

## WIRA Carpet Abrasion Machine

- Widely used in industry for quality control of carpets
- Tests small specimens of carpet
- Rapid test - from half an hour per specimen
- Weight loss test

The WIRA Carpet Abrasion Machine gives a measurement of abrasion resistance.

### Test Method

Specimens of carpet are abraded by being rubbed against a standard abrasant material. Specimen and abrasant are clamped to the ends of two vertical shafts, the centres of which are offset. The shafts rotate in the same direction and at the same speed, giving a motion described by Schiefer which ensures constant relative velocity between specimen and abrasant at all parts of the specimen.

The abrasant head is weight loaded to give the recommended pressure for carpet testing of 0.56kg/cm<sup>2</sup>.

Consumable fabrics are obtainable from WIRA Instrumentation.

The test specimen is a circle of 38mm diameter which is held in the specimen head by



a screw clamp. The number of rubs (revolutions) required for a test can be set on a predetermining counter and the number carried out is shown on a totaliser. Another counter displays the total number of rubs in successive testing cycles.

The amount of abrasion is determined by measuring the weight loss after 5,000 rubs (BS EN 1813). Alternatively, carpet specimens can be rubbed through to the backing in times of between 30 minutes and 5 hour, the number of rubs to end point is recorded (PD 6527: method 17:1990).

The end point is assessed against standard photographs.

**Conforms to:**  
**Wools of New Zealand/  
IWS Report CS 427:1990**  
**Wools of New Zealand test  
methods 283 & 122**  
**IWS test methods 122 & 283**  
**BS EN 1813 :1998**  
**PD6527: method 17:1990**

*Dimensions:*  
*Width: 330mm*  
*Depth: 330mm*  
*Height: 550mm*

*Power Consumption: 375W*

**Consumables:**

- *SM25 Abradant fabric*  
*Order code - **CAM:CTH***
- *Polyester abradant fabric*  
*Order code - **CAM:PLY***
- *Felt backing discs*  
*Order code - **CAM:FLT***
- *Carpet sample holder*  
*Order code - **CAM:CPS***

**Yarn Abrasion Adaptor**

The yarn abrasion attachment to the WIRA Carpet Abrasion Machine allows carpet yarn samples to be mounted in a special holder, which allows the yarn to be tested as it would appear in a carpet. This simple and effective attachment is

**Order Code CAM:YNS**

ideal for carpet yarn spinners and carpet manufacturers to assess the effect on carpet abrasion of changes to yarn engineering, chemical treatment etc without the necessity of manufacturing sample carpet.