## CORRECTIONS MANUFACTURING SPECIALIST - MECHANICAL

## KIND OF WORK

Craft (skilled) work supervising and training inmate workers engaged in mechanical manufacturing.

## NATURE AND PURPOSE

Under general supervision, supervises and trains inmate workers in fabricating, machining, welding, painting, and assembly of farm machinery and other metal products; auto body repair, brake and radiator repair. Performs related work as required.

This class differs from the Corrections Manufacturing Specialist - Light Assembly because of its greater technical depth. Incumbents supervise and train inmate workers in all facets of a production process requiring application of a skilled craft. At the Assembly level, Specialists direct the assembly of pre-fabricated parts into a finished product.

Inherent in this classification is responsibility for institution security. All employees are expected to be alert at all times and to report or intervene immediately in any behavior or activity that could affect the security of the institution, or jeopardize the safety of staff, inmates, or the public.

<u>EXAMPLES OF WORK</u> (A position may not include all the work examples given, nor does the list include all that may be assigned.)

Plans, organizes, assigns, and directs work activities of inmate workers to ensure that production deadlines and quality assurance standards are met. This is accomplished by setting production goals, scheduling a sufficient number of inmates, and inspecting final products before shipping.

Selects, promotes, rewards, and disciplines inmate workers to ensure that the inmate work force is treated equitably while also ensuring that production standards are maintained. This is accomplished by reviewing inmate records, interviewing job candidates, and evaluating performance against established standards of productivity.

Trains inmate workers in the principles and techniques of metal products manufacturing; auto body repair and painting; and brake and radiator repair to maximize inmates' skill level and ensure production of quality products within contract deadlines. This is accomplished by explaining and demonstrating to inmates fabricating, welding, painting, machining, and assembly of raw materials into a finished product. Trains inmate workers in set up and use of manufacturing equipment such as frame alignment rack, front end alignment rack, cutters and welders, torches, grinders, lathes, milling machines, drills, presses, threading machines, shears, brakes, saws, flame cutters, broaching machines, sanders, engine analyzers, and precision checking equipment.

Structures individual inmate jobs to match inmate skill levels, ensure safety and the production of quality products within contract deadlines. This is accomplished by modifying equipment and tools, simplifying directions, and modifying steps in the production process to their simplest level.

Recommends new or modified product designs to supervisor so that products are manufactured efficiently and meet quality standards. This is accomplished by developing specifications and drawings.

Determines production schedules so that contract deadlines are met. This is accomplished by: forecasting the amount of supplies, staff, equipment, and additional work hours necessary to complete production.

Implements quality control procedures within assigned area to eliminate scrap and lost production time and to ensure that quality and production standards are maintained. This is accomplished by recommending a quality control plan, observing manufacturing processes and procedures, and inspecting final products.

Monitors compliance with all OSHA, fire and safety rules, and ACA standards so that assigned shop is safe and hazard free. This is accomplished by performing periodic maintenance on shop equipment; securing all toxic, combustible and flammable chemicals and issuing only as required; inspecting production area daily for cleanliness and potential hazards and correcting all problems; keeping tools secure; instructing inmates on safety procedures, and conducting regular fire and safety inspections of the work area..

Submits reports to management so that industry activities are accurately monitored and evaluated. This is accomplished by compiling and completing inmate evaluations, periodic inspection reports, safety and accident reports, and production and cost reports.

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## KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

Knowledge of:

Supervisory principles sufficient to select, motivate, direct and evaluate inmate workers.

Training methods sufficient to explain and demonstrate manufacturing tasks so that inmate workers understand and learn their assigned jobs.

Principles and techniques of metal products manufacturing, auto body repair and painting, and brake and radiator repair sufficient to supervise and train inmate workers in these processes and to develop new or modified product designs and processing techniques.

Characteristics of machines, metals, paints, solvents, tooling and manufacturing processes sufficient to produce a variety of products.

Manufacturing equipment such as alignment racks, cutters, welders, torches, grinders, lathes, milling machines, drills, presses, threading machines, shears, brakes, saws, flame cutters, broaching machines, sanders, engine analyzers, and precision checking equipment.

Mathematics sufficient to design and layout work and to estimate production costs, time and raw materials necessary to complete work.

Health and safety standards sufficient to ensure compliance with OSHA standards and fire and safety rules.

Ability to:

Communicate orally sufficient to train, direct and motivate inmate workers and to establish and maintain effective working relationships with other production areas, vendors, and customers.

Objectively observe and report on inmate behavior in the production area sufficient to ensure a secure, safe and productive work environment.

Communicate in writing sufficient to clearly and concisely complete instructions and reports.

Repair and maintain production equipment sufficient to replace worn and broken parts, clean and lubricate according to the manufacturer's standards.

Est.: 5/90 Rev.: T.C.: Former Title(s):