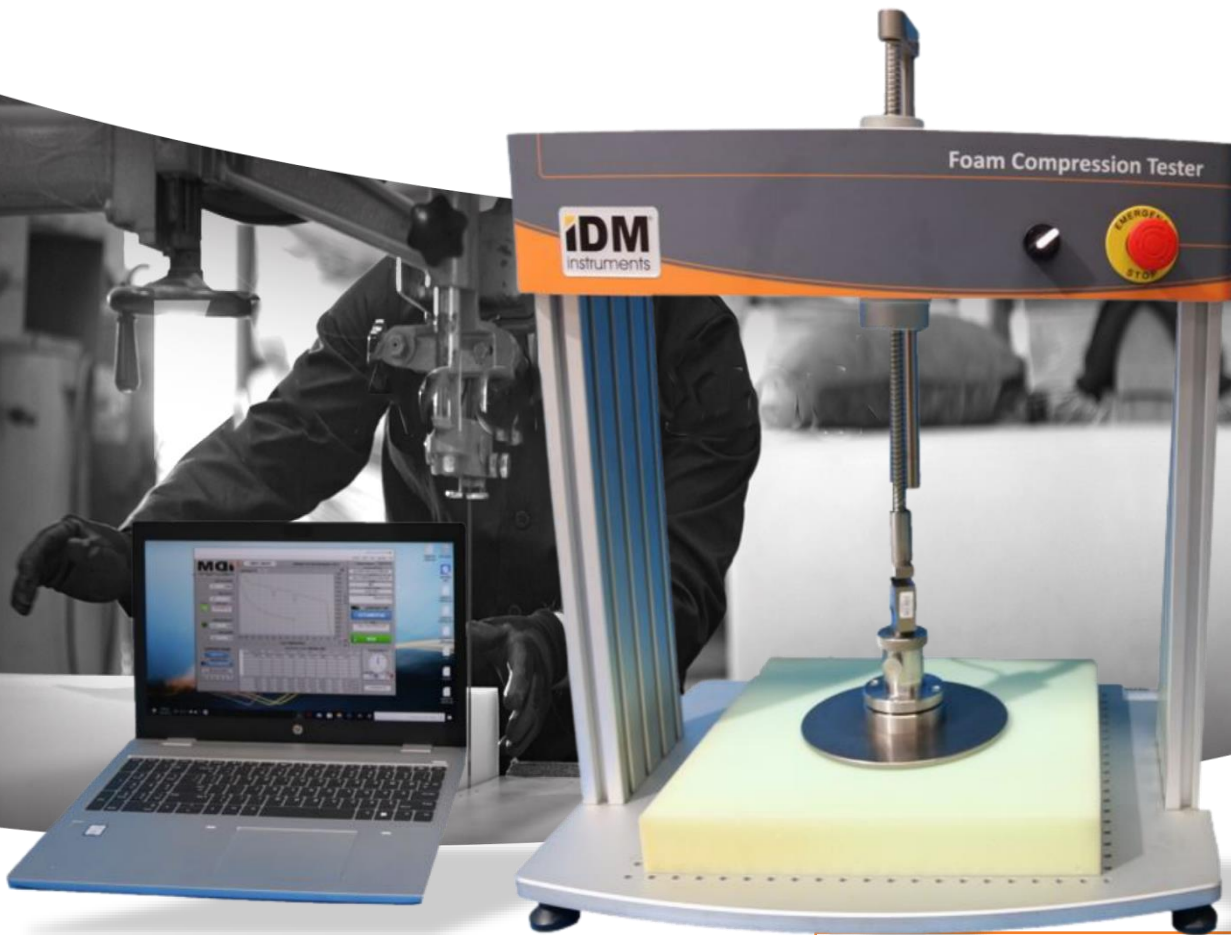


TESTING INSTRUMENTS FOR  
*A MEASURABLE DIFFERENCE...*

**IDM**  
instruments

# FOAM COMPRESSION TESTER

MODEL: IDM-F0028-M1



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## INTRODUCTION

The IDM Foam Compression Tester is used for determining the deflection force of flexible cellular polyurethane. The ILD or IFD of flexible cellular polyurethane is a common test, as per ASTM, ISO, AS, BS international standards.

This instrument offers a variety of software features that allows programming of many parameters, using the Universal Tester program developed by IDM Instruments Pty Ltd®. This software package allows the operator to conduct a large range of tests with an almost limitless array of test parameters and displayed test information when used with a compatible PC Test Configurations are prepared for each test type. This procedure is then fully automated.

The test scripts as well as the operating parameters are entered in the Configuration Panel to run a test. Values including the test type, sample piece, sample size, standard reference and many more values can all be entered and saved to be retrieved at a later stage.

The Software Program for the Foam Compression Tester is automatic. Once the Test Configuration menu has been programmed, the “Start” button is pressed, initiating the test. The results of the test are displayed on the PC in real time. They can then be saved and/or printed for later use.

The Foam Compression Tester has optional platen sizes and fixtures that suit several standards and test types with an option to custom make these.

## FEATURES

- Loading System – closed loop micro computer which drives a ball screw and nut for its vertical movement.
- Load auto-zeroing
- Safety function for overloading provided
- Test area of 500mm wide and not restricted at front and rear
- PC supplied (with 19” flat screen monitor)

## SOFTWARE FEATURES

- Data Sampling is adjustable from 1-200,000Hz
- Position or Load control
- Test parameters displayed with graph simultaneously.
- Real time graphic display of data and selectable graphical display presentation
- Data can be sent to Excel
- Out of range stop
- Auto return after a test is selected
- Calibration File to calibrate the instrument
- Statistical analysis & printable Reports
- Windows based software
- Overlay display of data curve possible during test
- Other test methods programmable by the operator.
- Cyclic testing with data recording during cycle



## SPECIFICATIONS

Feature	IDM-F0028-M1
Load Cell Range	0-2224N x 0.1N ± 0.5%FS
Travel	Approx. 200mm x 0.1mm ±1%FS
Speed	1 to 500 mm/min
Return Speed	500 mm/min
Speed Accuracy	Better than +0.5% ±1%FS
Maximum Stroke Limiter upper/lower	2 points
Compression Platens Area	400 mm X 400 mm
Indenter Foot	322 ± 2 cm <sup>2</sup>

## OPTIONAL ITEMS

### Compression Platens

- Fixed Platen: 322 ± 2cm<sup>2</sup> - 8" Ø (IDM-F0028-OP1)
- Swivel Platen: 322 ± 2cm<sup>2</sup> - 8" Ø (IDM-F0028-OP2)
- Swivel Platen - 390 x 390mm - ISO 3386-1 (IDM-F0028-OP7)

\*Custom platen fixtures available on request



### Load Cells

- Load Cell – 250 KG - 2.5 kN (IDM-F0028-OP3)
- Load Cell – 50 KG - 0.5 kN (IDM-F0028-OP4)

### Larger Capacity Machines

- Extended Capacity – 5 kN (IDM-F0028-OP5)
- Wider Machines are available for large samples from 500mm to 1000mm + (IDM-F0028-OP6)

\*Custom size indentors available on request



## APPLICATIONS

- Flexible Cellular Polyurethane
- Latex foam
- Rubber Foam
- Carpet underlay
- Foam components
- Springs

## STANDARDS

- AS 2282.8
- AS 2281
- ASTM D3574
- ISO 3386: 1984
- GB 10807
- JIS K 6400
- ISO 2439

## 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-R0010-M1