

State of California
Department of Food and Agriculture
Division of Measurement Standards

Certificate Number: 5381-04

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California Type Evaluation Program
Certificate of Approval
for Weighing and Measuring Devices

For:

Hopper Scale Weighing/Load Receiving Element
Load Cell Electronic
Models: QSPGMLHPR-14K and QSPGMLHPR-1K
Capacity: See Table on Page 2
 n_{\max} : See Table on Page 2
 e_{\min} : See Table on Page 2

Accuracy Class: III L

Submitted by:

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Standard Features and Options

Primary weight indications and motion detection are provided by an approved and compatible weight indicator.

Hopper construction: Mild steel

Load cells: Rice Lake Weighing Systems Model RL20000B (Certificate of Approval Number 4979-99)

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

This device was evaluated under the California Type Evaluation Program (CTEP) and was found to comply with the applicable technical requirements of California Code of Regulations for "Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Effective Date: May 4, 2004



Mike Cleary, Director

Quality Scale, Inc.
Hopper Scale Weighing/Load Receiving Element
Models: QSPGMLHPR-14K and QSPGMLHPR-1K

Model*	n _{max}	e _{min} (lb)	Capacity (lb)	Dimensions (inches)	Load Cells		Shape
					Number	Capacity	
QSPGMLHPR-14K	2800	5	14 000	72 High 120 Long 72 Wide	Four	10K	Rectangular with tapered bottom
QSPGMLHPR-1K	1000	1	1 000	70.5 Long X 25 Dia.	Four	1K	Horizontal cylinder

* Where: QSPGMLHPR-14K = Aggregate Batcher; QSPGMLHPR-1K = Oil Batcher

Application: Construction material hopper scale weighing elements when used with approved and compatible indicating elements.

Identification: An identification plate containing all required information is riveted to the cover plate of the junction box of the scale.

Sealing: The junction box of each scale may be sealed with a wire security seal threaded through a drilled head bolt and an adjacent eye on the cover. Sealing for the calibration and configuration parameters is provided by the certified and compatible indicating element.

Test Conditions: The Models QSPGMLHPR-14K and QSPGMLHPR-1K were submitted for evaluation and were each interfaced with an AND Model 4323 digital indicator (Certificate of Approval Number 2987-88). Each hopper was tested to capacity using known test weights. The emphasis of the evaluation was on device design, marking requirements, and performance of the weighing element. Several increasing/decreasing load, discrimination, and return to zero tests were initially performed and then repeated after approximately 30 days and a minimum of 300 normal use weighments.

Results of the evaluation indicate the devices comply with applicable requirements.

Type Evaluation Criteria Used: Title 4, California Code of Regulations, 2004 Edition

Tested By: Ken Jones (CA)