

***National Type Evaluation Program  
Certificate of Conformance  
for Weighing and Measuring Devices***

**For:**

Force Transducer (Load Cell)  
Compression  
Model: SLC820 Series\*  
 $n_{\max}$ : 10 000 / Multiple Cell  
Capacity: 20 mt to 90 mt (44 000 lb to 200 000 lb)  
  
Accuracy Class: III

**Submitted by:**

Mettler-Toledo, Inc.  
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**Standard Features and Options**

- \* The specific load cells covered by this certificate are identified by the load cell capacity. The load cell parameters are listed on page two.

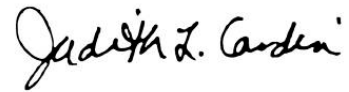
Minimum dead load: 50.0 kg  
Material: Stainless steel  
Safe Load Limit: 200%

Temperature Range: -10 °C to 40 °C (14 °F to 104 °F)

This device was evaluated under the National Type Evaluation Program (NTEP) and was found to comply with the applicable technical requirements of Handbook 44, "Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.



Jack Kane  
Chairman, NCWM, Inc.



Judith L. Cardin  
Chairman, National Type Evaluation Program Committee

Issued Date: November 20, 2008

Note: The National Conference on Weights and Measures does not "approve," "recommend," or "endorse" any proprietary product or material, either as a single item or as a class or group. Results shall not be used in advertising or sales promotion to indicate explicit or implicit endorsement of the product or material by the NCWM.

**Mettler-Toledo, Inc.**  
**Force Transducer (Load Cell)**  
**Model: SLC820 Series**

**Application:** The load cells may be used in Class III L scales for multiple cell applications consistent with the model designations, number of scale divisions, and parameters specified in this certificate. Load cells of a given accuracy class may be used in applications with lower accuracy class requirements provided the number of scale divisions, the  $v_{\min}$  values, and temperature range are suitable for the application. The manufacturer may market the load cells with fewer scale divisions ( $n_{\max}$ ) and with larger  $v_{\min}$  values than those listed on the certificate. However, the load cells must be marked with the appropriate  $n_{\max}$  and  $v_{\min}$  for which the load cell may be used.

**Load Cell Parameters:**

Model	Capacity ( metric ton)	$v_{\min}$ (kg)	Capacity (lb)	$v_{\min}$ (lb)
SLC820	20	0.62	44 000	1.36
SLC820*	30	0.93	66 000	2.05
SLC820	50	1.55	110 000	3.41
SLC820	90	2.79	200 000	6.15

\* Two load cells submitted for evaluation

**Identification:** Information containing the manufacturer, model designation, and serial number is laser etched on the housing of the load cell. All other required information, if not marked on the load cell, must be on an accompanying document including the serial number of the load cell.

**Test Conditions:** This certificate is issued based upon the following tests and upon information provided by the manufacturer. Test data was analyzed for the 30 mt load cells. Two 30 mt load cells were tested using dead weights as the reference standard. The data was analyzed for multiple load cell applications. The cells were tested over a temperature range of -10 °C to 40 °C. Three tests were run at each temperature. The temperature effect on zero was measured and a time dependence (creep) test was performed. The barometric pressure test was conducted on these load cells.

**Type Evaluation Criteria Used:** NIST Handbook 44, 2008 Edition; NCWM Publication 14, 2008 Edition

**Tested By:** NIST Force Group

**Conclusion:** The results of the evaluations and information provided by the manufacturer indicate the devices comply with applicable requirements.

**Information Reviewed By:** J. Truex (NCWM)

**Example of SLC820:**

