

De Mattia fatigue tester

Dynamic tester for the execution of fatigue tests in compliance with ISO 132, 6943, ASTM D 430-B, DIN 53 522 -1/2/3

The instrument is built according to International Standards about fatigue, which describe test methods for the determination of the resistance of vulcanized rubbers under repeated deformations.

This instrument permits to perform flex cracking/crack growth test and Tension fatigue test.

Instrument Regulation

According to the test method and the type of sample, the test cycle can be set by the user:

- the frequency can be set between 60 and 300 rpm
- the stroke can be set between O

and 60 mm

- the distance of the grips can be set (up to 100 mm)
- the number of cycles before automatic stop can be set
- up to 16 samples can be tested at the same time.

Construction

The exclusive movement system with both sample holders moving in opposite directions extremely low levels of noise and vibrations. The instrument has a solid aluminium and stainless steel structure that ensures long duration and repeatable results.

Control device

The instrument is controlled using a touch screen display

Safety devices

Safety protection doors with safety switch Motor controller with torque overload control CE labelling

Accessories

Mould for sample preparing Piercing tool for crack-groth test



Standards the instrument complies with	ISO 132, 6943, ASTM D 430-B , D 813; DIN 53 522 -1/2/3
Speed adjustment	from 60 to 300 cycles/min - 1 to 5 Hz
Run adjustment	between 0 and 60 mm
Distance of the grips	maximum 100 mm
Maximum force in traction	600 N (at 1 Hz oscillation frequency)
Sample Holder	16 samples can be tested at the same time, De Mattia, Dumbbell and Ring samples can be used
Data displayed	Number of oscillations
Test piece holder dimensions	Ø 200 X 400 mm
Power supply	220 VAC \pm 10%, 50 Hz \pm 3, 10 A, single phase – 110 VAC \pm 10%, 60 Hz \pm 3 on request
Instrument Dimensions	(W x D x H) 560 x 560 x 970 mm
Weight	80 Kg

Laboratory instruments for rubber and plastic testing