

## Job descriptions

### ■ Draughtsman

A draughtsman draws plans for different kinds of machines, engines and mechanical components. He is responsible for putting the ideas of an engineer onto paper. Therefore he has to be computer literate, because nowadays most of the drawing is done on computers.

Further skills and qualifications needed:

- ✓ Able to visualize three dimensionally
- ✓ Good eyesight and eye for detail
- ✓ Good team worker, has to deal with engineers and people at the production line.
- ✓ Able to work accurately, because production depends on his plans

### ■ Quality Control Manager

The task of a quality control manager is to maintain the quality of a product or process. He has to develop methods and criteria for defining quality. A quality control manager tests products at the different stages in the production process according to its mechanical, electrical or chemical characteristics.

Having identified problems in the production process he is also responsible for finding ways to improve it. This can concern either the quality of the product itself but also the produced amount of scrap or the reduction of the used resources. One further task is to initiate standards and methods for inspection, testing and evaluation. This includes sampling procedures.

### ■ Machine tool operator

A machine tool operator can work on different machines performing operations such as milling, drilling, boring, or turning. Normally machine tool operators do repetitive tasks on one machine, working mostly with metal or metal alloys. Sometimes they can also be involved in repairing and maintaining the machines.

Machine tool operators also have to be able to read drawings and plans and to turn them into real products. A basic knowledge in mathematics is necessary.

### ■ Mechanical engineer

A mechanical engineer usually has a broad education and often deals with many different tasks, from the design and construction of machines to the service and maintenance in the production within a company.

Within the field of **construction** the mechanical engineer designs, constructs and develops mechanical products - everything from car engines to whole production plants in the industry. As a constructor it is your job to calculate structural strengths as well as how much material would be needed and to make blueprints.

After a product has been designed it is sent to production. The **production engineer** or the **operation engineer** is then responsible for the complete production or the manufacturing of a detail.

When a product is completed (manufactured) it is the **service engineer** who often has most responsibility for the installation and maintenance of the complete product. The delivery follow-up in the form of education and service can be your duties. The customer may need advice on how the product should be operated and maintained. Your job is to supply your customer with that service when needed.

### ■ **Automation technician**

Industrial production has increasingly become automated with automatically governed plants and industrial robots which give rise to the need for technicians to carry out maintenance and reparation.

An automation technician assembles, sets, repairs and deals with equipment for the automatic control of different industrial processes and mechanical plants. One can also work with installation, service and maintenance of ventilation systems in plants. It is a broad trade and the duties shift depending on which activity one works within.

Automation technician is a summarizing name. It is common that one is called a control technician or a control mechanic. If the work is carried out in the process industry one would be often called an instrument technician or a process technician. One can also be employed as a maintenance technician or as a service technician within the manufacturing industry. One may even be called a CNC-technician.

One checks equipment and plants and does preventive maintenance when necessary. When repairing plants, not in operation, much of the work consists of trying to locate the faults. Automation technicians may also have development projects and provide new technical solutions. It may concern the improvements of existing plants or the development of new plants. Then, one usually takes part in a project group together with, amongst others, engineers.

An automation technician also works at companies that produce automated plants or robots and takes care of installation and service at their customers' location or at service companies that deal with the service of plants. The contact with customers is an important part of the job. A lot of travel is expected for such work and a driving licence is desirable.

The knowledge of languages is important since descriptions, instructions and manuals often are typed in English and sometimes even German. If the automation technician does the installation or service at the foreign customer good knowledge of language is essential.