

Roughness Tester

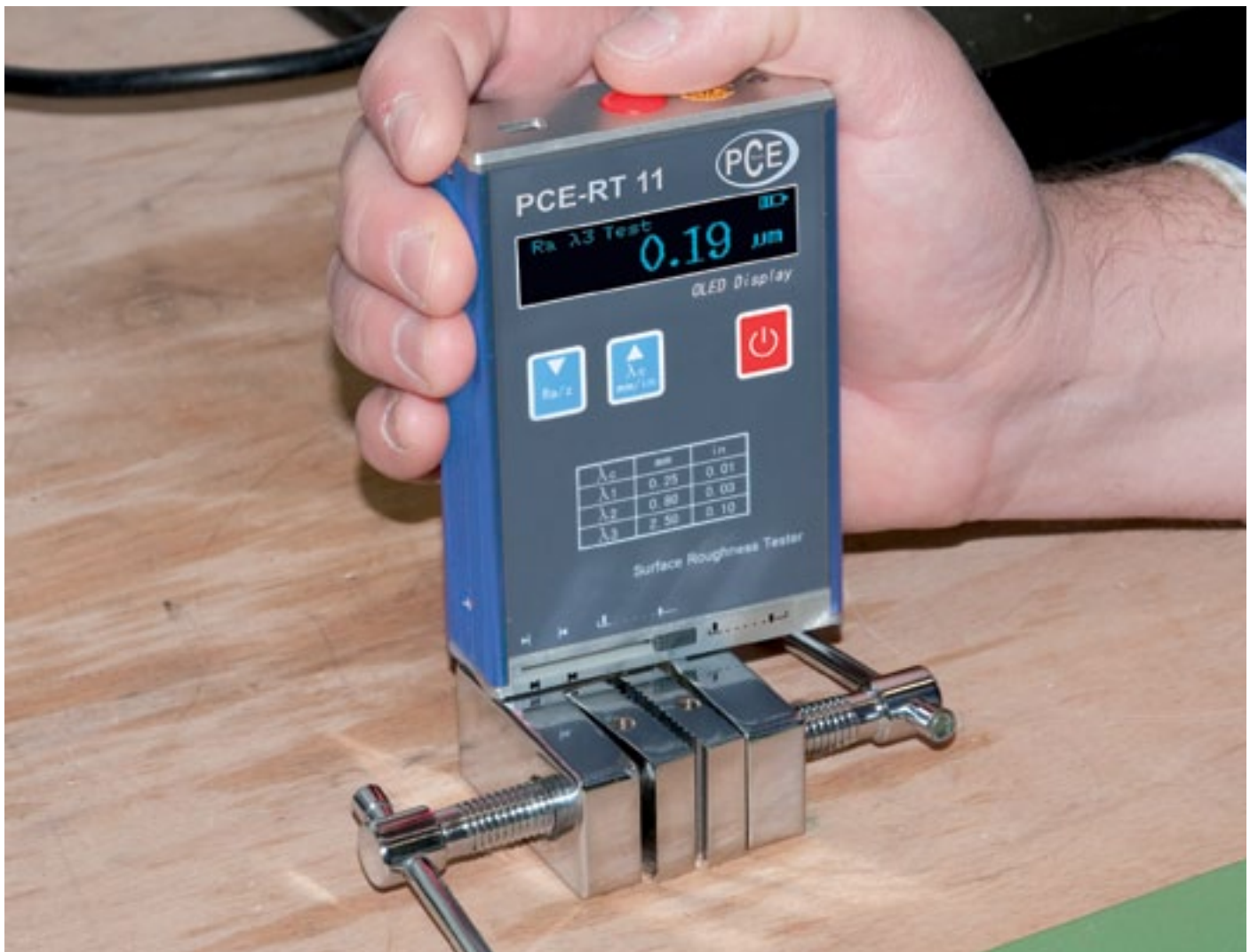
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Surface roughness which appears in the result of a machining process can influence the product effectiveness that is why there is often a necessity to measure it.

Roughness tester is an ideal instrument for fast and simple checking of the surface roughness in shop floor, metalworking, manufacturing, quality control, inspection, automotive and aerospace engineering. It is a portable and pocket-sized instrument, which provides you with highly accurate measurements of surface finish. They help you make a solution for process control and surface optimisation. Surface measurement can help identify the defects and their severity, control and improve the quality and functionality of a product.



Roughness tester identifies grooves and recessions as peaks and valleys of a surface. It can be used in any position (horizontal, vertical or in between). It also can measure almost any part of a workpiece of any size (flats, rounds, sloping planes, polished metal and non-metal surfaces).

This device calculates roughness parameters according to the chosen principle and shows all measured parameters and a profilogram of the surface changes on the display in micrometers. It can be equipped with either LC-display or analogue display.



The most common surface roughness parameters are expressed as Ra (roughness average), Rv (maximum profile valley depth), and Rsk (skewness). The most popular parameter is "Ra". Ra is commonly defined as the average roughness. And there are other parameters that are more specific and useful depending on the application requirements. The information about the roughness parameters is processed by the microprocessor unit and is shown in digital form on the display.

Roughness tester uses a contact measurement method. It has diamond needle that is moving perpendicular to the inspected surface. The sensor generates pulses passing through the electronic amplifier. Mechanical oscillations that appear in the result are converted into a digital signal. Processing of multiple signals allows to calculate the average value - quantitative characteristic of surface unevenness based on a certain length.



Roughness tester corresponds to the ISO, DIN, ANSI and JIS standards. It is highly accurate, easy to use and reliable in everyday operation and it also has a wide measurement range