

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For:

Non-Computing Scale Digital Electronic Model: SJ Series n_{max}: 2 600

e_{min}: 0.001 lb / 0.0005 kg / 0.02 oz

Capacity: 2.2 to 66 lb / 1 to 30 kg / 35 to 1058 oz

Platform Size: 7.5 in x 9.0 in

Accuracy Class: III

Submitted By:

A&D Engineering

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Standard Features and Options

Standard Features:

- Semi-automatic (push-button) Zero (SAZSM)
- Automatic Zero Tracking (AZT)
- Unit Conversion (kg, g, lb, oz)
- AC or DC Power
- Battery Saving Feature (Auto-shut off)

- Initial Zero Setting Mechanism (IZSM)
- Semi-automatic (push-button) Tare
- LCD Display
- Battery Power Optional

Load Cells Used:

- A&D Load-Cell Model (CC:10-001): 1ETTS103B (non-NTEP)
- A&D Load-Cell Model (CC: 10-001A1): LC184 (non-NTEP)
- HS Models = Stainless Steel Pan
- H Models = Plastic Pan (as part of the unit itself)

Specific Models, capacities and n _{max} :					
Model	Capacity x d (lb)	Capacity x d (kg)	Capacity x d (g)	Capacity x d (oz)	n _{max}
SJ-1000H/HS	2.2 x 0.001	1 x 0.0005	1000 x 0.5	35 x 0.02	2200
SJ-2000H/HS	4.4 x 0.002	2 x 0.001	2000 x 1	70 x 0.05	2200
SJ-5000H/HS	11 x 0.005	5 x 0.002	5000 x 2	176 x 0.1	2500
SJ-12KH/HS	26 x 0.01	12 x 0.005	12000 x 5	423 x 0.2	2600
SJ-20KH/HS	44 x 0.02	20 x 0.01	20000 x 10	705 x 0.5	2200
SJ-30KH/HS	66 x 0.05	30 x 0.02	30000 x 20	1058 x 1	1500

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

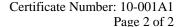
This device was evaluated under the National Type Evaluation Program and was found to comply with the applicable technical requirements of "NIST Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Stephen Benjamin / Chairman, NCWM, Inc.

Chairman, National Type Evaluation Program Committee
Issued: April 24, 2013

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A&D Engineering

Non-Computing Scale / SJ Series

Application: Non computing scale used for general purpose weighing applications.

Identification: The required information is on an adhesive badge affixed on the side of the indicating element.

<u>Sealing</u>: The device is sealed on underside by means of a wire security seal threaded through two eyelets one on the calibration cover plate the other on scale casing, to prevent access to the calibration switch.

Test Conditions: This Certificate supersedes Certificate of Conformance Number 10-001 and is issued to include new Model number suffix HS which represents a new load cell and has a stainless steel pan. The emphasis of the evaluation was on the device design, operation, marking requirements and compliance with influence factor requirements. For the purpose of this evaluation, a model SJ-1000HS (2.2 lb x 0.001 lb), SJ-12KHS (26 lb x 0.01 lb), and SJ-30KHS (30 kg x 0.02 kg) were submitted. Several increasing/decreasing load and shift tests were conducted on each scale. The scales were tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). A load of approximately one-half scale capacity was applied to each scale over 100 000 times. The scales were tested periodically during this time. Tests were also conducted with a power supply of 102 VAC to 132VAC, and 5.8 VDC to 10.0 VDC. Results of the previous test conditions are repeated below for reference.

Certificate of Conformance Number 10-001: The emphasis of the evaluation was on the device design, operation, marking requirements and compliance with influence factor requirements. For the purpose of this evaluation, a model SJ-1000H (2.2 lb x 0.001 lb), SJ-12KH (26 lb x 0.01 lb), and SJ-30KH (30 kg x 0.02 kg) were submitted. Several increasing/decreasing load and shift tests were conducted on each scale. The scales were tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). A load of approximately one-half scale capacity was applied to each scale over 100 000 times. The scales were tested periodically during this time. Tests were also conducted with a power supply of 100 VAC to 130VAC, and 5.8 VDC to 10.0 VDC.

Evaluated By: A. McCoy (OH), J. Morrison (OH), M. Kelley (OH), T. Buck (OH), E. Matthews (OH) 10-001; C. Harris (OH) 10-001A1

<u>Type Evaluation Criteria Used</u>: NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices, 2013 Edition. NCWM Publication 14 Weighing Devices, 2013 Edition.

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

Information Reviewed By: J. Truex (NCWM) 10-001, 10-001A1

Examples of Device:



