

INSTITUTE FOR SUSTAINABLE TECHNOLOGIES NATIONAL RESEARCH INSTITUTE – RADOM

PW-004 Multi-Year Programme

DEVELOPMENT OF INNOVATIVE SYSTEMS OF MANUFACTURING AND MAINTENANCE 2004–2008

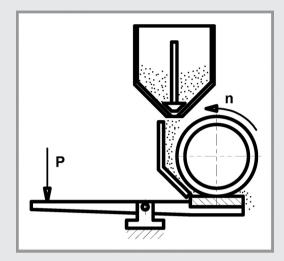


T-07 DRY SAND ABRASIVE TESTING MACHINE FOR EVALUATION OF THE RESISTANCE OF ENGINEERING MATERIALS TO ABRASIVE WEAR



MAIN CHARACTERISTICS

T-07 Dry Sand Abrasive Testing Machine is intended for determining - according to the **GOST 23.208-79** standard - the resistance of engineering materials to scratching abrasion during friction in the presence of a dry abrasive.





The test involves the abrading of the test specimen (plate), made of the tested material, with an abrasive that is introduced between the plate and the rotating wheel having a rubber rim. The plate is pressed at a specified force against the wheel rotating at a defined speed n. Before and after the run, the plate is weighed and then its mass loss is calculated. The result is related to the one obtained for the reference material.

Prior to the run, the plate is run in at the required load. T-07 Dry Sand Abrasive Testing Machine is equipped with the controller shutting off the motor of the tribotester after the preset sliding distance (number of wheel revolutions) is reached.

TECHNICAL SPECIFICATIONS

Type of movement sliding
Nominal rubber rim diameter 50 mm
Nominal test plate dimensions 30 x 30 mm
Rotating speed 60 rpm
Run-in normal load 22 N
Test normal load 44 N
Run duration 10 to 60 min

Abrasive

Tribotester dimensions (W x H x D)

Tribotester weight

Power supply

• Max. power consumption

22 N 44 N 10 to 60 minutes (600 to 3600 rev.), depending on test material hardness alumina

25 kg

360 x 440 x 250 mm

230 V / 50 Hz (optionally 110V / 60 Hz)

0.2 kW

