical and necessary steps to prevent or abate pollution arising from company operations.



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

5136 CHIEF EXECUTIVE OFFICER – Determines the basic objectives of the organizational unit; formulates plans and policies and allocates resources for the achievement of objectives. Interprets and applies policies established by the owners of the enterprise or their representatives. Is responsible for organizing the unit and determining the most efficient allocation of duties and authorities to subordinates. Exercises control to see that objectives are achieved in accordance with basic organization policy. Is fully accountable for the results of the activity of the organizational unit. Typical position titles include Chairman of the Board, President, Vice President, General Manager, Executive Director, etc. This is usually a single incumbent position.

5137 CHIEF OPERATING OFFICER – Directs and coordinates the organizational unit's line and staff activities towards the achievement of established objectives. Accounts for the full range of operations of the organizational unit. Provides operational guidance and analyzes/appraises operational effectiveness. Acts as Chief Executive in the absence of the CEO. Typical position titles include: President, Executive Vice President, General Manager, Senior Vice President, etc. This position reports to the CEO; so, compensation totals for persons acting as both Chief Operating Officer and CEO are computed in CEO totals only.

5138 CHIEF FINANCIAL OFFICER – Responsible for the entire range of financial activity in the organizational unit, including both treasury and accounting functions. Formulates and recommends policies on banking. Receipt and disbursement of funds, extension of credit and fiscal and accounting matters. Also, responsible for the development of standard accounting analysis and reporting procedures, and for exercising of overall financial control. Typical position titles include: Financial Vice President, Treasurer, Director of Finance, CFO., etc. Note: The title of controller is often used in this position as well. However, for this survey the position of Controller has fewer responsibilities and less authority over the full range of financial affairs compared to the Chief Financial Officer.

5139 CHIEF SALES AND MARKETING – Responsible for the entire range of marketing, planning, development, sales promotion and sales activities of the organizational unit. Formulates, recommends and implements policies and programs concerning pricing, marketing the product or service, appropriate research and any other related activities. May also have responsibility for customer relations or advertising. Typical position titles include: Marketing Vice president, Vice President of Sales, Director of Marketing, Sales Director, etc.

5140 ENGINEERING MANAGER – Has responsibility for technical support of product manufacturing, development, testing and research for new and present business. Directs industrial or manufacturing engineering, maintenance, drafting, design and laboratory analysis. May also be responsible for directing product safety and pilot projects. Provides technical or scientific data to management, sales and marketing. Develops methods, process equipment, machines and layouts for production facilities and products.

5141 INDUSTRIAL HEALTH AND SAFETY MANAGER – Responsible for serving and advising management staff on health and safety with the objective of an effective loss control of personnel and property. Proposes annual objectives. Develops policies, programs, and training aids. Measures effect of health and safety performance. Makes safety inspections. Investigates accidents and prepares reports. Organizes and directs work of Safety Committee.

5142 INVENTORY CONTROL SUPERVISORS – Responsible for determining and maintaining inventory levels. Could include work in process and finished goods as well as raw material. Other related duties.

5144 MANAGEMENT INFORMATION SYSTEMS MANAGERS – Under the direction of the executive in charge, directs, plans, coordinates and supervises the operation of the company's electronic data processing facilities. Through assignment and delegation of responsibilities to subordinates, conducts study projects to determine feasibility of computer utilization relative to the overall program of the company and to develop systems, procedures, programs instructions etc. within limits of equipment capacities to process and resolve engineering problems and business data. Supervises computer and off-line equipment, scheduling and operations, correction or modification of programs and computation errors, records systems, tape and card library, etc. Maintains liaison with departments utilizing the facility. Has responsibility for staffing and training of personnel, procurement of supplies and servicing of equipment. Prepares budget proposals and recommendation, cost of operation reports, etc. Analyzes operations data and institutes procedural changes where warranted to effect cost reductions through more efficient systems, operations and schedules.

5146 MANUFACTURING/PRODUCTION SUPERINTENDENT – Supervises through foremen/women and general foremen/women the manufacturing activities of the plant. Position is immediately subordinate to the plant manager. Supervises with respect to volume, cost and quality of production, meeting production schedules, delivery dates with maximum efficiency and productivity. Encourages efficient utilization of equipment and facilities. Responsible for compliance with company policies, good housekeeping and safety standards and practices. May hire, transfer, or terminate employee. Recommends salary adjustments



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

and promotions. May recommend purchase of new equipment and conformance to budget in all departments. May be responsible for maintenance of plant and facilities. May participate in collective bargaining and contract negotiations.

5150 OFFICE MANAGERS – Responsible for supervising general offices, clerical, statistical, and service functions. Develops and organizes office procedures and system. May audit reports and summaries. Observes and evaluates performance of personnel. May hire, transfer, and terminate employees. Recommends salary adjustments and promotions. Responsible for overall administration of company personnel policies for the office group.

5155 PAYROLL SUPERVISORS – Responsible for supervising the activities of the payroll department. Assigns and directs payroll and other clerks in this group. Responsible for maintaining the accuracy and scheduling of payrolls. May personally distribute paychecks, investigate and settle disputes involving possible errors. Audits summaries, tax forms, bank balances, wage reports, and surveys. May personally prepare confidential payrolls. Hires, transfers, and terminates employees. Recommends salary adjustments and promotions. Administers company personnel policies as applicable to group supervised.

5157 HUMAN RESOURCES MANAGER – Responsible for supervision and coordination of activities pertaining to the manning of the plant and/or office. Supervises the recruitment and testing of personnel. Administers such employee services as first aid and health, recreational activities, insurance programs, etc. May handle safety programs in small plants. Administers company labor relation's policies. Serves as a member of the management labor relations committee. Supervises the employee records, including wage and salary rates. Prepares negotiation material when needed. Investigates grievances, general policies, and procedures to avoid any violation of local, state, and federal regulations in relation to personnel to avoid any violation of local, state and federal regulations in relation to personnel and employee relation's practices. May administer and participate in employee training programs. May hire, transfer and terminate employees. Recommends salary adjustments and promotions for personnel supervised.

5158 PLANT MANAGERS – Directs the manufacturing operations of fabricating, finishing, assembling, and crating of products. Develops manufacturing plans, maintains production schedules, quality, safety, and cost standards, and maintains favorable labor relations. Supervises the allocation of material, manpower and equipment resources, identifying and reporting variances in efficiency, budget, and indirect labor utilization. Advise managers of optimum material and parts levels, manufacturing processes and procedures. Provides supervisory training on labor contract provisions and company policies. Establishes safety standards and recommends or provides training courses. Prepares production, operating costs and budget reports.

5160 PRODUCTION CONTROL SUPERVISORS – Supervises planning, scheduling, and expediting of all orders of products through manufacturing operations. Coordinates production activities in accordance with schedule facilities. Notes potential production bottlenecks and takes action to prevent their occurrence. Makes provision for raw materials, purchased parts and subcontract machining so that all materials are on hand for meeting scheduled shipping dates.

5162 PRODUCTION CONTROL MANAGER/MATERIALS PLANNER – Responsible for establishing and follow-up on production schedules, coordinating purchase of materials. Prepares production and project completion reports. May initiate suggestions for improved production or warehousing. May control shipping traffic, warehouse storage, expediting, inventory and record keeping. May control load factors to insure the efficient use of machine capacity, tools, labor and equipment. Cooperates with all departments regarding scheduling production, record keeping.

5164 PURCHASING MANAGERS – Responsible for the purchase of materials and supplies required. Supervises the work of buyers, assistants, and clerical employees attached to purchasing department. Reviews and approves requisitions, supply sources, supplies, quotations, terms, etc. Personally handles contract negotiations covering items of major importance or magnitude. Responsible for overall control of deliveries as scheduled. Keeps abreast of economic, industrial, and other trends that affect markets and prices. May hire, transfer, and terminate employees. Recommends salary adjustments and promotions. Responsible for administering company personnel policies in department.

5166 QUALITY CONTROL MANAGERS – Supervises the maintenance of product quality in machining, assembly, receiving, and fabricating. Establishes control limits and control charts. Discusses with methods, sales and engineering departments and occasionally with customers on related problems to resolve such problems. Prepares or presents for approval, various statistical analyses to justify recommendations for changes in methods, tooling, tolerances or inspection and testing procedures. Investigates causes of faulty work, excessive scrap, rework or inspection delays and takes proper corrective action.



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

5169 SALES MANAGERS – Plans and coordinates sales programs for maximum sales volume and profitability. Conducts sales promotion staff meetings for long and short-range sales events. Participates in meetings to select lines or items of merchandise to promote and develop timing and methods of promotion. Sets up schedules for sales volume and follows up to assure participation of other departments. Works with advertising department in preparing advertisements for newspapers and other media. Maintains balance in promotion between sales force, advertising and other forms of publicity, display and presentation. Develops sales budgets and forecasts and prepares operating reports.

5173 SALES PROMOTION SUPERVISOR/MANAGER – Supervises the development and carrying out of sales promotion policies and procedures within the company or a part of the company, providing support for the sales/marketing function. Subordinate employees devise sales promotion techniques and prepare brochures, exhibits, displays, posters, catalogs, selling aids, sales training materials, etc. They also organize and administer such projects as sales contests, promotional campaigns, etc. May originate new uses or markets for products, evaluate effectiveness of current sales methods and advertising programs, advise on product design, packaging and pricing from a sales promotion standpoint. This is a sales support function.

5175 SERVICE MANAGERS – Responsible for supervising activities of service department personnel engaged in customer service in the field and the sale of service parts. Assigns and directs work of correspondents, clerical, stores and possibly shipping employees. Conducts training programs. May personally handle and process general complaints, warranties, etc. Responsible for maintenance of service manuals, parts list and other related literature stocks. Hires, transfers and terminates employees. Recommends promotions and salary adjustments. Administers company personnel policies as applicable to group supervised.

5179 TRAFFIC MANAGERS – Supervises all operations connected with incoming and outgoing shipments. Responsible for use of most commercial and efficient shipping services. May specify routing for purchased materials and trace lost or delayed shipments. Prepares and files claims for damage or over charges. Directs activities of and assigns work to traffic department personnel. May hire, transfer and terminate employees. Recommends salary adjustments and promotions. Administers company personnel policies.

5181 BUYERS, Experienced or Expanded Scope of Responsibility – Must be the sole buyer of production materials, machines or equipment in a purchasing department. Ascertains required delivery dates and what materials and quantities should be purchased from a purchase requisition or other authorization. Obtains quotations from vendors. Determines ability of vendors to supply or manufacture desired materials in quality and quantities required to meet schedules. Executes contract for the purchase of materials.

5183 CLIENT/SERVER APPLICATIONS DEVELOPER – Designs, prototypes, develops and codes applications in which processing is shared between a host computer (server) and networked microcomputers or workstations (clients). Applications typically have a graphical user interface (GUI). May require extensive knowledge of tools such as Visual Basic, PowerBuilder, and Lotus Notes, and of application development tool sets from vendors such as Oracle and Sybase. Normally requires proficiency in C or C++ and practical knowledge of Unix, Windows NT, or OS/2. May require applications development expertise with products such as dBase, FoxPro, and Paradox. Generally, requires experience developing microcomputer, workstation, or minicomputer applications. May require a related degree.

5184 CLIENT/SERVER APPLICATIONS DEVELOPER, Senior

5186 CONTRACT ADMINISTRATORS – Responsible for coordinating all relevant functions of the company to ensure that contracts with customers are fulfilled satisfactorily and that favorable relationships with customers are maintained. Subordinate employees provide interpretation of contract provisions, screen and process customer inquiries to insure prompt handling and maintain continuing customer liaison. Monitors progress of work performed under the contract, preparing periodic reports and estimates of completion dates. May also participate in the development of sales proposals, negotiation of new contracts and renegotiation of existing contracts, and provide support to the sales organization.

5188 COST ACCOUNTANTS – Under general direction of supervisor, cost accounting, assumes responsibility for a segment of cost accounting records, working either independently or with cost clerks. Maintains assigned cost records according to prescribed cost accounting methods. May recommend changes in methods or records to fill requirements more satisfactorily.

5190 DATABASE ADMINISTRATORS – Manages a specific database application. Is involved in the original design of the database system and has responsibility for its implementation, backup, recovery and documentation as well as training and user



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

consultation. Typically requires a degree in computer science and two or more years' experience in database application. May supervise lower level database analyst.

5192 MARKET RESEARCH ANALYSTS – Under minimum supervision, conducts market surveys, compiles data and prepares various market and product sales reports to assist area sales management in determining new market potential, sales penetration, new product potential, etc. Tasks are broad in nature requiring originality and evaluation in their accomplishment. This is the highest non-supervisory level. Requires several years of sales or market research experience.

5193 PRODUCTION IT ASSOCIATE – Coordinate and provide technical support for production info systems, including hardware and software components including, but not limited to on-line camera systems, measurement devices, counters, and sensors. Provide data analysis and troubleshooting support to manufacturing operation.

5194 IT ANALYSTS – Designs and implements information systems that optimize organizational efficiency. The process begins with managers, who provide the IT analyst with a broad objective, like capturing marketing research data.

5195 NETWORK ADMINISTRATORS – Responsible for the operations, technical support, and administration of the organizations networked microcomputers and/or distributed processing system(s). Responsible for daily backups, user training, system documentation, and routine troubleshooting. Requires extensive interaction with users to respond to problems and requests. Develops and monitors procedures necessary to maintain network security and data integrity. May assign and maintain access codes. Normally requires a degree in telecommunications or computer science, or advanced technical training and 2 - 5 years of experience with distributed processing systems and computer networks.

5196 NETWORK ADMINISTRATORS, EXPERIENCED – Responsible for server and network installation, system upgrades and maintenance, hardware and software testing, and troubleshooting. Coordinates activities of equipment, software, and cable installation vendors or staff. Monitors and maintains networks and systems to ensure that all components are operational. May require comprehensive knowledge of a variety of computing platforms, operating systems, and network software. May require a Certified Network Engineer (CNE). Normally requires a degree in telecommunications or computer science, or advanced technical training, and 5 or more years' experience with distributed processing systems and telecommunications/data networks.

5201 NETWORK ANALYST LEVEL I – Provides technical support in the installation and maintenance of employer or customer's Local Area Network (LAN). Assists in the evaluation of hardware and software, including peripheral, output, and telecommunications equipment. Installs network hardware and software, including network operating systems. Monitors data communications to ensure that network is available to all users. Troubleshoots and resolves routing problems. Generally responsible for maintaining a simple network of 25 or fewer nodes, or for a section of a larger network. May require a related degree.

5202 NETWORK ANALYSTS LEVEL II – Designs, installs, maintains and coordinates the use of employer's or customer's Local Area Network or Wide Area Network (LAN/WAN). Evaluates hardware and software, including peripheral, output, and telecommunications equipment. Enforces security procedures, installs network software, and manages network performance. Troubleshoot and resolves complex problems. Implements and coordinates network policies, procedures and standards. Trains users. Generally responsible for maintaining moderately complex networks of 25 to 100 nodes. Typically requires a degree and 3 - 5 years related experience. May require certification as a network analyst or engineer.

5203 NETWORK ANALYSTS LEVEL III

5205 PACKAGING SUPERVISORS – Supervises and coordinates activities of workers engaged in packaging products and materials for storage or shipment. Studies production orders to ascertain types and quantity of product, containers needed and other packaging requirements. Observes packaging operations, inspects containers to verify conformance to specifications.

5206 PERSONAL COMPUTER SPECIALIST LEVEL I – Reports to Management Information Systems Manager or Computer Operations Supervisor. Has responsibility for developing, implementing and maintaining personal computing operations. Follows industry and company procedures and practices to install and maintain personal computer software, hardware and networking capabilities. Will train or assist in the training of other employees in the proper use of available personal computer programs and packages. Maintains personal knowledge of new programs or networking systems and capabilities. Integrates various software packages where necessary.



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

5207 PERSONAL COMPUTER SPECIALISTS LEVEL II – Reports to Management Information Systems Manager or Computer Operations Supervisor. Has responsibility for developing, implementing and maintaining personal computing operations. Follows industry and company procedures and practices to install and maintain personal computer software, hardware and networking capabilities. Will train or assist in the training of other employees in the proper use of available personal computer programs and packages. Maintains personal knowledge of new programs or networking systems and capabilities. Integrates various software packages where necessary.

5208 PERSONAL COMPUTER SPECIALISTS LEVEL III – Reports to Management Information Systems Manager or Computer Operations Supervisor. Has responsibility for developing, implementing and maintaining personal computing operations. Follows industry and company procedures and practices to install and maintain personal computer software, hardware and networking capabilities. Will train or assist in the training of other employees in the proper use of available personal computer programs and packages. Maintains personal knowledge of new programs or networking systems and capabilities. Integrates various software packages where necessary.

5209 PRODUCT MANAGER – Determines product selection and specifications, coordinates internal and external activities related to the management of products, and develops and recommends marketing objectives, including sales volume and profit forecasts. Monitors the sales activities and profit margins of assigned product lines and assess performance and implements appropriate action. Gather new product ideas, evaluate their potential and practicality with respect to market opportunities and their effect on present products. Analyze competitive product line strategies, strengths and weaknesses to determine opportunities for competitive advantage as it relates to new products. Obtain technical opinions and estimates of time and costs of new product development to create the new product business case and participate in the new product development process as the product management representative.

5210 PROGRAMMER ANALYST LEVEL I – Performs routine assignments that require following project specifications and statements of problems and procedures to create or modify computer programs. May confer with end users to analyze specified methods and procedures, identify problems, and document specific input and output requirements. Requires knowledge of one or more applications languages such as COBOL or C. May use software tools to design detailed flowcharts and generate standardized code. This is an entry-level position and typically requires 1 year or less programming analyst experience. May require a related degree.

5211 PROGRAMMER ANALYSTS, LEVEL II – Plans, develops, tests, and documents computer programs, generally working from source data provided by senior programmer analysts. May review systems capabilities and scheduling limitations to determine if required program or modification is possible within existing system. Applies standard programming procedures and a detailed knowledge of the application being programmed. Prepares program documentation and materials for users. May provide work direction to entry-level programmer analysts. Normally requires a relevant degree and 2 - 4 years of programming experience.

5212 PROGRAMMER ANALYSTS, LEVEL III – Designs, develops, implements, and maintains complex business, accounting and management information systems. Works on more complex assignments that require nonstandard programming techniques. Evaluates user requests for new or modified programs to determine feasibility, cost, and time requirements, and compatibility with existing systems and capabilities. Determines programming specifications. Provides assistance to lower level programming analysts. Normally requires a relevant degree and 5 - 7 years of related experience. Incumbent may be the programming analyst senior in and I.S. unit devoted primarily to maintaining existing applications.

5213 PROGRAMMER ANALYSTS, LEVEL IV – Works with users to identify current operating procedures and clarify program objectives. Consults manuals, periodicals, and technical reports to learn ways to develop programs that meet user or market requirements. May team with external analyst-programmer consultants. Outlines steps required for program development, including diagrams and charts. Writes program documentation and user operations guidelines. Provides technical guidance to lower level analyst programmers. Requires advanced knowledge of programming techniques, operating systems, and platform capabilities. Typically requires detailed and comprehensive knowledge of employer's applications and hardware platforms. Requires a relevant degree and 8 - 12 years of related experience. May be titled Senior Analyst Programmer.

5214 PROGRAMMER ANALYSTS, LEVEL V – With user management and technical staff as necessary to clarify program intent, identify problems, suggest changes, and determine require coding. Assigns, coordinates, and reviews work of lower level analyst programmers. May train lower level analyst programmers in advanced techniques.



THE MANUFACTURERS' ASSOCIATION
320 Busser Rd, 2nd Floor, P.O. Box 493 Emigsville, PA17318
Ph: 717-843-3891 | email: office@mascpa.org

2018 WAGE AND SALARY SURVEY

Prescribes standards for terms and symbols used to simplify interpretation of programs and documentation. Supervises preparation of records and reports. Normally requires 12 or more years of related experience and expert knowledge of specific applications and lines of business.

5216 PROGRAMMERS, EXPERIENCED or Expanded Scope of Responsibility – With general supervision, analyzes and defines programs for electronics data processing equipment. Is competent in most phases of programming to work on his own, and requires only general guidance for the balance of the activities. Conducts analyses of sufficient detail of all defined systems specifications and develops all levels of block diagrams and machine logic flow charts, codes, prepares test data, tests and debugs programs. Revises and refines programs as required and documents all procedures used throughout the computer program when it is formally established. Evaluates and modifies existing programs to take into account changes in systems requirements. May give technical assistance to lower level classifications.

5220 SYSTEMS ANALYST – Under close supervision, assists in devising computer system specifications and record layouts. Is qualified to work on several phases of systems analysis, requires guidance and direction for other phases. Conducts studies and analyses of existing office procedures and prepares system flow charts for existing and proposed operations. Under instruction prepares computer block diagram and may assist in the preparation of machine logic flow-charting.

5230 TRAINER/TRAINING MANAGER – Responsible for developing and administering effective training plans and procedures to support current and future requirements of the company and which comply with good business practices as well as legal and regulatory requirement. May conduct general or specialized training programs. Maintains training library, including references, manuals, and videos. May select and supervise training personnel.

5234 CONTINUOUS IMPROVEMENT MANAGER – Will assess current state of performance, identify gaps, visualize and establish a plan to get to the future state, monitor progress and share/acquire best-in-class ideas and systems. Identify gaps in Best Business Practices Metrics (BBP's), and then work with all levels of the plant in establishing and executing a strategy for improving them. Assess the Current state of the plant's operations; Develop Future State vision and drive monitor the implementation plan.

5235 CONTINUOUS IMPROVEMENT SPECIALIST – Implements improvement plans and monitors progress to ensure updates achieve desired results and are implemented in a timely manner. They assess the effectiveness of a business function and offer recommendations for improvement in accordance with a well-defined body of knowledge.

5236 LEAN IMPLEMENTER – Utilizes employees' talents to produce at the pace of customer demand using optimal resources achieving lowest cost with Six Sigma quality across the entire Value Stream. Facilitate cross-functional expert teams to drive breakthrough of Best-in-class performance in People, Quality, Material Flow, and Cost.

5237 BLACK BELT – Assumes responsibility for the leadership and facilitation of projects for product and process continuous improvements. Project team members will develop and implement improvements through Lean Manufacturing & Six Sigma methodologies ("Lean/Sigma").

5240 PRESIDENT/CEO – Provides strategic leadership for the company by working with the board of directors and the executive management team to establish long-range goals, strategies, plans and policies.

5250 WEB CONTENT SPECIALISTS – Responsible for building, acquiring and publishing content for website, email newsletters and other online communications media. Ensures product accuracy and maintains proper appearance and online functionality. Implements editorial policy.