

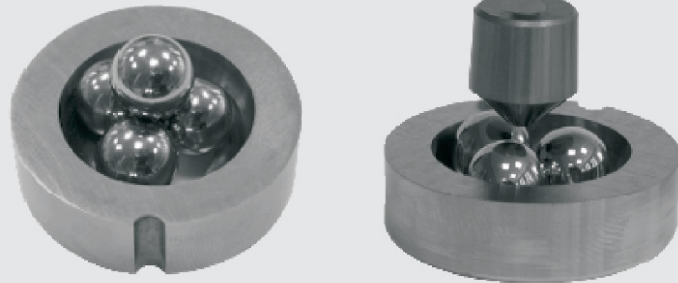
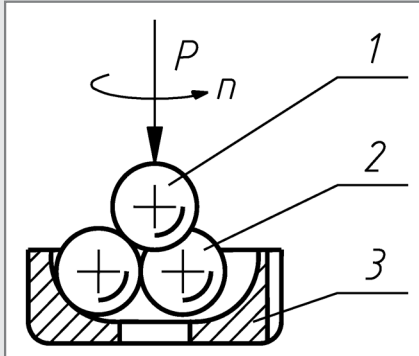
T-03 FOUR-BALL PITTING TESTER FOR INVESTIGATION OF SURFACE FATIGUE WEAR (PITTING)



MAIN CHARACTERISTICS

T-03 Pitting Tester is intended for the determination of the tendency of lubricants and engineering materials to produce surface fatigue failures (pitting) in high-loaded rolling contacts.

T-03 Tester makes it possible to carry out experiments in accordance with **IP 300 standard**.



In case of testing of an effect of lubricants on pitting, the tribosystem consists of the three bottom balls (2), free to rotate in the special race (3) and pressed at the required load P against the top ball (1). The top ball is fixed in the ball chuck and rotates at the defined speed n .

In case of testing of an effect of engineering materials on pitting instead of the top ball (1), it is possible to mount a cone-shaped specimen made of the tested material. When testing a thin coating, it can be deposited on the cone.

T-03 Four-Ball Pitting Tester is equipped with a control-measuring system that consists of the following:

- A set of measuring transducers,
- Controller, and
- PC and special software for measurements and data acquisition.

During the tests, the following quantities are measured:

- The vibration level of the tribosystem,
- Lubricant temperature, and
- Time.

The measured values are displayed on the monitor screen and saved on the computer disk. The motor of the tribotester is automatically stopped when the preset vibration level is exceeded due to the occurrence of a pit on one of the test specimens. After test completion, one can print a report presenting the curves of changes in the particular quantities versus time.

TECHNICAL SPECIFICATIONS

• Type of movement	rolling
• Contact geometry	non-conformal (point)
• Nominal ball diameter	12.7 mm (0.5 in.)
• Rotational speed	up to 1800 rpm
• Applied load	up to 7848 N
• Tribotester dimensions (W x H x D)	1100 x 1700 x 620 mm
• Tribotester weight	210 kg
• Power supply	230 V / 50 Hz (optionally 110 V / 60 Hz)
• Max. power consumption	2.1 kW

