

Dry Sand Rubber Wheel Abrasion Tester

This tester assesses material resistance to abrasion using a rotating rubber wheel and abrasive sand. Adjustable parameters allow customizable testing and precise measurement of material loss.



Overview

Professional Abrasion Resistance Testing

The Dry Sand Rubber Wheel Abrasion Tester is a precision instrument designed according to ASTM G65-04 standards for evaluating the wear performance of engineering plastics, powder metallurgy, and alloys. It simulates real-world sliding friction conditions by utilizing a rotating rubber wheel and a controlled abrasive sand flow. This system is essential for quality control and R&D, providing accurate data on material durability and surface roughness impacts.

Performance Metrics

Key Performance Metrics

200 N

Max Test Force

200 r/min

Max Spindle Speed

2.2 kW

Input Power

Technical Specifications

Spindle Speed Range	10r/min - 200r/min
Spindle Speed Accuracy	1 r/min
Indication Accuracy	± 1%
Temperature Measurement Range	Room temperature - 200
Test Revolutions Range	1 - 999,999 set

Loading System

Available Loading Weights	1N, 2N, 5N, 10N, 20N, 50N
Loading Mechanism	Integer electrodeless loading achieved via lever equalization arm and weight plates.

System Configuration

System Components

- Host Machine (Base, Spindle, Drive system)
- Weight Loading System
- Sample Clamping Part
- Control System (Measurement and Control Instrument)
- Sand Delivery System

Adjustable Test Parameters

- Load
- Speed
- Test Duration
- Friction Sponge Material
- Surface Roughness
- Hardness

Power Requirements

Input Voltage

AC 380V

Compliance & Standards

Testing Standards

ASTM G65-04 • CE • ISO 9001:2000

Control & Display

Control Interface

- LCD screen for speed and time display
- Preset dial for test time control
- Real-time sample temperature monitoring
- Automatic alarm and shutdown protection