

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

Certificate Number: 5610-09

Page 1 of 2

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

**For:**

Hopper Scale Weighing/Load Receiving Element  
Load Cell Electronic  
Models: HBECFCEM and HBECFXAG  
Capacity: See table below  
 $n_{\max}$ : See table below  
 $e_{\min}$ : See table below

Accuracy Class: III L

**Submitted by:**

Hanson Brothers Enterprises  
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Contact: Orson Hanson

**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: TARE Incorporated Model TISB-XX (Certificate of Conformance Number 97-063)  
(XX is the capacity of the load cell)

Model	$n_{\max}$	$E_{\min}$ (lb)	Capacity (lb)	Dimensions (inches)	Load Cells		Shape
					Number	Capacity	
HBECFCEM	1000	5	5 000	92 High 82 Long 57 Wide	Four	2.5K	Rectangular with tapered top and bottom
HBECFXAG	1000	20	20 000	51 High 243 Long 48 Wide	Four	10K	Rectangular with tapered bottom

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 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.



Edmund E. Williams, Director

Effective Date: August 18, 2009

**Hanson Brothers Enterprises**  
**Hopper Scale Weighing/Load Receiving Element**  
**Models: HBECFCEM and HBECFXAG**

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

HBECFCEM – Cement  
HBECFXAG – Aggregate

**Identification:** An identification plate containing all required information is riveted to each individual hopper.

**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 HBECFCEM and HBECFXAG were submitted for an on-site evaluation and were interfaced with a Command Alkon Model Spectrum VI digital indicator (Certificate of Conformance Number 97-124A2). The 5 000 lb capacity HBECFCEM was tested to capacity with 5 000 lb of known test weights and the 20 000 lb capacity HBECFXAG was tested to capacity using 5 000 lb of known test weights and substitution of material. The emphasis of the evaluation was on device design, marking requirements, and performance of the weighing elements. Several increasing/decreasing load, discrimination, and return to zero tests were initially performed and then repeated after a minimum of 300 normal use weighments.

**Type Evaluation Criteria Used:** Title 4, California Code of Regulations, 2009 Edition

**Tested By:** Ken Jones (CA) Sonia Muñoz (CA)



Cement Scale



Aggregate Scale