

## Linear abraser

The Taber® linear abraser offers the greatest versatility of any Taber instrument available.

Designed to test virtually any size or shape specimen, this unit is ideal for material properties of contoured surfaces and finished products. Initially developed to evaluate wear resistance, this instrument can also be used to evaluate scratch resistance (single or multiple pass) and color transfer. Plus, with the universal or a custom attachment, 'real world' testing and other forms of material durability can be performed.

The linear abraser can be used for both wet and dry testing.



### Operation

A precision bearing on the spline shaft creates a "free-floating head". As the arm strokes in a linear motion, this "free-floating head" follows the contours of the specimen - curved or flat.

To enable you to simulate real world conditions, test parameters can be altered so optimal settings for each material can be established. The linear abraser allows you to select stroke length, speed and load.

The collet assembly comes standard with each unit, and is used for wear testing. Optional attachments can be used to perform scratch, coin scrape, crock-meter, rub and custom testing.

### Features

- Versatile wear and scratch testing with a single rugged, durable machine
- The new linear abraser uses a free-floating head with laser alignment guide to follow the contours of every sample, permitting testing of finished products
- With virtually no limit on sample size or shape, the linear abraser is ideal for testing plastics, automotive components, painted parts, printed graphics, optical products, rubber, leather, textiles and for use in laboratories
- Programmable test duration: program counter up to 999999 cycles (note : abradant may wear prior to end of test) - backlit display adds in viewing
- Abradants: CS-10 Calibrase® and H-18 Calibrade® Wearasers™ are included
- Interface port for remote start/stop

## Technical specifications

### Adjustable load

Standard range from 350 to 1100 g.

Using supplemental weight discs, the maximum load of the linear abraser is 2100 g.

### Operating speed

Standard preset speeds 2, 15, 25, 30, 40 and 60 cycles per minute.

Variable stroke speed from 2-75 cycles per minute.

### Five operating stroke lengths

The five operating stroke lengths are adjusted manually. By changing the location of the crank pin, a connecting rod can be set to stroke standard lengths of 12.7, 25.4, 50.8, 76.2, or 101.6 mm.

A reference label under the cover indicates proper set-up for changing stroke lengths.

Custom stroke lengths are available upon request.

### Power supply

230 V, 50/60 Hz

## Physical specifications

### Dimensions

51 x 23 x 28 cm

### Net Weight

9 kg

## Standards

ASTM D6279, F1319, ISO 105-X12

The linear abraser is CE marked.

## Options

The linear abraser can be modified from a wear tester to other testers by changing the attachment.

### Attachments

- Scratch kit : perform single or multiple pass scratch testing
- Crock kit : for evaluating color transfer
- Universal kit : perform 'real world' testing by attaching virtually anything to this attachment and abrade against your specimen (or visa-versa)
- Coin scrape attachment (available as 45°, 60°, 75°)
- Custom attachments

### Specimen tables

- Flat specimen table
- Vacuum vise
- 45° vacuum vise

### Adjustable load

- Additional weight discs (50, 75, 100, 150, 250 g) increase load to 2100 g
- Optional light weight spline kit expands testing flexibility

### Abradants

Wide selection of abrasants, made from the world famous abrasive materials found in Taber wheels (CS-10F, CS-10, CS-17, H-18, H-22)

Custom abrasants available