

California Type Evaluation Program
Certificate of Approval
for Weighing Devices

For:

Automatic Bulk Weighing System
Application Software
Model: ABM DW

Accuracy Class: III

Submitted by:

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Standard Features and Options

This application software is designed to be installed in approved programmable indicating elements.

Primary weight indications are provided by a compatible, certified indicating element
Motion detection is provided by the primary indicating element
Time, date, and consecutive job numbering
Ticket printing capability for loaded, unloaded, and net weights for each weighing cycle

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: March 11, 1998


Barbara J. Bloch, Director

**ABM Scale Company
Automatic Bulk Weighing System
Application Software
Model: ABM DW**

Application: For use with certified digital weight indicators that contain enough memory within the indicator to properly function as an automatic bulk weighing system. This software is designed to operate with an approved and compatible hopper scale weighing element.

Identification: An identification badge for the additional software will be attached to the digital weight indicator.

Sealing: In most cases, the system can be sealed with a wire seal provided by the digital weight indicator. This will prevent undetected access to the software and indicator calibration and configuration parameters. Some digital weight indicators may be equipped with a Category 2 audit trail that will detect changes made to the software and the indicators' metrological parameters. Additionally, the software is password protected.

Operation: The Model ABM DW software controls the weighing operation, gate interlocks, and a printer. The software can operate in the automatic or manual mode using the indicator's keypad. The software cannot interfere with the scale adjustments and parameters.

Test Conditions: The emphasis of the evaluation was on device design, operation, performance, and compliance with marking requirements. The printer and print format were also evaluated. The Model ABM DW bulk weighing system was submitted and installed interfaced to the GSE Model 650 digital weight indicator with a weight simulator and a gate simulator for the purpose of the laboratory evaluation. The system was evaluated for motion detection, overfill sense capability and other errors such as overcapacity, below zero and power interruptions. Additionally, a field evaluation was performed on a fully operational system.

The results of these evaluations indicate the device complies with applicable requirements.

Type Evaluation Criteria Used: Title 4, California Code of Regulations, 1997 Edition.

Tested By: Gary Castro (CA)