



**A and D Engineering  
Bench Scale  
Model: SK Series**

**Application:** General purpose bench scale.

**Identification:** The required information is on a pressure sensitive, self-destructive label located on the right side of the scale.

**Sealing:** The device can be sealed by means of a wire security seal threaded through two flat head screws located on the bottom of the scale to prevent undetected access to the calibration switch.

**Test Conditions:** This Certificate supersedes Certificate of Conformance Number 98-086A1 and is issued to include waterproof stainless steel housing. The emphasis of the evaluation was on the device design, marking and compliance with influence factor requirements. A Model SK1000WP 1000g x 0.5 g (2.2 lb x 0.001 lb) was submitted for the evaluation. Several increasing/decreasing load and shift tests were conducted. The scale was tested over a temperature range of  $-10^{\circ}\text{C}$  to  $40^{\circ}\text{C}$  ( $14^{\circ}\text{F}$  to  $104^{\circ}\text{F}$ ). Additionally, tests were conducted with a power supply of 100 VAC and 130 VAC. A load of approximately one-half capacity was placed on the scale 100 800 times with the scale being tested periodically. Previous test conditions are listed below for reference.

**Certificate of Conformance Number 98-086A1:** This Certificate supersedes Certificate of Conformance Number 98-086 and is issued to include a new capacity into the family. The emphasis of the evaluation was on the device design, marking and compliance with influence factor requirements. A Model SK-30K (30 kg x 0.02 kg) was submitted for the evaluation. Several increasing/decreasing load and shift tests were conducted. The scale was tested over a temperature range of  $-10^{\circ}\text{C}$  to  $40^{\circ}\text{C}$  ( $14^{\circ}\text{F}$  to  $104^{\circ}\text{F}$ ). Additionally, tests were conducted with a power supply of 100 VAC and 130 VAC. A load of approximately one-half capacity was placed on the scale 100 000 times with the scale being tested periodically.

**Certificate of Conformance Number 98-086:** The emphasis of the evaluation was on the device design, marking and compliance with influence factor requirements. Three models were submitted for the evaluation SK-1000 (2.2 lb x 0.001 lb), SK-5000 (11 lb x 0.005 lb), and SK-20K (44 lb x 0.02 lb). Several increasing/decreasing load and shift tests were conducted. The scale was tested over a temperature range of  $-10^{\circ}\text{C}$  to  $40^{\circ}\text{C}$  ( $14^{\circ}\text{F}$  to  $104^{\circ}\text{F}$ ). Additionally, tests were conducted with a power supply of 100 VAC and 130 VAC. A load of approximately one-half capacity was placed on each scale 100,000, 100,800 and 100,800, respectively.

The results of the evaluations indicate the devices comply with applicable requirements of NIST Handbook 44.

**Type Evaluation Criteria Used:** NIST Handbook 44, 2003 Edition

**Tested By:** A. McCoy (OH) 98-086, 98-086A1 & 98-086A2 & W. West (OH) 98-086 & 98-086A1

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