

# IDM<sup>®</sup>

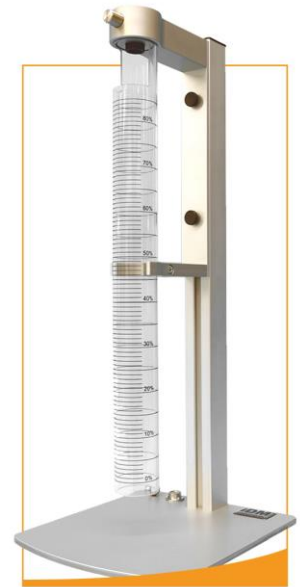
## instruments

IDM's Foam Resilience Tester determines the resilience of flexible cellular polyurethane. A steel ball is dropped vertically on to a test piece and the rebound height measured and expressed as a percentage of the height dropped.

The F0030 -M1 is an economical resilience tester, where the steel ball is mechanically dropped, and the rebound result is captured by eye against the scale.

The F0030-M2 is a full digital model where once the ball is dropped the result is automatically captured on the touch screen, with the advantages of great repeatability, digital test results, statistical data and a USB port for exporting.

The Digital Foam Resilience Tester uses an electronic sensor to detect the impact of the steel ball on the foam sample. Using data from the repeated impact, the IDM Software calculates the rebound value. After each test, the rebound value is displayed on the touch screen.



**Model F0030-M1**

### Applications:

- Flexible Cellular Polyurethane
- Visco Foams

### Features:

- 2 x Ø16mm Chrome Steel Ball
- Adjustable feet – for levelling
- Height Adjustable Test Tube
- Magnetic Ball Release

#### **M2 ONLY Features:**

- 7" Touch Screen – for control and test display
- Test Report Generation - Microsoft Excel
- Statistical Data (min, max, mean, deviation)
- 1 x USB port – for saving test reports
- Magnetic Rod for ball retrieval

### Standards:

- |                       |                   |
|-----------------------|-------------------|
| • AS 2282.11          | • EN ISO 4651     |
| • ASTM D3574 – Test H | • BS EN ISO 8307  |
| • ISO 8307            | • DIN EN ISO 8307 |
| • JIS K 6400          | • ISO 8307        |
| • BS EN ISO 4651      | • BT/T6670        |
| • DIN EN ISO 4651     | • GB 10807        |



**Model F0030-M2**



### M2 ONLY – Operation & Test Report Screens:

HOME v141218

MENU

REPORTS

EXIT

## Resilience

# 0.0 %

-100-

-90-

-80-

-70-

-60-

-50-

-40-

-30-

-20-

-10-

SL NO.	RESILIENCE	RESULT	TIME		
9	7.7 %	P	18:58:00		
8	7.7 %	P	18:57:51		
7	58.5 %	P	18:57:37		
6	35.7 %	P	18:57:09		
		MIN	MAX	MEAN	DEVIATION
Resilience		5.3 %	59.3 %	31.1 %	20.6 %

EXPORT

SAVE

CLEAR

HOLD

At the end of each test, the data can be saved into the table on the screen, the program calculates the minimum, maximum, mean and deviation from a series of tests.

Report\_a18-01-2019\_12\_08\_09\_PM.xls  
Not saved yet

RESILIENCE	MIN	MAX	MEAN	DEVIATION
RESILIENCE	5.3 %	59.3 %	31.1 %	20.6 %

Sample No.	RESILIENCE	RESULT	TIME	DATE
1	34.7 %	PASS	18:43:08	18-01-2019
2	35.1 %	PASS	18:54:05	18-01-2019
3	5.3 %	PASS	18:04:18	18-01-2019
4	36 %	PASS	18:56:04	18-01-2019
5	59.3 %	PASS	18:56:18	18-01-2019
6	35.7 %	PASS	18:57:09	18-01-2019
7	58.5 %	PASS	18:57:37	18-01-2019
8	7.7 %	PASS	18:57:51	18-01-2019
9	7.7 %	PASS	18:58:00	18-01-2019



### Specifications:

Model	F0030-M1	F0030-M2
<b>Type:</b>	Foam Resilience Tester – Standard	Foam Resilience Tester – Digital
<b>Power Supply</b>	N/A	110/240V @ 50/60Hz (universal)
<b>Readout</b>	N/A	7" Touch Screen
<b>Export</b>	N/A	1 x USB Port
<b>Ball Release</b>	Mechanical Button (magnetic release)	Touch Screen (magnetic release)
<b>Ball Retrieval</b>	N/A	Magnetic Rod
<b>Drop Tube</b>	Clear Acrylic Plastic	
<b>Drop Tube Diameter</b>	Ø50mm (3mm wall thickness)	
<b>Drop Tube Setting</b>	0 - 50mm (maximum sample thickness)	
<b>Drop Height</b>	516mm to bottom of tube	
<b>Tube Markings</b>	1% - 120° arc, 5% - complete circle	
<b>Drop Ball Size</b>	Ø16mm	
<b>Drop Ball Weight</b>	16.5g	

### Options:

- Spare Ø16mm steel ball
- JIS K6400 Method A – Tube Length: 460mm, Drop Height: 476mm

### M2 ONLY – Connections:

- 110/240 VAC @ 50/60Hz

### Dimensions:

#### F0030-M1 Standard

- **H:** 620mm
- **W:** 250mm
- **D:** 290mm
- **Weight:** 7kg

#### F0030-M2 Digital

- **H:** 620mm
- **W:** 375mm
- **D:** 290mm
- **Weight:** 6kg

### Related Items:

Use foam samples cut with the Sample Band Saw with the F0031 Automatic Foam Porosity to test foam porosity.



### Related Items:

Use samples cut with the Sample Band Saw with the F0025 Universal Testing Machine for compression or tear testing.

