TESTING INSTRUMENTS FOR
A MEASURABLE DIFFERENCE...

IDM instruments

CREASE AND STIFFNESS TESTER

C0039 SERIES

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INTRODUCTION

Crease and stiffness testing of carton board, paper, printing and packaging materials are important measures to have correct and uniform quality. The board stiffness and crease recovery (spring back) is important in the performance of cartons on high-speed packaging machines and when manual folding. The value of crease stiffness is technically important in the folding of carton blanks during their erection and closure. The crease recovery (spring back) can result in forces, which distort the erected carton or cause stresses to be applied to closures, which reduce their effectiveness.

Crease and Stiffness Tester (IDM-C0039-M1)

The Model C0039 (M1) can determine the crease recovery by the decrease in resistance offered by creased board after it is folded 90° at the crease measuring the recovery force after 15 secs. Board Stiffness is determined by bending a 50mm length of board through a 15° angle.

Round 90° Crease Stiffness Tester (IDM-C0039-M2)

The C0039-M2 offers the same capabilities as the C0039, with the added functionality of being able to test for round corner creases. Round corners can be tested with ease using the easily changeable Round Corner Jaw. Folds are still able to be bent at 90°, and the Round Corner Jaw allows leeway for rounded corners to bend as intended. Another added functionality of the C0039-M2 is the ability to adjust the Load Bar position via the Load Bar Adjustment Knob, allowing for a range of different test lengths of 5mm, 10mm or 15mm creases.

Digital Crease Stiffness Tester (IDM-C0039-M3)

Along with the above-mentioned features of the C0039 M1 & M2 model, C0039-M3 includes a digital display. The real-time display screen is the latest addition to the Digital Stiffness Tester. The digital display is colour touch screen ensures simple operation making it convenient to check statistics, test reports and results. This product is the latest and most updated version available.

SPECIFICATIONS

Model	IDM-C0039-M1	IDM-C0039-M2	IDM-C0039-M3
Range	0 – 10,000 gf (Gram Force)		
Bending Angle	90°		
Round Corner Bending	N/a	Yes	Yes
Stiffness Bending	15°	N/a	N/a
Crease Stiffness Sample	38 x 36mm		
Board Stiffness Sample	70 x 38mm	N/a	N/a
Accuracy	1 (+/- 0.5%)		
Test Time	15 seconds		
Check Weight	200g included		
RS 232 Output	Included		

OPTIONAL ITEMS

• IDM-C0039-OP1 - CST Data Acquisition Software (WinWedge Pro)

The IDM Crease and stiffness tester can be purchased with standard RS232 and software to automatically capture the output of results to a PC where stiffness/crease ratios can be calculated, test results saved, and test reports created and printed. This makes the CST even more easy to use with accurate precision results


Crease Test Results

IDM instruments

Customer:		Report No:	1
Location:	IDM	Report By:	T. HALMOS
Job No:	7576	Test Standard:	RS6965
Serial No:	TDA	Room Temperature:	21° C
Material Description	BOARD	Material Condition:	

Insert cursor where data is to be inserted before testing

	Force 1 limits	Force (g)
Upper		100.0
Lower		

ID No.	Force (g)	Date	Time	Pass/Fail	Initials	Comments
1	16	20/03/2011	09:28:00 AM	Pass	TH	
2	16	20/03/2011	09:28:10 AM	Pass	TH	
3	17	20/03/2011	09:28:20 AM	Pass	TH	
4	18	20/03/2011	09:28:30 AM	Pass	TH	
5	19	20/03/2011	09:28:40 AM	Pass	TH	
6	20	20/03/2011	09:28:50 AM	Pass	TH	
7	21	20/03/2011	09:29:00 AM	Pass	TH	
8	23	20/03/2011	09:29:10 AM	Pass	TH	
9	25	20/03/2011	09:29:20 AM	Pass	TH	
10	24	20/03/2011	09:29:30 AM	Pass	TH	

Mean	19.500	grams
Mean	1.900	millinewtons
Std. Deviation	3.028	
Range	9.000	grams

Checked By: Name: T. HALMOS Signature: Date: 20/03/2011

• IDM-C0039-OP2 - USB to RS-232 Cable

• IDM-C0039-OP3 - Round Corner Jaw

APPLICATIONS

- Paper & Carton Board Manufacturers
- Ink & Coating
- Packaging Manufacturers
- Packaging Development

BENEFITS

- Easy to use, dual purpose unit
- Increase production
- Reduce waste
- Increase packaging speeds

STANDARDS

- GB/T2679.3 - Paper and Board–Determination of resistance to bending
- GB/T 23144 - Paper and Board–Determination of bending stiffness by static methods Generation principle
- ISO2493 - Paper and Board–Determination of resistance to bending
- ISO 5628 - Paper and Board–Determination of bending stiffness by static methods Generation principle
- BS6965-1 - Creasing properties of carton board

CONNECTIONS

- Electrical: 220/240 VAC @ 50 HZ
  or
  110 VAC @ 60 HZ
  (please specify when ordering)

DIMENSIONS

Instrument:

- H: 200 mm
- W: 205 mm
- D: 260 mm
- Weight: 5.5 kg

Packaged:

- H: 420 mm
- W: 420 mm
- D: 440 mm
- Weight: 8 kg

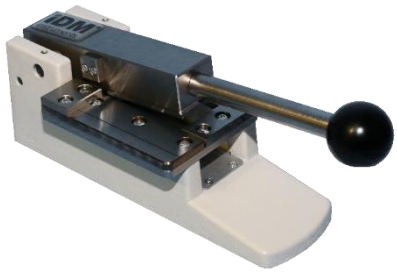
WARRANTY AND CALIBRATION SERVICES

- **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

- **IDM-C0016-M1 - Crease & Stiffness Cutter**

IDM's precision cutter is designed to assist in the easy and accurate cutting of sample specimens for both crease stiffness and bending stiffness testing.



Samples prepared:
• Crease stiffness testing 38 x 36mm
• Board samples 70 x 38mmDimensions

Dimensions	H: 85mm x W: 95mm x D: 295mm
Weight	3.5kg

- **IDM-C0053-M1 - Use Carton Crease Proofer to determine the type of crease after bending samples**

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