

Professional Content

Industrial Mechanic in Germany

Industrial mechanics are the experts when it comes to the construction, maintenance, repair and operation of machinery and production equipment - and in almost all sectors of the industry.

Just as you enter the door of the workshop, the first order is already waiting for you: a customer has called. There is obviously a malfunction on the production line. But where does the error lie? You should find out now. Nothing like going to work. With your colleagues you check the functions of the individual device parts and systems. You monitor every single manufacturing process and collect the data to finally find the cause of the failure. The customer is satisfied - you too! Continue to the next order!

In some ways, part of your working day might look like an industrial mechanic. But there are many other tasks that fall into your field:

Production, assembly and disassembly

Not only do you work with the finished machines, but you also produce equipment parts and assemblies for production plants and machines. Then you assemble them and set them up properly. It is important to check all functions, because the workpieces must be accurate to hundredths or even thousandths of a millimeter! If necessary, you rebuild the production lines again. You use technical documents that help you to plan your work exactly. Not infrequently you talk to colleagues, for example in the field of electrical engineering or mechatronics.

Inspection and optimization

When such a machine runs once, it always runs - wrong! It is especially important that production processes are constantly monitored. On the PC, you evaluate data and document individual work steps. Only in this way can defects in production be discovered and remedied as quickly as possible. In addition, you are interested in constantly optimizing the work steps. Quality controls are therefore one of your regular tasks.

Maintenance and repair

Maintenance refers to preventive maintenance measures. If a machine is defective, nothing can be produced. That means losses for a company. That's where you come in! You ensure that production facilities are cleaned regularly, supplies are refilled and signs of wear are detected early. If necessary, you order spare parts or make them yourself. Of course you dispose of any waste products properly.

School education content

As an industrial mechanic, you need all sorts of theoretical foundations to better understand the processes and operations that you are doing at the workplace. Above all, physics helps you understand the electrical and control technology. You need mathematics to calculate dimensions, volumes and angles. In the subject of plants or technology, you will learn how to make components, understand and create technical drawings and also to file, drill, mill and grind. All these are the basics

for your work in the company. Also computer science is important, because it allows you a safe handling CNC machines. These are machine tools that can produce parts very precisely automatically thanks to the possibilities offered by the control technology. It may also happen that you need to evaluate technical documentation in English. Therefore, technical English is one of your subjects in vocational school.

In-company training content

In your training company, most of the theoretical content of the vocational school is put into practice. Here you will learn how to best plan and organize your work. You will learn to differentiate and classify the different materials, how to make components and workpieces, how to operate and operate machinery and systems. It also teaches you how to find and eliminate causes of quality defects yourself. The goal of your education is to be able to do the work independently and professionally. But do not worry, this will of course happen step by step!