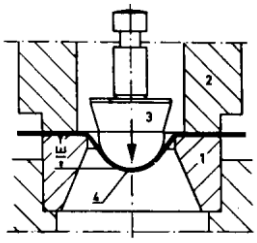

Test Tool No. 27

Sheet Metal Testing Machine Model 100

testing equipment for quality management

ERICHSEN
since 1910

Technical Description

ERICHSEN Cupping Test

Simple Manually Driven Testing Machine

Product

The **Sheet Metal Testing Machine** for manual operation provides a maximum drawing force of 30 kN and a blankholder force according to the standard, of 10 kN - **Model 100.**

Application

The manually operated Testing Machine is intended for measuring the drawing qualities of ferrous and non-ferrous metal by means of the ERICHSEN CUPPING TEST in accordance with

ISO 8490	EN 14-58
EN ISO 20482	EN 14-67
BS 3855: 1965	NF A 03-652
ASTM 643-84	JIS Z-2247
UNI 3037	UNE 7080
GOST 10 510	ICONTEC 21
SIS 112635	SABS 0138-197
IS: 1756-1961	PN-68 H-04400

on sheet and strip from 0.1 to 1.5 mm thick (400 N/mm² tensile strength) and on foil material in thicknesses down to 0.005 mm. Because it is easy to operate the machine, it is particularly suitable for use in factories only involved with a limited amount of sheet metal forming, and applications confined to thinner materials.

Purpose

The **Sheet Metal Testing Machine, Model 100**, provides a means to measure the drawing quality of sheet metal with very little effort.

By establishing the quality of material which is still just satisfactory for producing a particular drawn work-piece the lowest cost material suitable for the part can be established. The standardised ERICHSEN Cupping Test is in this way useful for the Purchasing Department, as part of an order specification.

The surface grain size is shown up clearly on the tip of the bulge produced in the Cupping Test

No special skills are required to operate the machine. Anybody can use it after instruction.

Description

The **Sheet Metal Testing Machine, Model 100**, is a bench mounted unit with a cast iron machine body and a cylindrical test head.

To conduct the cupping test the sheet metal specimen or foil is entered into an opening through the test head.

The test head is then tightened manually against a stop on the locating sleeve. This clamps the blank with a force of 10 kN as required by the cupping test standards mentioned above.

The clutch pin is pulled outwards from the locating sleeve, the test head is turned clockwise and the cupping process commences.

The cupping test value reached is displayed on a digital counter.

The forming process and the ap-pearance of the crack can be observed conveniently looking down onto the blankholder. In poor light, or when using the smaller test tools nos. 5 and 11, we recommend the use of a special microscope with battery operated lamp.

Technical Data

Dimensions:	Width 340 mm Depth 350 mm Height 450 mm
Net weight.:	approx. 32 kg
Drawing force:	max. 30 kN
Blankholder force:	10 kN (fixed)
Punch stroke:	max. 18 mm
Measuring result display:	digital (accuracy of 0.1 mm)
Width of specimen panel:	13 - 90 mm
Thickness of specimen panel:	0.1 - 1.5 mm

Ordering Information	
Ord.-No.	**Product Name**
0004.01.31	**Sheet Metal Testing Machine, Model 100,** including Test Tool No. 27
Supplied with: ♦ Standard lubricant to DIN, ISO and EURONORM ♦ Operating instruction manual	

Accessories	
Ord.-No.	**Product Name**
0002.01.32	Microscope (10-fold magnification) with battery operated illumination
0006.01.32	Test Tool No. 21 to EN ISO 20482
0001.01.32	Test Tool No. 11 to EN ISO 20482
0007.01.32	Test Tool No. 5

Subject to technical modifications.
TBE 100 - VII/2018

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