



Certificate of Conformance for Weighing and Measuring Devices

For:

Non-Computing Scale

Bench Scale, Digital Electronic

Model: SK Series n_{max}: (see below) e_{min}: (see below)

Capacity: 1 kg to 30 kg (2.2 lb to 66 lb) 176oz Platform: 230 mm x 190 mm (9.05 in x 7.48 in)

Accuracy Class: III

Submitted By:

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Standard Features and Options

- Gross/Net Display
- Semi-automatic Zero
- Initial Zero Setting Mechanism (IZSM)
- Semi-automatic Tare (push-button)
- Battery Saving Feature (sleep mode)

- lb/kg Conversion
- SK-5000WP lb, g, oz selectable
- Battery Power Supply
 - AC/DC Power Adapter

Options:

- Customer Display (dual)
- Rechargeable Battery Pack
- Stainless Steel Platter
- An "LB" Indication Replaces the Weight Display for Low Battery Conditions

Model	Capacity (kg)	Capacity (lb)	Capacity (oz)	n _{max}	Class
SK-1000, SK-1000D, SK-1000WP	1000 g x 0.5 g	2.2 lb x 0.001 lb		2200	III
SK-2000, SK-2000D, SK-2000WP	2000 g x 1 g	4.4 lb x 0.002 lb		2200	III
SK-5000, SK-5000D	5000 g x 2 g	11 lb x 0.005 lb	7	2500	III
SK-5000WP	5000 g x 2 g	11 lb x 0.005 lb	176 oz x 0.1 oz	2500	III
SK-10K, SK-10KD, SK-10KWP	10 kg x 0.005 kg	22 lb x 0.01 lb		2200	III
SK-20K, SK-20KD, SK-20KWP	20 kg x 0.01 kg	44 lb x 0.02 lb		2200	III
SK-30K, SK-30KD, SK-30KWP	30 kg x 0.02 kg	66 lb x 0.05 lb		1500	III

*SK-1000D, SK-2000D, SK-5000D, SK-10KD, SK-20KD, and SK-30KD are dual display models, SK-1000WP, SK-2000WP, SK-5000WP, SK-10KWP, SK-20KWP, and SK-30KWP are waterproof models. All other features are identical with single display models

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

This device was evaluated under the National Type Evaluation Program and was found to comply with the applicable technical requirements of "NIST 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.

Stephen Benjamin Chairman, NCWM, Inc. Kurt Floren Committee Chair, National Type Evaluation Program Committee

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A&D Engineering, Inc.

Non-Computing Scale / SK Series

Application: General purpose bench scale.

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

<u>Sealing:</u> The SK-WP models can be sealed by means of a wire security seal threaded through two plastic locks located on the bottom of the scale to prevent undetected access to the calibration switch. The SK and SK-D models can be sealed by means of a wire security seal threaded through two drilled head screws located on the bottom of the scale to prevent undetected access to the calibration switch.

<u>Test Conditions:</u> This Certificate supersedes Certificate of Conformance Number 98-086A2 and is issued to include the oz unit of measure to the SK-5000WP model and clarification of the sealing mechanism. The emphasis of the evaluation was on the device marking and performance compliance. A Model SK-5000WP 5000g x 2 g, 11 lb x 0.005 lb and 176 oz x 0.1 oz scale was submitted for the evaluation. Several increasing/decreasing load, shift and discrimination test were conducted to confirm the oz unit. Previous test conditions are listed below for reference.

<u>Certificate of Conformance Number 98-086A2</u>: 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 SK-1000WP 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°C to 40°C (14°F to 104°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.

<u>Certificate of Conformance Number 98-086A1</u>: 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° C to 40° C (14° F to 104° 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°C to 40°C (14°F to 104°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.

Evaluated By: A. McCoy (OH) 98-086, 98-086A1, 98-086A2; W. West (OH) 98-086, 98-086A1; C. Harris (OH) 98-086A3

<u>Type Evaluation Criteria Used:</u> NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices, 2012 Edition. NCWM Publication 14 Weighing Devices, 2012 Edition.

Conclusion: The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

Information Reviewed By: S. Patoray (NCWM), L. Bernetich (NCWM) 98-086A2; J. Truex (NCWM) 98-086A3





A&D Engineering, Inc.

Non-Computing Scale / SK Series

Example(s) of Device:



SK-5000WP



SK-5000/D



Sealing



Sealing