

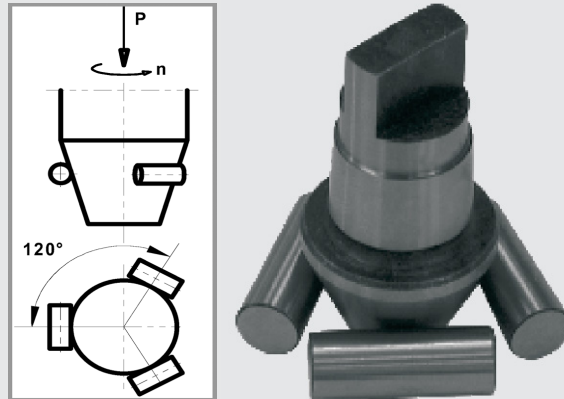
T-04 THREE-CYLINDER-CONE WEAR TESTER FOR DETERMINATION OF WEAR PREVENTIVE PROPERTIES OF ENGINEERING MATERIALS



MAIN CHARACTERISTICS

T-04 Three-Cylinder-Cone Tester is intended for determination of the resistance to wear of engineering materials depending on load, sliding speed and other factors, during sliding friction.

T-04 Tester makes it possible to carry out experiments in accordance with the Polish Standard **PN-83/H-04302**.



The tribosystem consists of the three stationary cylinders, made of the tested material, located every 120°, pressed at the required load P against the cone that rotates at the defined speed n . Experiments can be carried out under conditions of dry friction. The friction contact may also be lubricated either by a grease, applied once before a run, or by an oil after filling the holder of the cylinders. To reasonably use the entire surface of the cone, it is possible to change the locations of the cylinders on four planes (changing the diameter of the contact circles).

T-04 Three-Cylinder-Cone Tester is equipped with a control-measuring system that consists of the following:

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

During the tests, the following quantities are measured:

- Friction torque,
- Applied load (option),
- Lubricant temperature,
- Rotational speed, 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 time elapses or when the preset friction torque is reached. After test completion, one can print a report presenting the curves of changes in the particular quantities versus time. Optionally, the tribotester may be equipped with a system for continuous load increase.

TECHNICAL SPECIFICATIONS

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| • Type of movement | sliding |
| • Contact geometry | non-conformal (point) |
| • Nominal cylinder diameter | 8 mm |
| • Nominal cone angle | 45° |
| • Diameters of contact circles | 14.8, 17.7, 19.2 and 21.2 mm |
| • Rotational speed | up to 3200 rpm |
| • Applied load | up to 3100 N (optionally up to 7848 N with a system for continuous load increasing) |
| • Tribotester dimensions (W x H x D) | 620 x 1700 x 1100 mm |
| • Tribotester weight | 160 kg |
| • Power supply | 230 V / 50 Hz (optionally 110 V / 60 Hz) |
| • Max. power consumption | 2.1 kW |

