

Issued by NMi Certin B.V.
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The Netherlands

Notified Body Number 0122

In accordance with Paragraph 8.1 of the European Standard on Metrological aspects of non-automatic weighing instruments EN 45501:1992/AC:1993 and by application of the OIML International Recommendation R 60 (Edition 2000). The applied error fraction p_i , meant in the paragraph 3.5.4. of the standard is 0.7.

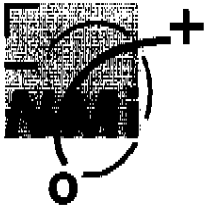
Applicant Tedeo-Huntleigh International, Ltd.
5a Hatzoran St.,
Netanya, 42506
Israel

In respect of The model of a **shear-beam load cell**, with strain gauges, tested as a part of a weighing instrument.
Manufacturer : Tedeo-Huntleigh
Type : 3410 and 3411

Characteristics

Maximum capacity (E_{max})	550, 1000, 1500, 2000, 2500, 4000 and 11025 lb 250, 450, 500, 680, 907, 1000, 1130, 1800, 2000 and 5000 kg			
Accuracy Class	C			
Maximum number of load cell intervals (n)	700	1000	2000	3000
Ratio of minimum LC Verification interval $Y = E_{max} / V_{min}$	2333	3333	6667	10000

In the description TC2353 revision 7 further characteristics are described.



Nederlands Meetinstituut

Test certificate

Number **TC2353** revision 7
Project number 10140138
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Description and documentation The load cell is described in the description number TC2353 revision 7 and documented in the documentation folder TC2353-4, appertaining to this test certificate.

Remarks Summary of the test involved: see Appendix number TC2353 revision 7.
This revision test certificate replaces the earlier version, including its documentation folder.

Delft, 3 January 2002
NMI Certin B.V.

P.P.M. van Enckevort
Manager Certification Delft

1 General information about the load cell

All properties of the load cell, whether mentioned or not, may not be in conflict with the standard mentioned in the test certificate.

1.1 Essential parts

Description	Drawing number	Rev.	Remarks
General Dimensions	297.000.00-3	4	Mechanical
Wired sensor	297.300.00-2	7	Electrical
General Dimensions	297.950.01-3	0 2	Mechanical
Wired sensor	297.950.02-2	0 1	Electrical
General Dimensions (stainless steel model)	228.001.00-3	A	Mechanical
Wired sensor (stainless steel model)	228.200.00-2	0	Electrical

Cable:

- The load cell is provided with a 4 or 6-wire system.
- When "remote-sensing" (= 6-wire system) is used the cable length can vary.
The standard cable length is 3 meter.
- When no "remote-sensing" (= 4-wire system) is used the cable length has to correspond with the cable length mentioned on the descriptive plate of the load cell.
- The cable should be a shielded cable, the shield is not connected to the load cell.



1.2 Essential characteristics

Minimum dead load	:	0 kg
Safe overload	:	150 % of E_{max}
Rated Output	:	3 mV/V \pm 0.1 % (1000, 1500, 2000, 2500 and 4000 lb)
	:	2 mV/V \pm 0.1 % (550, 1100, 2200, 4400, 11025 lb)
	:	3 mV/V \pm 0.1 % (450, 680, 907, 1130 and 1800 kg)
	:	2 mV/V \pm 0.1 % (250, 500, 1000, 2000 and 5000 kg)
Input impedance	:	380 Ω \pm 10 Ω or
	:	1100 Ω \pm 30 Ω
Output impedance	:	355 Ω \pm 50 Ω or
	:	1025 Ω \pm 25 Ω
Recommended excitation	:	10 V DC/AC
Excitation maximum	:	15 V DC/AC
Transducer material	:	Electroless Nickel Plated Steel or Stainless Steel
Atmospheric protection	:	Potted or IP 67

1.3 Essential shapes

The load cell is built according to drawings as stated in chapter 1.1.

The data plate is sealed against removal or will be destroyed when removed. The data plate mentions at least the information and markings as described in the OIML R60 document. In countries where it is mandatory the load cell should bear this test certificate number: TC2353.

Securing:

The connecting cable of the load cell or the junction box is provided with possibility to seal.



Tests carried out for this test certificate:

Test	Institute	Type, version, remarks
Temperature test and repeatability (20, 40, -10 and 20 °C)	NMi Certin B.V	3410 C3 1000 lb, 250 kg and 500 kg
Temperature effect on minimum dead load output (20, 40, -10 and 20 °C)	NMi Certin B.V	3410 C3 1000 lb, 250 kg and 500 kg
Creep test (20, 40 and -10 °C)	NMi Certin B.V	3410 C3 1000 lb, 250 kg and 500 kg
Minimum load output return (20, 40 and -10 °C)	NMi Certin B.V	3410 C3 1000 lb, 250 kg and 500 kg
Barometric pressure test at room temperature	NMi Certin B.V	3410 C3 1000 lb, 250 kg and 500 kg
Humidity test	NMi Certin B.V.	3410 C3 1000 lb, 250 kg and 500 kg