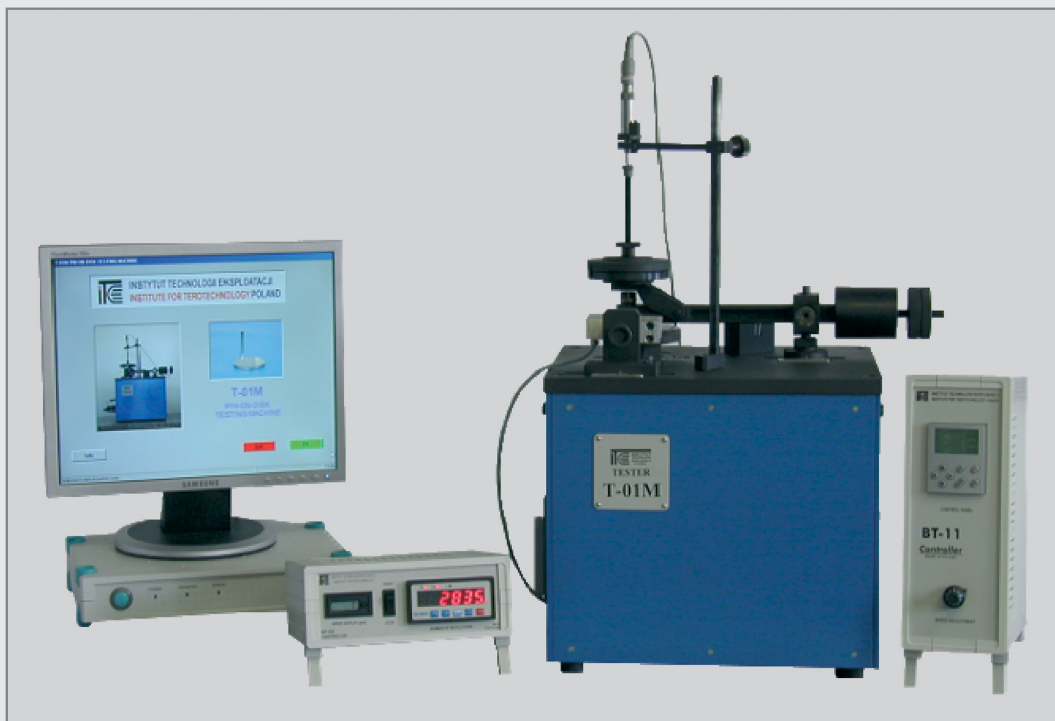


# T-01M PIN-ON-DISK TESTING MACHINE FOR EVALUATION OF FRICTION AND WEAR OF ENGINEERING MATERIALS

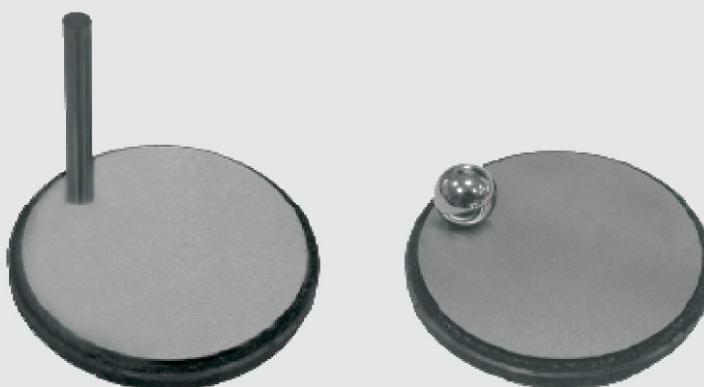
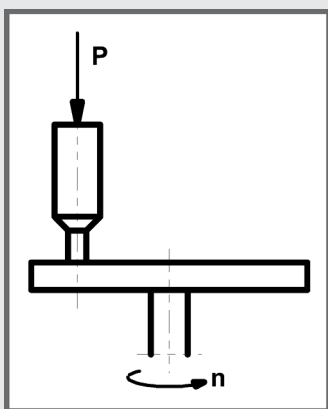


## MAIN CHARACTERISTICS

T-01M Testing Machine (with pin-on-disk or ball-on-disk friction contact) is intended for the determination of tribological properties of engineering materials used for sliding joints of machines.

T-01M Machine makes it possible to determine the wear resistance and friction coefficient for a pair of materials sliding against each other, depending on sliding velocity and applied load.

Experiments can be carried out in accordance with the **ASTM G 99** and **DIN 50324** standards.



The tribosystem consists of the stationary pin (ball) pressed at the required load  $P$  against the disk rotating at the defined speed  $n$ .

T-01M Testing Machine is equipped with a control-measuring system that consists of the following:

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

During the tests, the following quantities are measured:

- Friction force,
- The total linear wear of test specimens,
- Ambient temperature,
- Rotational speed, and
- The time and number of disk revolutions (sliding distance).

During the run, 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 sliding distance (number of disk revolutions) is reached. After test completion, one can print a report presenting curves of changes in the particular quantities versus time.

## TECHNICAL SPECIFICATIONS

• Type of movement	sliding
• Contact geometry	conformal: pin-on-disk, or non-conformal: ball-on-disk
• Nominal pin diameter	3 mm
• Nominal ball diameter	10 mm
• Nominal disk diameter	42 mm
• Sliding velocity	up to 1 m/s
• Normal load	up to 100 N (equipment for higher loads is optionally available)
• Wear track radius	up to 18 mm
• Tribotester dimensions (W x H x D)	450 x 750 x 300 mm
• Tribotester weight	65 kg
• Power supply	230 V / 50 Hz (optionally 110 V / 60 Hz)
• Max. power consumption	0.6 kW

