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CNC operator ●

Description

CNC operator is a common name for the metal processing operator at numerical control machines.

CNC operator produces semi-finished and finished products made of different materials (metal, plastics, wood) by using different machines and devices with control unit with integrated software (CNC milling machine, CNC lathe, CNC grinder, processing centre, CNC laser, CNC plasma, CNC bending rolls, CNC cutting shears) shaping and cutting tools (milling cutter, lathe knife, drill bit), clamping equipment, measuring instruments (meter, vernier calliper, angle, protractor, micrometre screw, reporters) and necessary manual tools. Machines such as cranes, forklifts, pallet jacks and other internal transport machines can be used during the operation and require additional trainings.

Performing this job require knowledge in mathematics, machine materials and measuring methods, control, testing and establishing accurate operation of the numerical control machines. In addition to that, it is also necessary to know how to use software developed for this field. Working activities of a CNC operator include preparation of machines, tools, workplace and reading technical documentation and operational activities including directing the machine, doing the workpiece and control during the operation and of the finished work. Application of the safety at work rules, observing of procedures and maintenance of workplace and machine hygiene make a significant additional work component. For the purpose of work protection, a protective equipment is used, such as protective clothing, shoes, goggles and gloves.

The CNC operator's job is usually performed in shifts in production plants, mechanical workshops and machine shops and includes physical activity of standing, lifting, bending (when placing pieces in the clamps and taking out the pieces from the clamps). The job is physically demanding and includes exposure to polluted air, noise and risk of mechanical injuries.

Desirable traits/requirements

- Manual dexterity
- Agility and physical endurance
- Good sight and precision
- Sense of shape and proportion
- Visual imagination
- Spatial orientation
- Healthy musculoskeletal system
- Responsibility and reliability
- Being well-organized and team-oriented

Positive aspects:

- The field of work of CNC operator is broad and is in a constant demand. Production of high-quality products and structures require competent CNC operators who can run high-tech machines with numerical control.

Negative aspects:

- CNC operator's job is performed mainly in a standing position, in noisy plants, exposed to high temperatures, pollution and risk of injuries.

Career path/ fields of work

The CNC operator's job requires completion of three-year or four-year secondary vocational education for the occupation of the Machining operator or technician for CNC computer machine control, i.e., non-formal training program lasting minimum 960 hours.

Competences for operating specific CNC machines (CNC milling machine, CNC lathe, CNC grinder, processing centre, CNC laser, CNC plasma, CNC bending rolls, CNC cutting shears, erosimat) can be acquired through shorter non-formal trainings.

CNC operators usually work in metals, textile and wood processing industry producing a large number of various semifinished products and/or finished products.