



Scope of application

A drum peel test fixture is used to determine the resistance of core composites to peeling loads acting perpendicular to the surface layer, in accordance with DIN 53295 or similar standards. This test fixture is suitable for core composites whose surface layer can be wound around the drum during the test. The part of the core composite that is not wound around the drum (the core and the second top layer) must be sufficiently rigid to resist bending. The drum peel test fixture can be used in all standard universal testing machines.

During the test, the outer layer of a core-composite test specimen with a constant radius is peeled away from the core and wound onto a cylindrical drum. The loads during peeling are measured and recorded from the start to the end of the peeling process. To do this, one end of the test specimen is secured to the drum, whilst the other end is clamped into the upper specimen holder mounted in the universal testing machine.

After applying a preload, the peeling test is carried out at a speed of 25 mm/min. The load required for peeling is recorded in a load-displacement diagram (peeling diagram), which is used for analysis. To determine the average tensile load, only the loads measured in the middle section of the test specimen's length are taken into account. The first and last 10 per cent of the curve's length must not be included in the evaluation.

Features & benefits

- User-friendly and easy-to-operate test fixture
- Simple installation and replacement of the test specimen thanks to the lockable drum
- Precise linear guidance of the roller-bearing drum with end stops
- Stainless design made from high-alloy tool steel



Technical data

Characteristics	Values
Specimen geometry	300 mm x 75 mm x 0,5...1 mm
Drum diameter (inside)	100 mm
Drum diameter (outside)	125 mm
Max. test load	2,5 kN
Permitted temperature range	+10...+40 °C
Dimensions (W x D x H)	200 mm x 140 mm x 330 mm
Weight	approx. 9 kg

Options

- Adapter for specimen holder for upper mounting in universal testing machine according to customer specification
- Clamping pad for test specimens (drum)
- Clamping pad for test specimens (specimen holder)

Standards

- DIN 53295:1982-02
Testing of sandwiches; Peel test by means of a drum
- ASTM D1781 - 98
Standard test method for climbing drum peel for adhesives

