TE 65 MULTIPLEX SAND/WHEEL ABRASION





Description

The TE 65 Multiplex Sand/Wheel Abrasion Tester is designed to perform tests according to the conditions described in the following methods:

- ASTM G65 Standard Test Method for Measuring Abrasion Using the Dry Sand/Rubber Wheel Apparatus
- ASTM G105 Standard Test Method for Conducting Wet Sand/Rubber Wheel Abrasion Tests
- ASTM B611 Test Method for Abrasive Wear Resistance of Cemented Carbides

The machine is floor standing with test assemblies mounted on a back-plate and abradant discharged downwards into a hopper. Load is applied by pneumatic bellows in conjunction with a manually adjusted precision regulator, with a force transducer for load measurement. Speed set-point control is manual, implemented via a PLC, with input via touch-screen.





Standard Test Configurations

ASTM G65 uses hopper fed sand through a defined nozzle and loads the test piece sideways on to the wheel.



The other standards have a fluid trough and the slurry is agitated by the wheel rotation. ASTM B611 uses a steel wheel, thus providing higher stress abrasion than the rubber wheel tests.



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Technical Specifications

ASTM Conditions

Wheel Speed: 10 to 350 rpm

9" rubber wheel as per ASTM G65
Wheel Types: 6.65" steel wheel as per ASTM B611

7" rubber wheel as per ASTM G105

Load: 20 to 350 N

Motor Type: a.c. motor with frequency inverter drive

Specimen Size: 25 mm x 58 mm Specimen Thickness: 6 mm to 16 mm

Test Types: ASTM G 65, ASTM G 105, ASTM B 611

Services

Electricity: 220/240V, single phase, 50 Hz, 1 kW

110/120 V, single phase, 60 Hz, 1 kW