Australian Government
National Measurement Institute
Bradfield Road, West Lindfield NSW 2070

Notification of Change
Supplementary Certificate of Approval No S387
Change No 2

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

The following changes are made to the approval documentation for the

A & D Mercury Model AD-4329 Digital Indicator

submitted by A & D Mercury Pty Ltd
(now A & D Australasia Pty Ltd)
32 Dew Street
Thebarton SA 5031.

A. In Supplementary Certificate of Approval No S387 dated 12 April 2001;

1. The title of the pattern should be amended to read:

   "A & D **Mercury** Model AD-4329 Digital Indicator"

2. The Condition of Approval referring to the review of the approval should be amended to read:

   "This approval becomes subject to review on 1 April **2016**, and then every 5 years thereafter."

   Note: The review date was previously amended by Notification of Change No 1 dated 25 September 2006.

3. The FILING ADVICE should be amended by adding the following:

   "Notification of Change No 1 dated 25 September 2006
   Notification of Change No 2 dated 25 May 2010"

B. In Supplementary Certificate of Approval No S387 and its Technical Schedule both dated 12 April 2001, and in Notification of Change No 1 dated 25 September 2006, all references to the name of the submittor should be amended to read:

   "A & D **Australasia** Pty Ltd"

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C. In Technical Schedule No S387 dated 12 April 2001;

1. Clause **1. Description of Pattern** should be amended by adding:

"May also be known as A & D or A & D Australasia instruments of the same model."

2. The 1st paragraph of the TEST PROCEDURE should be amended to read, in part:

"… any relevant tests specified in the **national inspection test procedures**."

Signed by a person authorised by the Chief Metrologist to exercise his powers under Regulation 60 of the *National Measurement Regulations 1999*.

S387
12 April 2001

National Standards Commission

12 Lyonpark Road, North Ryde NSW

Supplementary Certificate of Approval

No S387

Issued under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the

A & D Model AD-4329 Digital Indicator

submitted by A & D Mercury Pty Ltd
32 Dew Street
Thebarton SA 5031.

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

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CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 April 2006, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No S387 and only by persons authorised by the submittor.

Instruments incorporating a digital indicator purporting to comply with this approval shall be marked NSC No S387 in addition to the approval number of the instrument.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the Commission and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with the Commission's Document NSC P 106.

The values of the performance criteria (maximum number of scale intervals etc.) applicable to an instrument incorporating the pattern approved herein shall be within the limits specified herein and in any approval documentation for the other components.

The Commission reserves the right to examine any instrument or digital indicator of an instrument purporting to comply with this approval.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0/A.

DESCRIPTIVE ADVICE

Pattern: approved 9 March 2001

- An A & D Mercury model AD-4329 single or multi-interval digital indicator.

Technical Schedule No S387 describes the pattern.

FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S387 dated 12 April 2001
Technical Schedule No S387 dated 12 April 2001 (incl. Table 1 and Test Procedure)
Figure 1 dated 12 April 2001

Signed by a person authorised under Regulation 60 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.

TECHNICAL SCHEDULE No S387

Pattern: A & D Mercury Model AD-4329 Digital Indicator.

Submittor: A & D Mercury Pty Ltd
32 Dew Street
Thebarton SA 5031.

1. Description of Pattern

An A & D Mercury model AD-4329 digital indicator (Figure 1 and Table 1). Instruments may be configured with single interval or multi-intervals (three) and are approved for use with up to 3000 verification scale intervals per interval range. Instruments may be fitted with output sockets for the connection of auxiliary and/or peripheral devices.

1.1 Zero

Zero is automatically corrected to within $\pm 0.25e_1$ whenever the instrument comes to rest within $0.5e_1$ of zero.

The instrument has a semi-automatic zero-setting device with a nominal range of not more than 4% of the maximum capacity of the instrument.

The instrument has an initial zero-setting device with a nominal range of not more than 20% of the maximum capacity of the instrument.

1.2 Tare

A semi-automatic and/or a non-automatic keyboard-entered subtractive pre-set taring device, each having a capacity of up to the maximum capacity of the instrument, may be fitted.

1.3 Display Check

A display check is initiated whenever power is applied.

1.4 Additional Facilities

The indicator has additional features, including facilities for accumulation of weight values, set points, and the facility for delivering a batch of a product.

An optional relay output card may be fitted.

However this approval does not include the use of the indicator as an automatic weighing instrument.

Indications other than the indications of measured mass (i.e. gross, tare, net) displayed either on the indicator or on an auxiliary or peripheral device, are not for trade use.

1.5 Linearisation Facility

Instruments are fitted with a three-point programmable linearisation correction facility.

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1.6 Sealing Provision

Provision is made for the access to the calibration adjustment to be sealed by sealing the screw lock and plastic boss on the front panel.

1.7 Verification/Certification Provision

Provision is made for the application of a verification/certification mark.

1.8 Markings

Instruments carry the following markings:

Manufacturer's mark, or name written in full	A & D, Japan
Name or mark of manufacturer's agent	A & D Mercury Pty Ltd
Indication of accuracy class	(III)
Maximum capacity	*Max* .../.../... kg * #
Minimum capacity	*Min* ..... kg *
Verification scale interval	*e* = .../.../.... kg * #
Serial number of the instrument	.....
Pattern approval mark for the indicator	NSC No S387

* These markings are also shown near the display of the result if they are not already located there.

\# Single interval instruments only have one value of *Max* and of *e*.

In addition, instruments not greater than 100 kg capacity shall carry a notice stating NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC, or similar wording.

TABLE 1 — Specifications

Maximum number of verification scale intervals	3000 per interval range
Minimum sensitivity	0.5 μmV/scale interval
Excitation voltage	5 V DC
Maximum excitation current	120 mA

TEST PROCEDURE

Instruments should be tested in conjunction with any tests specified in the approval documentation for the instrument to which the pattern is connected, as appropriate, and in accordance with any relevant tests specified in the Inspector's Handbook.

Maximum Permissible Errors at Verification/Certification

The maximum permissible errors for increasing and decreasing loads on initial verification/certification for loads, *m*, expressed in verification scale intervals, e, are:

±0.5*e* for loads $0 \le m \le 500$;
±1.0*e* for loads $500 < m \le 2\,000$; and
±1.5*e* for loads $2\,000 < m \le 10\,000$.

For multi-interval instruments with verification scale intervals e_1, e_2, ..., apply e_1, for zero adjustment, and for maximum permissible errors apply e_1, e_2, ..., as applicable for the load.

S387
25 September 2006

Australian Government

National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Notification of Change
Supplementary Certificate of Approval No S387
Change No 1

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

The following changes are made to the approval documentation for the

A & D Model AD-4329 Digital Indicator

submitted by A & D Mercury Pty Ltd
32 Dew Street
Thebarton SA 5031.

In Supplementary Certificate of Approval No S387 dated 12 April 2001, the Condition of Approval referring to the review of the approval should be amended to read:

> "This approval becomes subject to review on 1 April 2011, and then every 5 years thereafter."

Signed by a person authorised by the Chief Metrologist to exercise his powers under Regulation 60 of the *National Measurement Regulations 1999*.

FIGURE S387 - 1

A & D Mercury Model AD-4329 Digital Indicator