



The Taber® Micro—Abrader provides a unique method to perform micro—particle erosion and abrasion testing. Equipped with a patented modulator system, the system precisely controls the mixture of pressurized air with micron sized abrasive powder to generate an abrasive flow.

Employing a high precision nozzle, the abrasive flow can be set up to test internal or external surfaces. Additionally, it can be used to clean, cut, debur and drill many materials. An integral dust collection system is used to remove the airborne media during testing.

The nozzles interchangeable are available in four standard sizes:

- Ø 0.018 in.;
- Ø 0.030 in.;
- Ø 0.046 in.;
- 0.008 x 0.125 in. rectangular.

Other nozzle sizes and configurations are available by request.

A selection of abrasive media is offered in varying sizes, shapes and hardness to provide testing versatility.

The most significant variables for erosion and wear testing include the characteristics (size, shape and hardness) of the abrasive powder. These determine the severity and aggressiveness of the wear process.



Taber® Model 8000 Abradant Material		
Type	Average Size	Description
Silicon Carbide	20 micron	Extremely hard, block shaped
Aluminum Oxide	25 micron	Very hard, block shaped
Aluminum Oxide	50 micron	Very hard, block shaped
Glass Bead	50 micron	Hard, spherical shaped
Crushed Glass	50 micron	Hard, irregular shaped

The Taber® Model 8000 is designed to optimize other factors for each material, including:





- air pressure;
- rate of abradant flow;
- nozzle orifice and design;
- duration of test;
- angle of abrasive stream to the specimen;
- distance between the nozzle and specimen;
- dust collection.

The Micro—Abrader workstation confines the abrasive powder and maintains a clean test area. Illuminated by a fluorescent lamp, the test area is viewed through a hinged, tempered glass window that is sloped for maximum visibility and reduced glare.



Taber® Micro—Abrasion Tester Model 8000: Standard Features & Options

Standard Features:

- Workstation dust collection system;
- Start/Stop control timer;
- Air filter-dryer;
- Tank Orifice (0.025 & 0.040 in.);
- 4 Standard Nozzles:
  -  Ø 0.018 in.
  -  Ø 0.030 in.
  -  Ø 0.046 in.
  -  0.008 x 0.125 in. rectangular
- Abradant (aluminum oxide & glass bead);
- Nozzle mounting stand;
- Specimen vise;
- CE Marked.

Optional Accessories (sold separately):

- Tungsten Carbide Nozzles
- Tank Orifices:
  -  [0.025 Orifice](#)
  -  [0.040 Orifice](#)
- Selection of Abrasive Media:
  -  [Silicon Carbide \(20 micron\)](#)
  -  [Aluminum Oxide \(25 micron\)](#)
  -  [Aluminum Oxide \(50 micron\)](#)
  -  [Glass Bead \(50 micron\)](#)
  -  [Crushed Glass \(50 micron\)](#)

Complete Data Sheets for Taber® Micro Abrader Model8000:



[Taber® Abraser Models 5130 & 5150 Data Sheet](#)



[Taber® Abraser Models 5150 Brochure \(CCSi\)](#)

### Taber® Micro–Abrasion Tester Model 8000: Specifications

Operating Pressure: 40 - 125 psi (2.7 - 8.6 Bars)	40 - 125 psi (2.7 - 8.6 Bars)
Inlet Air Pressure:	80 - 140 psi (5.5 - 9.65 Bars)
Powder Capacity:	50 in <sup>3</sup> (820 cm <sup>3</sup> )
Air Volume:	Typically 0.5 - 2.0 SCFM (235 - 950 cm <sup>3</sup> / sec)
Tank Capacity:	Up to 2 lbs (.9 kg) powder
Power:	115 VAC / 60 Hz or 230 VAC / 50 Hz; 40 Watts

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