Test certificate

Number **TC5844** revision 2
Project number 219471

Issued by	NMi Certin B.V. Hugo de Grootplein 1 3314 EG Dordrecht The Netherlands
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 R60 (Edition 2000).
Manufacturer	Mettler-Toledo (Changzhou) Scale & System Ltd. 111 Changxi Road Changzhou, Jiangsu Peoples Republic of China
In respect of	A **compression load cell**, with strain gauges, tested as a part of a weighing instrument. Manufacturer : Mettler-Toledo Type : GD… , GD… Pro, 0782, 0782 Pro,
Characteristics	E_{max} : 20 t up to and including 100 t Accuracy class : C In the description number TC5844 revision 2 further characteristics are described.
Description and documentation	The load cell is described in the description number TC5844 revision 2 and documented in the documentation folder TC5844-2, appertaining to this test certificate.
Remarks	Summary of the test involved: see Appendix number TC5844 revision 2. This revision test certificate replaces the earlier versions, including its documentation folder.

Issuing Authority

NMi Certin B.V. Notified Body number 0122
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INSPECTION
RvA I 122

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
GD(0782) Load Cell 20 ~ 100 t	130850A	5	Assembly drawing
GD(0782) Load Cell 20 ~ 100 t	130855A	-	Wiring drawing
GD-50t, 0782-50t, Pro	5844/2-01	-	Assembly drawing
GD-100t, 0782-100t, Pro	5844/2-02	-	Assembly drawing
GD/GDN, 0782/0782A, Pro	5844/2-03	-	Wiring drawing

Cable:
- The load cell is provided with a 6-wire system (="Remote-sensing");
  - The cable length is not limited;
  - The cable length shall be mentioned on the data plate.
- The cable should be a shielded cable, the shield is not connected to the load cell.

1.2 Essential characteristics

Fraction P_i	:	0,7
Maximum capacity (E_{max})	:	20 t up to and including 100 t
Humidity Class	:	CH
Temperature range	:	-10 °C / +40 °C
Accuracy Class	:	C
Maximum number of load cell intervals (n)	:	3000
Ratio of minimum LC Verification interval $Y = E_{max} / V_{min}$	:	12500
Ratio of minimum dead load output return $Z = E_{max} / (2 * DR)$	:	3000

The characteristics for $\mathbf{n_{max}}$ and **Y** can be reduced separately. **Z** is proportional or equal to $\mathbf{n_{max}}$

Each produced load cell is supplied with information about its characteristics.

Minimum dead load	:	0 kg
Safe overload	:	125 % of E_{max}
Rated Output	:	2,0 mV/V
Input impedance	:	1165 Ω ± 10 Ω
Output impedance	:	1000 Ω ± 3 Ω
Recommended excitation	:	6 - 15 V DC
Excitation maximum	:	20 V DC
Transducer material	:	AISI 420
Atmospheric protection	:	Hermetically sealed

1.3 Essential shapes

The load cell is built according to drawing:
- "GD(0782) Load Cell 20 ~ 100 t", drawing number 130850A;
- "GD-50t, 0782-50t, Pro", drawing number 5844/2-01;
- "GD-100t, 0782-100t, Pro", drawing number 5844/2-02.

The data plate is secured against removal by sealing or will be destroyed when removed. The data plate mentions at least the information and markings as described in the OIML R60 document. In the countries where it is mandatory the load cell should bear this test certificate number: TC5844.

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

Appendix

Tests performed for this test certificate:

Test	Institute	type, version, remarks
Temperature test and repeatability (20, 40, -10 and 20 °C)	NMi Certin B.V.	GD, 20 t, C3
Temperature effect on minimum dead load output (20, 40, -10 and 20 °C)	NMi Certin B.V.	GD, 20 t, C3
Creep (20, 40 and –10 °C)	NMi Certin B.V.	GD, 20 t, C3
Minimum dead load output return (20, 40 and –10 °C)	NMi Certin B.V.	GD, 20 t, C3
Barometric pressure effects at room temperature	NMi Certin B.V.	GD, 20 t, C3
Damp heat, cyclic: marked CH (or not marked)	NMi Certin B.V.	GD, 20 t, C3