

FOAM INDUSTRY INSTRUMENTS











CATALOGUE



ABOUT US

IDM Instruments Pty. Ltd. is a leading manufacturer of testing and measurement instruments. With over 49 years of experience, we have successfully delivered testing solutions to leading global companies.



Since 1972



DIN

Testing Standards Accredited



Global Presence



Custom Manufacturing



Lifetime support



1-year Warranty



Calibration & Maintenance



Trusted by Leaders

KEY BUSINESS AREAS

We are proudly Australian owned and managed. Started in a humble garage in 1972, we have grown our business into diversified markets and areas including but not limited to:

- Testing Instruments & solutions
- Sensors
- Manufacturing
- Services & Support





ROLLER SHEAR MACHINE

MODEL NO: RØØ1Ø

The Roller Shear Machine is used to determine the resistance to compression fatigue of flexible cellular polyurethane using dynamic roller compression testing. The Roller Shear Machine fatigues a specimen dynamically with a constant force deflecting the material both vertically and laterally. It has been used for many years in the foam industry to determine the percentage loss in thickness.



COMPRESSION TESTER

MODEL NO. FØØ28

The IDM Foam Compression Tester is used for determining the deflection force of flexible cellular polyurethane, with reference to various international standards, based on the ILD and IFD. A smaller version of the F0013 machine.



FOAM POROSITY TESTER

MODEL NO. FØØ31

The Auto FPT is used for monitoring the porosity of flexible cellular polyurethane. The machine determines how easy air passes through a cellular structure. Airflow values may be used as an indirect measurement of cell structure characteristics.



CORNELL TYPE TESTER

MODEL NO. C0044

The C0044 is used to test the long term capacity of bedding to resist cyclic loading. The machine consists of a double hemispherical ram head on a manually adjustable shaft. A load cell is located on the ram head to measure the force being applied to the mattress.



FOAM RESILIENCE TESTERS

MODEL NO. F0030

The Foam Resilience Tester has been manufactured to determine the resilience of flexible cellular polyurethane. A steel ball is dropped vertically onto a test piece and the rebound height is measured and expressed as a percentage of the height dropped.





MATTRESS ROLLATOR & DURABILITY TESTER

MODEL NO: MØØ15

The Mattress Rollator consists of a weighted roller which moves width ways across a test mattress to simulate body movement. The length of stroke to which the Roller moves is very easily adjusted, by sliding the stroke adjustors left or right, to suit the relevant mattress under test. Unloading and loading of the Roller onto the test mattress is done easily via a motor driven lifting assembly.

THICKNESS GAUGE FOR HIGH LOFT PRODUCTS

MODEL NO. TØØ22

This unit has been designed to measure the thickness of high loft nonwoven material, by means of a digital readout. Thickness is determined by observing the linear distance that a moveable plane is displaced from a parallel surface by the specimen while under a specified pressure.

BEDDING IMPACT TESTER

MODEL NO. 80008

The Bedding Impact Tester is used to determine the effects of impact for comparison testing under realistic abuse conditions. The machine consists of a 79.5 ± 1kg platen with a maximum load of 250kg which is used to drop down from specified heights. The machine operates both manually or automatically using an external PC linked to the computer.

FOAM COMPRESSION TESTER

MODEL NO. FØØ13

Used to evaluate a degree of firmness and hardness, common within the foam and furniture industries, based on a physical property called the indentation force deflection (IFD) and is calculated by determining the force required to deflect the test piece a percentage of its original thickness using a circular indenter. It is operated using the Universal Tester program developed by IDM.

MATTRESS COMPRESSION TESTER

MODEL NO. F0021

The Foam Resilience Tester has been manufactured to determine the resilience of flexible cellular polyurethane. A steel ball is dropped vertically onto a test piece and the rebound height is measured and expressed as a percentage of the height dropped.







FOAM CONSTANT LOAD POUNDING MACHINE

MODEL NO: F0021

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 of the latex and polyurethane types used in load-bearing upholstery. The test can be performed on both standard size test pieces cut from stock material and to shaped components.



THICKNESS GAUGE - FOAM & LOFTY PRODUCTS

MODEL NO. FØØ17

The Foam & Lofty products Thickness Gauge gives an accurate measurement of the thickness to be the basis for accurate values of various properties of cellular materials, such as density, tensile strength, tear resistance, and compression set.

Options: Small & Large



FOAM POROSITY METER

MODEL CELLFLO

CellFlo is a pocket-sized digital instrument, ergonomically designed with soft grip edges for hand-held comfort. With a digital air flow reading of 0-100 (zero to 100% flow), the unit allows safe monitoring of foam quality at the production line cut-off. This can also assist necessary production adjustments during the run.



FLAMMABILITY TESTER

MODEL NO. F0009

Used to measure flame duration and material consumed for small specimens of densities less than 100kg/m, exposed to a small flame with the specimen in a vertical orientation.



FOAM CONSTANT DISPLACEMENT FATIGUE TESTER

MODEL NO. FØØ29

The Constant Displacement Foam Fatigue is a floor standing instrument with two daylight samples areas, one on the left and right side of the machine. The center, top and bottom plates are stationary, while the upper and below center platens simultaneously move up and down. Compression platens measure 500mm x 500mm. 2 Capacity and 4 Capacity units available.





CONSTANT DEFLECTION COMPRESSION TESTER

MODEL NO: F0026

The Constant Deflection Compression Tester is designed to measure the change of thickness of a polyurethane sample of 50mm x 50mm, after deflecting the test piece to a specified deflection, at a certain amount of time and temperature.

CONSTANT DEFLECTION STATIC FORCE

MODEL NO. FØØ27

The Constant Deflection Static Force instrument determines the loss of indentation force deflection (IFD), loss of thickness and the structural breakdown by visual assessment of polyurethane.



FOAM PAT HIGH SPEED MIXER

MODEL MØØØ5

The High Speed Mixer is used for the rapid mixing of foam compounds to produce a well-mixed sample pat, which can be poured to form a sample for testing purposes and quality control. It is made from Stainless Steel for easy cleaning, and featuring automated mixing, as well as variable mixing speeds for added ease of use.



FOAM PAT MIXER

MODEL NO. FØØØ9

A smaller version of model M0004, the Foam Pat Mixer helps produce a well-mixed sample pat, which can be poured to form a sample for testing purposes and quality control. It features Stainless Steel components for easy cleaning, as well as variable mixing speeds for added ease of use.



FOAM COMPRESSION TESTER - PORTABLE

MODEL NO. FØØ29

This bench top operated Foam Compression Tester is designed to automatically determine Compression Load Deflection of flexible cellular polyurethane samples, up to a size of 10cm x 10cm x 5cm thick and provides compression and recovery curve analysis via PC. An economic solution to foam compression where smaller samples are applicable.





UNIVERSAL TESTING MACHINES

MODEL NO: F0026

IDM provides a range of UTM's which feature multiple testing capabilities including compression testing and tensile testing. UTM's eliminate the need of having multiple machines to perform various tests (i.e. compression and tensile). UTM's offer versatility and the ability to set up dual tests to speed up test set up, production & ultimately reduces operator fatigue & possible setup errors.

CUTTING DIES

VARIOUS OPTIONS

Tool Steel and Ruler Dies of standard and custom sizes can be used and interchanged with ease, allowing a large range of dies to be used with any press. These dies are manufactured as per samples sizes mentioned in various testing standards.



SAMPLE CUTTING PRESSES

VARIOUS OPTIONS

IDM offers a range of sample cutting presses which are fast and easy to operate. Used for sample preparation of various sized test pieces. The cutting dies are manual, hydraulic, pneumatic. Available in various capacities to suit all sample preparation requirements.



MATTRESS TEMPERATURE & HUMIDITY DATA LOGGER

MODEL NO. MØØ11

The Mattress Temperature & Humidity Data Logger has been specially designed and manufactured to measure and data log for temperature and humidity percentage (%).



THICKNESS GAUGES - HAND HELD

MODEL NO. TØØ14

Handheld Thickness Gauges can be used on many different materials where an accurate measurement of thickness is required. Different models are available depending on weight and contact point required.



QUALITY EXCELLENCE ASSURED

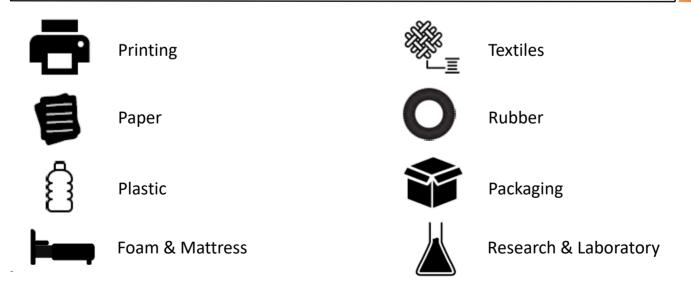
The IDM Preventive Maintenance and Calibration (PM&C) program has been designed to make the maintenance and calibration of your valuable testing equipment more cost effective by preventing breakdowns and downtime by regular calibration, service and replacement of defective parts.

We have successfully executed this program with the help of 38+ representatives spread across the globe. PM&C team members are supplied with the necessary resources to main our testing equipment at peak performance throughout thier lifetime, benefiting both you and your equipment. Testing equipment in your facility (or at IDM) will be calibrated using industry-wide, internationally recognised standards or as per your specific requirements.

Calibrated instruments are labelled accordingly and documented with an IDM full calibration report or certificate of conformance (whichever is applicable). All calibrations are maintained in IDM's calibration database and you will be notified when your next service/calibration is due. IDM's Calibration work is comprehensive- adjusting your equipment to give you the right results, whenever possible.

For over 49 years now, the IDM name and brand has grown across the globe. Our commitment to quality and providing the measurable difference reflects upon our customers' satisfaction. We look forward to continuing to provide our expertise and assisting you with your next requirement. Speak to IDM today, and see how an IDM testing instrument will benefit your quality control process.

INDUSTRIES & APPLICATIONS



& many more....





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