



Mechanika precyzyjna / Precision mechanics

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Strona 1

Precision mechanic



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In Poland there is an insufficient number of specialists qualified to work as precision mechanics. This results in creating advantageous job opportunities for graduates of vocational and technical schools. Moreover, the continuous development of technology makes the job stimulating and gratifying.

A person who wants to become a precision mechanic should be thorough and have a strong sense of responsibility. A mechanic organises their own workplace in line with the OHS and ergonomics guidelines, as well as in accordance with fire and environment protection rules.

They should be willing to constantly broaden their knowledge of machines which is continuously modernising. A precision mechanic must be creative, have spatial imagination and the ability to quickly solve problems as they come up.

The ability to work in a team is also extremely important because cooperation with other technicians makes the work management of an entire company considerably more effective.

A precision mechanic mostly handles:

- designing machine parts and precision devices,
- producing precision devices and monitoring their technical and operational condition,
- mounting precision mechanisms, measuring and control devices, and both new and modified precision mechanised systems,
- assessing the technical condition of industrial automated and precision devices,
- maintaining machines and devices,
- scheduling technical inspections of precision mechanisms,
- repairing and regulating pneumatic, hydraulic and electrical mechanisms.

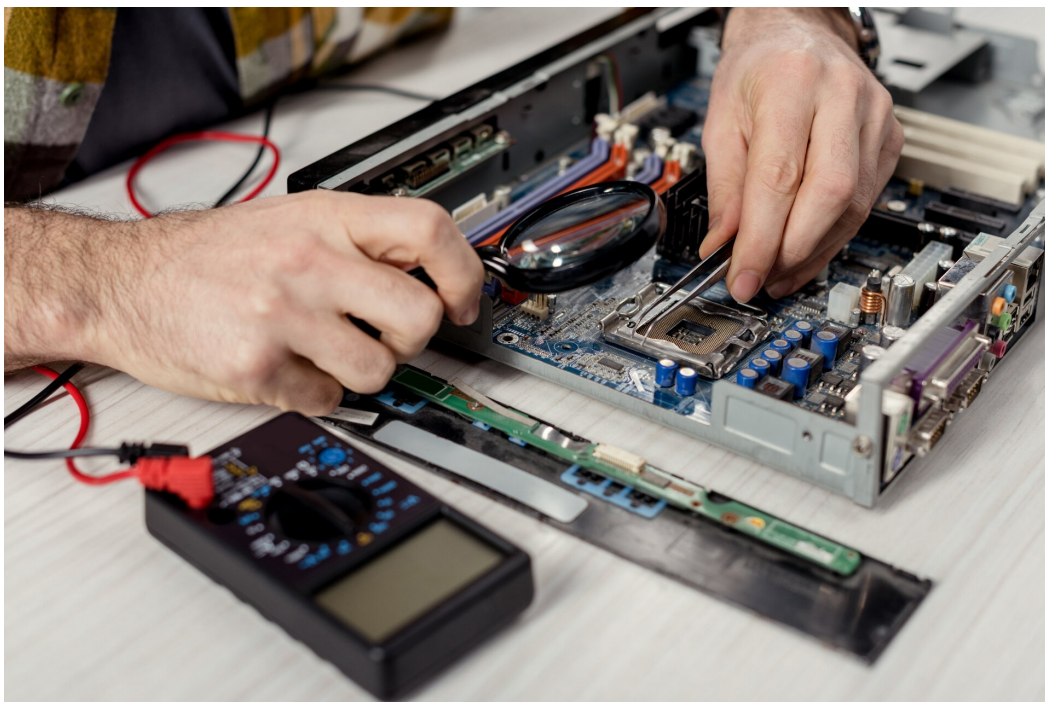
What's more, a precision mechanic is responsible for drawing up technical documentation, calculating the amounts and prices of purchased materials and the time needed to produce and install precision mechanisms.

They launch industrial control systems and conduct measurements of electrical volume and mechanical quantity. A precision mechanic is also required to work in compliance with certain regulations and monitor all the technical aspects of devices production, operation and control.

Based on their workplace precision, mechanics use different pieces of equipment such as measuring, optical, sewing, office, medical, pneumatic, industrial automated or dial-based devices.

The labour market offers precision mechanics numerous job opportunities in various branches of industry. These are for example, metallurgy, machinery, construction, mining, agriculture, services, transport and communication. Qualified graduates will easily find employment in industrial plants that manufacture electrical, electronic or aircraft equipment and companies that are in mechanics industry and handle customer service.

Industrial automation and precision equipment mechanic



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The automation of industry has contributed to the popularisation of the profession of industrial automation and precision devices mechanic. Well-qualified specialists are in high demand in a vast majority of facilities where industrial robots are used.

A person who considers becoming an industrial automation and precision devices mechanic should make sure that they have technical skills, are patient, persistent and thorough. Good vision and manual skills are also a must.

A mechanic should be able to design and draw 3D projections of various devices. The job is of a rather individual nature, but the ability to work within a team is also required, especially while carrying out tasks related to assembly of industrial automated systems.

The work usually takes place in large roofed production halls where an automation mechanic is constantly exposed to detrimental working conditions such as noise and risks of either a mechanical or electrical nature.

The basic activities performed by an automation technician include designing, mounting and starting automated technical equipment and precision devices.

Assembly and start-up of technical devices consists in distributing them in correct places on the production line and the subsequent synchronisation of their individual elements.

Operating automated industrial devices involves their monitoring, regulation and maintenance. If a machine part has broken or worn out, its failure must be identified and the faulty component must be replaced with a new one. That's why it is essential that an

automation technician is skilled in reading technical documentation, drawings and diagrams of precision devices and automated systems.

Well-educated specialists will easily find employment in facilities where industrial automated devices, control systems, measuring devices, multi-purpose automated equipment and all kinds of precision devices are produced, installed, repaired or their technical condition is assessed.

Industrial automation and precision devices mechanics are also sought by companies that are in the vehicle industry, food industry, arms industry, chemical industry, plastics processing and many other businesses.

Automation technician



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Automation is a branch of science and technology dealing with management of various processes, mostly those related to industrial and technological development, where human involvement is extremely limited. This discipline has emerged not so long ago, relatively speaking, as it dates back to the 20th century. Nevertheless, it has already greatly affected businesses such as motorisation, medicine or broadly understood industry. Automation makes our everyday lives easier thanks to various technical achievements such as mechanised car washes, accelerated production systems or improved accuracy of medical treatments and examinations. In order for the machinery to run smoothly, well-qualified

automation technicians must design control systems that are to be used in accordance with their specific, intended purpose.

An automation technician is a person who possesses an extensive knowledge of disciplines such as automation, pneumatics or power hydraulics. Apart from that, they need to be able to analyse production processes, which helps them to choose the most appropriate automation techniques. A good specialist also has broad technical knowledge of machines and control systems operation. All that makes it perfectly easy for them to find a job as assemblers and installers of new systems. Furthermore, they can find employment as experts in modifying old automated devices and entire systems, as well as diagnosing irregularities and dealing with their removal. Automation technicians can also seek employment in industrial plants and technology offices.

A person who wishes to become an automation technician should be able to think in abstract, synthetic and analytical terms, have good memory and technical skills. Since automation as a field of study develops quickly and new technical and technological solutions keep appearing on the market, it is vital that automation technicians constantly improve their skills and take part in additional training.

A basic work tool used by automation technicians is a computer with special software. A specialist can work in a team or individually, at production lines of various branches of industry, included facilities such as plants manufacturing medical equipment, power stations or refineries.

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