

Air Jet Erosion Tester

ASTM G76, ASTM G211

The Air Jet Erosion Tester is a unique and a feature rich erosion tester that is capable of testing bulk materials and coatings under erosion. Its capabilities range from subjecting sample to tightly controlled gentle erosion to some of the harshest erosion conditions seen on the field. all.

ADJUSTABLE IMPINGEMENT ANGLE

Solid particle erosion tests use fine particles as a test consumable. The Ducom Air Jet Erosion Tester is a fully self contained setup that minimizes particle escape. It has a sealed hopper for storing particles before the test. It also has a built in particle collector, complete with a filter to minimize particles escaping into the air.

TEMPERATURE CONTROL

Product Feature Snapshot Here

A dust preventive chamber with a hot air exhaust system ensure safe working conditions. The pneumatic control system ensures automatic open and closure of the heat furnace. Sufficient insulation prevent direct exposure to high temperature.

PARTICLE FLOW CONTROL

Particle flow rate is controlled by a motor, gear head and belt assembly connected to below a hopper. High flow rate of particles up to 300 g/min can be achieved by using a high-speed motor. The furnace is used to heat the samples and the air carrying the particles is heated by a joule heating technique. A maximum temperature of 1200 °C (specimens and air carrying the particles) can be achieved.

BUILT-IN PARTICLE COLLECTOR AND AIR FILTER

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Particle Velocity: 30 to 100 m/s

Erodent Feed Rate: 1 to 10 g/min

Angle of Impingement: 15°, 30°, 45°, 60°, 75° & 90°

Nozzle Diameter: 1.5 mm, standard (others on request)

Sample Size: 25 x 25 x 5 mm; 20 X 20 X 5 mm for 15 and 30 degree angles (Other sizes on request)

Erodent Hopper Capacity: 2 liters (Max)

Temperature Options: Ambient or 1,000 deg C (consult Ducom for higher temperature options)

Standard Erodent: 50 µm Alumina Al2O3; S

