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Surveyor. Skills and Responsibilities

Surveyor - mining engineer or technician, an expert on space-geometric measurements in the ground and in the relevant sections of the surface, followed by the image of the plans, maps and sections in mining and exploration

Surveying data is used for planning of mining operations, development and integrated use of deposits as well as the construction of underground facilities not related to the development of mineral deposits. Mine surveying includes: identification of spatial location, size and shape of body minerals, data mining and the geometric structure and properties of the deposit, the exact determination of the position of mine workings and underground structures in relation to the objects of the earth's surface to ensure proper and safe operation of mining, transfer in nature geometric elements of mining projects, buildings, utilities, transportation routes, border safety mining, and safety barrier pillars, drafting and updating drawings. One of the specific sectors of mine surveying is developing new surveying instruments designed to automate the surveys and special measurements, computer work and graphics. Mine surveying uses the advancements of computer technology, mathematical processing of measurements, mathematical statistics and related to geomechanics, strength of materials, optics, electronics, geodesy, topography, cartography.

In addition to specific knowledge, skills and abilities, surveyor has to have a very balanced character, be infinitely meticulous, careful and accurate in their duties and know the safety regulation. Errors in his work can lead to huge losses, accidents with mass casualties.

Surveyor profession also has its problems. Sometimes the surveyor has to go to places where it is very difficult to get into, like a very deep and long mine. He faces some problems, like living in the open air, being away from civilization and carrying on his back all the drawings and other equipment needed to run things.

Surveyors believe that their profession - it is like going to impassable taiga with levels and a backpack, the clouds of mosquitoes in the summer and severe frosts in winter, work up a sweat. But it all pays off spectacular views of nature, romance and joy of discovery of something new.