



Laboratory stand for measuring forces in devices for orientation and fixing of parts with flat and revolving surfaces

Scientific Research Project

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DESCRIPTION:

The laboratory stand for measuring the forces in the device for orienting and fixing parts with flat surfaces but also parts of revolution is an innovative project to be able to do research on the forces to which the device is required to be sure that unpleasant accidents do not happen in companies such as: the part jumping out of the device during processing and all kinds of such unpleasant accidents. For this reason, we thought of such a stand to avoid unwanted accidents as much as possible.



ADVANTAGES:

- Avoiding accidents;
- We see the weaknesses of the device;
- Finding concrete and exact values.

RESULTS AND DISCUSSIONS:

This laboratory stand for measuring forces in devices plays an essential role in avoiding accidents and ensuring that machine tool operators feel safe and comfortable at work.

The operating mechanism

The device is very simple: we have attached to a plate with T-channels made of high alloy steel two prisms on which we place the parts of revolution and on another part of the plate we have pins and lateral supports for orientation and fixation of the parts with mostly flat surfaces. In the middle of the plate we have attached a support with an arm on which we have placed a dynamometer and comparator clock to measure the forces in the device.



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