

TESTING INSTRUMENTS FOR
A MEASURABLE DIFFERENCE...

IDM
instruments

FOAM CONSTANT LOAD POUNDING MACHINE

MODEL: IDM-F0021-M1



INTRODUCTION

The Constant Load Pounding Machine is used for the determination of loss in thickness and loss in hardness of flexible cellular materials intended for use in upholstery.

This test provides a means of assessing the service performance of flexible cellular materials used in load-bearing upholstery. The test can be performed on both standard size test pieces cut from stock material and shaped samples.

The test is performed by the indenter repeatedly compressing the test piece. A pneumatic cylinder is mounted inside the machine, raising the base platen to pound against the circular indenter. A set of weights are fixed on top of the indenter to give a repetitive load against the sample. A maximum load of 750N per cycle is run for 80,000 continuous load cycles at 70cpm according to international standards. The machine also performs standard tests with viscoelastic memory foams at 10cpm for 12,000 cycles according to ASTM D3574. This machine can be set for 0 to 999,999 cycles.

For added safety, the sample area is fully enclosed, with limit switches put in place so all operation is ceased if the door is opened, ensuring no harm come to operators

FEATURES

- 21.5 kg Indentor Assembly
- Timer, 0 - 99 minutes
- 1 x 10 kg Weight set (2 pcs)
- Counter, 0 - 999,999 cycles
- 2 x 20 kg Weight sets (4 pcs)
- Start/Stop Buttons
- 1 x 5 kg Weight set (2 pcs)
- Open Door Safety Switches
- Up/Down Indicator lights
- Emergency Stop Switch
- Pressure Regulator

SPECIFICATIONS

Model	IDM-F0021-M1	
Plane Platen	550mm x 410mm Working Area: 380mm x 380mm	
Indentor	Head Diameter: 250 ± 1mm Head Corner Radius: 25 ± 1 mm	
Maximum force	750 ± 20 N	
Adjustable cycle speed	70cpm setting: 70 ± 5 cpm 10cpm setting: 10 ± 1 cpm	
Max sample thickness	200 mm	
Platen Size	1000mm x 800mm	1250mm X 1250mm
Voltage Supply	Air: 600kpa - 800kpa (Air volume sufficient to operate for an extended period of time) Electrical: 220/240 VAC @ 50HZ or 110 VAC @ 60HZ (please specify when ordering)	
Machine Dimensions	D: 1870 mm x W: 860 mm x H: 875 mm @ Weight: 280 kg	
Packaged Dimensions	D: 2120 mm x W: 9800 mm x H: 1110 mm @ Weight: 452 kg	

APPLICATIONS

- Foam
- Seating
- Polyurethane

STANDARDS

- AS 2282.12
- ASTM D3574
- ISO 3385
- BS EN ISO 3385
- DIN EN ISO 3385
- EN ISO 3385
- JIS K 6400

WARRANTY AND CALIBRATION SERVICES

- **1 year Warranty**
- Our **Preventive Maintenance and Calibration (PM&C) program** has been designed to make the maintenance and calibration of your valuable testing equipment more cost effective by preventing breakdowns and downtime by regular calibration, service and replacement of defective parts. Talk to us about this today.

RELATED ITEMS

1. Use the Mattress/ Foam Compression Tester (IDM-F0013) is used to evaluate a degree of firmness common within the foam and furniture industries, either in the laboratory, or on the production line.



IDM-F0013-M1

2. Use our Roller Shear Machine (IDM-R0010-M1) for determining the resistance to compression fatigue of foam using the Dynamic roller compression test.



IDM-F0028-M1