

National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Notification of Change Supplementary Certificate of Approval No S314A Change No 3

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-4326B 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 S314A dated 31 August 2005;
- 1. The Condition of Approval referring to the review of the approval should be amended to read:

"This approval becomes subject to review on 1 August **2015**, and then every 5 years thereafter."

Note: The review date was previously amended by Notification of Change No 2 dated 12 December 2005.

The FILING ADVICE should be amended by adding the following:

"Notification of Change No 1 dated 6 April 2004 Notification of Change No 2 dated 12 December 2005 Notification of Change No 3 dated 15 December 2010"

B. In Supplementary Certificate of Approval No S314A and its Technical Schedule both dated 31 August 2005, the references to the name of the submittor should be amended to read:

"A & D Australasia Pty Ltd"

C. In Technical Schedule No S314A dated 31 August 2005, the 1st paragraph of the TEST PROCEDURE should be amended to read, in part:

"... any relevant tests specified in the Uniform Test Procedures."

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



National Standards Commission

12 Lyonpark Road, North Ryde NSW

Supplementary Certificate of Approval No S314A

Issued under Regulation 63
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 Mercury Model AD-4326B 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.

This Certificate is issued upon completion of a review of NSC approval No S314.



This approval becomes subject to review on 1 August 2005, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No S314A and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked NSC No S314A 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 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 component 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 11 July 2000

An A & D Mercury model AD-4326B digital indicator.

Variant: approved 11 July 2000

Certain other models and configurations.

Technical Schedule No S314A describes the pattern and variant 1.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No S314A dated 31 August 2000

Technical Schedule No S314A dated 31 August 2000 (incl. Table 1 and Test Procedure)

Figures 1 and 2 dated 31 August 2000

Signed by a person authorised under Regulation 63 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.



Jon Semeth

TECHNICAL SCHEDULE No S314A

Pattern: A & D Mercury Model AD-4326B Digital Indicator.

Submittor: A & D Mercury Pty Ltd

32 Dew Street

Thebarton SA 5031.

1. Description of Pattern

An A & D Mercury model AD-4326B digital indicator (Figure 1 and Table 1) which is approved for use with up to 5000 verification scale intervals.

Instruments may be fitted with output sockets for the connection of peripheral and/or auxiliary devices.

Instruments may be battery-operated or may use a model TB124 AC power adaptor.

1.1 Zero

Zero is automatically corrected to within $\pm 0.25e$ whenever the instrument comes to rest within 0.5e 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 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 Features

Instruments may be fitted with a number of management functions which are not approved for trade use, including comparator and counting..

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 Sealing Provision

Provision is made for the calibration adjustment to be sealed by sealing the cover which provides access to the calibration switch at the rear of the indicator.



1.6 Verification/Certification Provision

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

1.7 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 Indication of accuracy class ◍ 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 S314A

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

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.

2. Description of Variant 1

Other models and configurations as listed below:

- AD-4326A having the features of the pattern (AD-4326B) but without the preset tare device.
- AD-4327B having the features of the pattern (AD-4326B) and in a waterproof housing (Figure 2).
- AD-4327Bs having the features of the AD-4327B including the housing, but without some of the management functions (e.g. counting) and therefore having a different keyboard layout.
- AD-4327A having the features of the AD-4327B including the housing, but without the pre-set tare device.

TABLE 1 — Specifications

Type: Models AD-4326A, AD-4326B, AD-4327A, AD-4327B and AD-4327Bs

Maximum number of verification 5000

scale intervals

Minimum sensitivity 0.8 µV/scale interval

Excitation voltage 5 V DC Maximum excitation current 90 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 $500 < m \le 2000$; and

 ± 1.5 e for loads 2 000 < $m \le 10$ 000.





National Measurement Institute

12 Lyonpark Road, North Ryde NSW 2113

Notification of Change Supplementary Certificate of Approval No S314A Change No 2

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

The following change is made to the approval documentation for the

A & D Mercury Model AD-4326B Digital Indicator

submitted by A & D Mercury Pty Ltd

32 Dew Street

Thebarton SA 5031.

In Supplementary Certificate of Approval No S314A dated 31 August 2000, the Condition of Approval referring to the review of the approval should be amended to read:

"This approval becomes subject to review on 1 August 2010, 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.



Australian Government

National Standards Commission

12 Lyonpark Road, North Ryde NSW 2113 Australia

Notification of Change Supplementary Certificate of Approval No S314A Change No 1

The following change is made to the approval documentation for the

A & D Mercury Model AD-4326B Digital Indicator

submitted by A & D Mercury Pty Ltd

32 Dew Street

Thebarton SA 5031.

In Technical Schedule No S314A dated 31 August 2000, Table 1 is amended by adding:

"Minimum load impedance 55.6 ohm"

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.

FIGURE S314A - 1



FIGURE S314A - 2



A & D Mercury Model AD-4327B Digital Indicator