SAN MIGUEL ELECTRIC COOPERATIVE

POSITION: MECHANICAL MACHINIST SPECIALIST

SUMMARY

Under direction, the main purposes of this position are to manufacture, set up, and operate machine tools and heavy equipment, and perform other duties as required.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following.

- Operates and sets up lathes, drill presses, milling machines, saws, shapers, and cranes; machines all close tolerance parts within .0001 inch; and instructs others in procedure.
- Manufactures American and foreign-made (metric) gears, shafts, and new parts.
- Machines housings to install various mechanical seals; and machines wear rings, impellers, and bearings for old pumps.
- Redesigns and upgrades material to produce parts.
- Designs and makes tools and adapters for new parts to be placed in old equipment.
- Makes blueprints of new shafts and old parts for rebuilding or making new parts, and provides to vendors for items requiring outside manufacture.
- Reads blueprints or job orders for product specifications, such as dimensions and tolerances; and tooling instructions, such as fixtures, feed rates, cutting speeds, and depth of cut; and determines sequence of operations.
- Selects, positions, and secures tool in toolholder (chuck, collet, or tool post).
- Positions and secures workpiece in holding device, machine table, chuck, centers, or fixtures.
- Moves controls to position tool and workpiece in relation to each other, and to set specified feeds, speeds, and depth of cut.
- Sets up fixture or feeding device, starts machine, and turns handwheel to feed tool to workpiece or vice versa; and engages feed.
- Turns valve handle to direct flow of coolant or cutting oil against tool and workpiece.
- Observes operation of machine and verifies conformance of machined workpiece to specifications, using measuring instruments, such as fixed gauges, calipers, and micrometers.
- Operates bench grinder to sharpen tools, drills, and taps.
- May set up and operate machines and equipment other than machine tools, such as welding machines and flame-cutting equipment.
- Maintains inventory of stock, tools, and materials.
- Instructs others on usage of OD, ID, depth micrometers, calipers, dial indicators, and other precision tools; and sets up machines for others, instructing others on safe and efficient usage.
- Designs, fabricates, and operates portable machines for machining fan blades, main turbine rotor, drill radial stud, and others.
- Makes recommendations and assists in rebuilding gear boxes, roll wheels, air compressors, electrical motors, and others.
- Assist crews out on the plant site.
- Provides leadership to temporary employees.

SUPERVISORY RESPONSIBILITIES

N/A

REQUIRED EDUCATION/EXPERIENCE

Requires HS/GED, technical training, plus 10 years of experience in metals and mathematical functions.

KNOWLEDGE, SKILLS, and ABILITIES

Knowledge of algebra, physics, trigonometry, and geometry; metals; and safety policies and procedures. Skilled in conducting effective and confident communications, working with varied personalities, taking and reading measurements (including metric), and reading blueprints. Ability to machine a new part from a solid stock of metal, operate heavy equipment such as overhead shop cranes and riggers, reason through complex problems under pressure, and use safety gear and equipment.

CERTIFICATES, LICENSES, REGISTRATIONS

Class C Operator's License.

PHYSICAL DEMANDS - The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. Tasks involve the ability to exert moderate physical effort including climbing, balancing, stooping, kneeling, crouching, and crawling, and the lifting, carrying, pushing, and/or pulling of moderately heavy objects and materials. Tasks involve work in confined spaces and high areas. Tasks involve the ability to work in confined spaces, such as but not limited to generators, transformers, breakers, tanks, wire vaults, scrubber modules, boiler, precipitator, vessels, etc. Tasks involve the ability to work in areas of excessive height, such as 400-foot stack, 100-foot ball field lights, support structure beams, switchyard structures, manlifts, scrubber module structures, boiler structures, precipitator structures, vessel structures, etc. and to climb to those locations with the necessary tool and necessary safety equipment.

WORK ENVIRONMENT - The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. Tasks require the ability to perceive and discriminate sounds and depths, and visual perception and discrimination. Tasks risk exposure to adverse environmental conditions, such as dirt, dust, odors, humidity, temperature and noise extremes, wetness, strong/toxic agents/chemicals, machinery, vibrations, and bright or dim lighting.

San Miguel Electric Cooperative is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, San Miguel Electric Cooperative will provide reasonable accommodations to qualified individuals with disabilities, and encourages both prospective and current employees to discuss potential accommodations with the Human Resources Department.

USDA is an equal opportunity provider, employer, and lender.