



Fwd: IIT Hyderabad IM10T-15

Service ABS <service@absinstruments.com>

Fri, Mar 15, 2019 at 10:22 AM

To: snk@iith.ac.in, Stores IIT Hyderabad stores@iith.ac.in, Sales ABS sales@absinstruments.com

Dear Sir,

Please find below the details of specimens to be arranged by you at the time of installation:

A minimum of 5 of each would be ideal, 10 preferable.

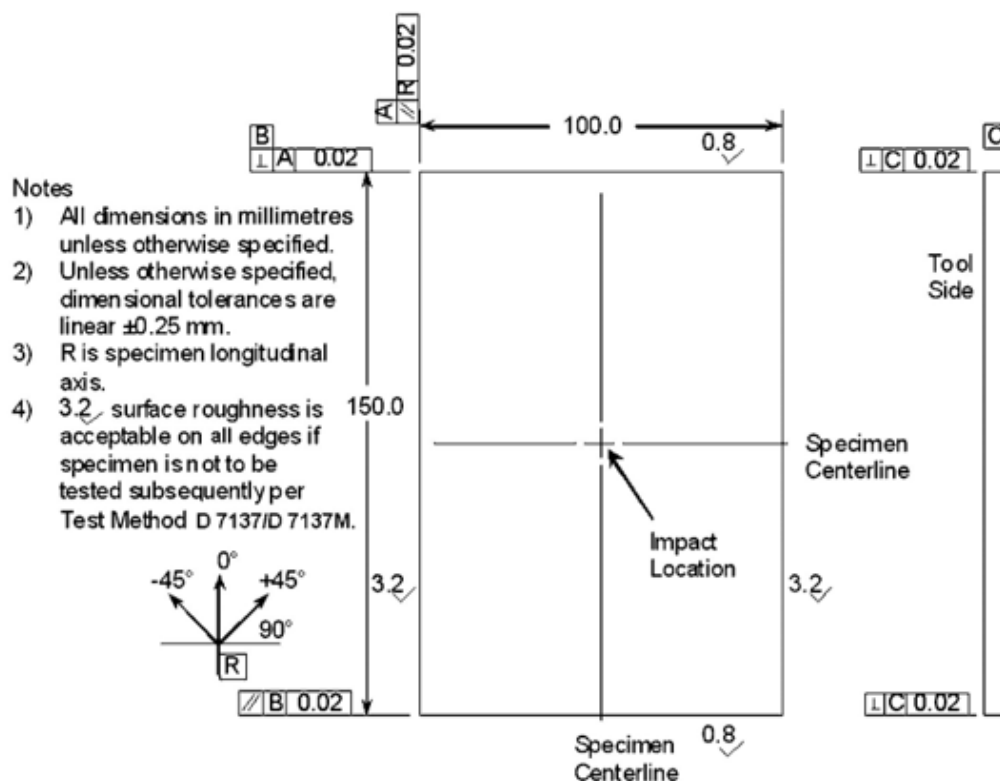
1. Ideally multi-axial plaque test require specimens making to ISO 6603-1, alternatively, any flat polymer specimen would be suitable, provided its thickness is between 1mm and 4mm with minimum dimensions of 60mm x 60mm:

6.1 Shape and dimensions

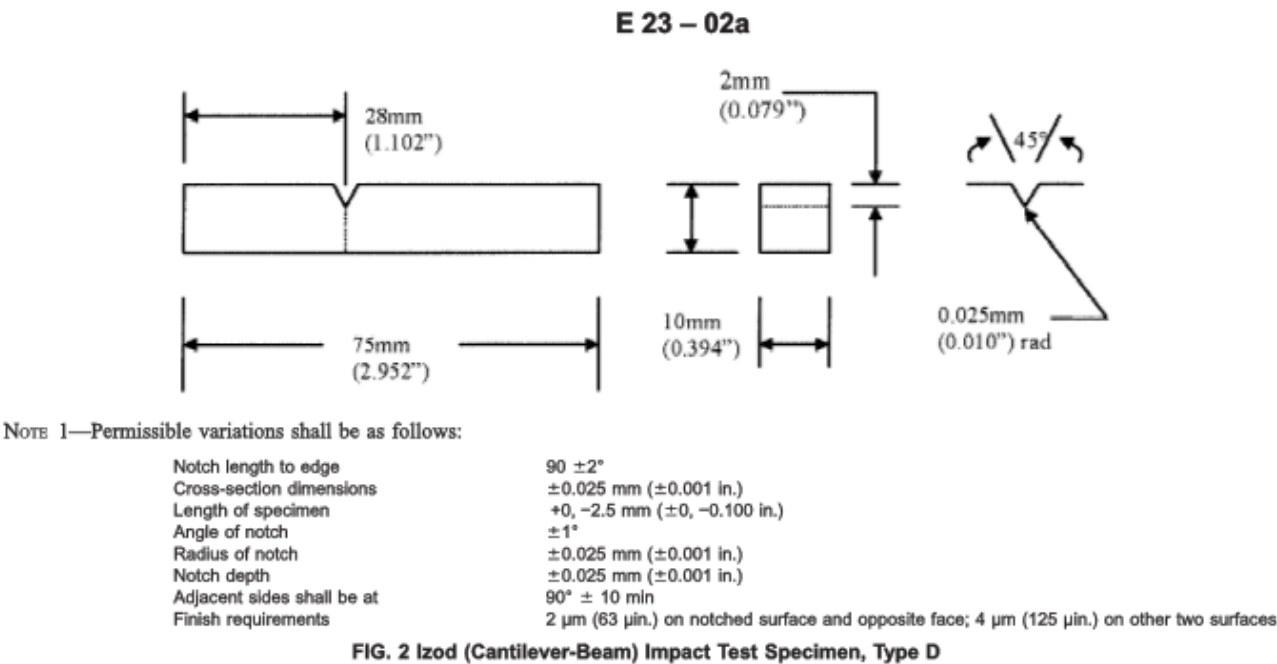
The preferred test specimen is 60 mm \pm 2 mm square or 60 mm \pm 2 mm in diameter, with a thickness of 2,0 mm \pm 0,1 mm, and is used with the 40 mm diameter support ring.

For testing brittle fibre-reinforced plastic composites and low failure strain plastics, a test specimen $140 \text{ mm} \pm 2 \text{ mm}$ square or $140 \text{ mm} \pm 2 \text{ mm}$ in diameter with a recommended thickness of $4,0 \text{ mm} \pm 0,2 \text{ mm}$ may be used with the 100 mm diameter support ring.

2. Compression after impact specimens, to ASTM D7136 (metric version) carbon or glass re-enforced composite materials, with thickness between 4mm to 6mm (5mm is the ideal):

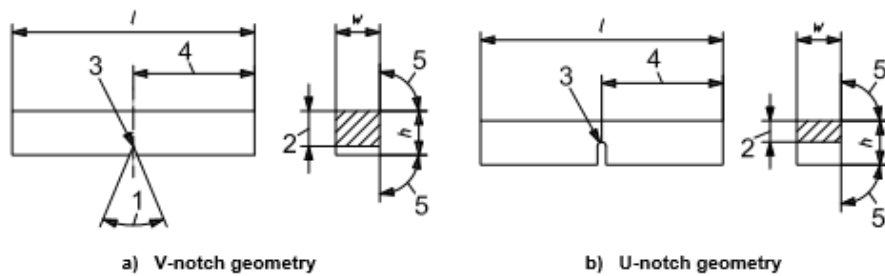


3. Metal Izod specimen to ASTM E23:



4. Metal Charpy specimen to ISO148, v-notch type (ASTM E23 uses the same specimen):

ISO 148-1:2009(E)



NOTE The symbols l , h , w and the numbers 1 to 5 refer to Table 2.

Figure 2 — Charpy pendulum impact test piece

Table 2 — Tolerances on specified test piece dimensions

Designation	Symbol and No.	V-notch test piece			U-notch test piece		
		Nominal dimension	Machining tolerance		Nominal dimension	Machining tolerance	
				Tolerance class ^a			Tolerance class ^a
Length	l	55 mm	$\pm 0,60$ mm	js15	55 mm	$\pm 0,60$ mm	js15
Height ^b	h	10 mm	$\pm 0,075$ mm	js12	10 mm	$\pm 0,11$ mm	js13
Width ^b :	w						
— standard test piece		10 mm	$\pm 0,11$ mm	js13	10 mm	$\pm 0,11$ mm	js13
— reduced-section test piece		7,5 mm	$\pm 0,11$ mm	js13	—	—	—
— reduced-section test piece		5 mm	$\pm 0,06$ mm	js12	—	—	—
— reduced-section test piece		2,5 mm	$\pm 0,05$ mm	js12	—	—	—
Angle of notch	1	45°	$\pm 2^\circ$	—	—	—	—
Height below notch (height of test piece minus depth of notch)	2	8 mm	$\pm 0,075$ mm	js12	5 mm ^c	$\pm 0,09$ mm	js13
Radius of curvature at base of notch	3	0,25 mm	$\pm 0,025$ mm	—	1 mm	$\pm 0,07$ mm	js12
Distance of plane of symmetry of notch from ends of test piece ^b	4	27,5 mm	$\pm 0,42$ mm ^d	js15	27,5 mm	$\pm 0,42$ mm ^d	js15
Angle between plane of symmetry of notch and longitudinal axis of test piece		90°	$\pm 2^\circ$	—	90°	$\pm 2^\circ$	—
Angle between adjacent longitudinal faces of test piece	5	90°	$\pm 2^\circ$	—	90°	$\pm 2^\circ$	—
^a In accordance with ISO 286-1. ^b The test pieces shall have a surface roughness better than R_a 5 μ m except for the ends. ^c If another height (2 mm or 3 mm) is specified, the corresponding tolerances shall also be specified. ^d For machines with automatic positioning of the test piece, it is recommended that the tolerance be taken as $\pm 0,165$ mm instead of $\pm 0,42$ mm.							

5. Other.

Please also let us know the specimen / application that you will be testing using the 9mm hemispherical striker and an 80mm diameter striker.

Thanks & Regards,

S.Lakshmipriya

ABS Instruments Pvt. Ltd

Unit 21, Block 1, SIDCO Electronics Complex,

T.V.K. Industrial Estate,

Guindy, Chennai-32.

TEL.No : 044 2250 0009/ 044 2250 0305

service@absinstruments.com, sales@absinstruments.com

www.absinstruments.com

NABL ACCREDITED LABORATORY

"Confidentiality Warning: This message and any attachments are intended only for the use of the intended recipient(s), are confidential and may be privileged. If you are not the intended recipient, you are hereby notified that any review, re-transmission, conversion to hard copy, copying, circulation or other use of this message and any attachments is strictly prohibited. If you are not the intended recipient, please notify the sender immediately by return email and delete this message and any attachments from your system.

Virus Warning: Although the company has taken reasonable precautions to ensure no viruses are present in this email. The company cannot accept responsibility for any loss or damage arising from the use of this email or attachment."