

Australian Government

National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Cancellation

Supplementary Certificate of Approval No S426

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

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

Bilanciai Model EV7 Digital Indicator

submitted by National Weighing & Instruments Pty Ltd now of 1/88 Magowar Road Girraween NSW 2145.

has been cancelled in respect of new instruments as from 1 January 2010.

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

Supplementary Certificate of Approval

No S426

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

Bilanciai Model EV7 Digital Indicator

submitted by National Weighing & Instruments Pty Ltd 3/148 Toongabbie Road Toongabbie NSW 2140.

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 January 2009, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No S426 and only by persons authorised by the submittor.

Instruments incorporating a digital indicator purporting to comply with this approval shall be marked NSC No S426 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 12 December 2003

• A Bilanciai model EV7 digital indicator.

Variant: approved 12 December 2003

1. A Bilanciai model EV7S digital indicator in a stainless steel housing.

Technical Schedule No S426 describes the pattern and variant 1.

FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S426 dated 4 May 2004 Technical Schedule No S426 dated 4 May 2004 (incl. Table 1 and Test Procedure) Figures 1 to 3 dated 4 May 2004

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.

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TECHNICAL SCHEDULE No S426

Pattern: Bilanciai Model EV7 Digital Indicator

Submittor:National Weighing & Instruments Pty Ltd3/148 Toongabbie RoadToongabbieNSW2140

1. Description of Pattern

A Bilanciai model EV7 digital mass indicator (Table 1 and Figure 1) which may be configured to form part of:

- A weighing instrument with a single weighing range of up to 6000 verification scale intervals;
- A multi-interval weighing instrument with up to three partial weighing ranges (each with its own verification scale interval) in which case it is approved for use with up to 3000 verification scale intervals per partial weighing range; or
- A multiple range weighing instrument with up to three weighing ranges, in which case it is approved for use with up to 3000 verification scale intervals per weighing range.

The changeover between weighing ranges is automatic.

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

This approval does not include the use of the indicator as an automatic weighing instrument, unless specifically mentioned in a certificate of approval for such an instrument.

TABLE 1 – Specifications

Maximum number of verification scale intervals	6000 or 3000 per range
Minimum sensitivity	1.0 μV/scale interval
Excitation voltage	10 V DC
Maximum excitation current	233 mA

1.1 Zero

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

Note: For multi-interval or multiple range operation, 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 (to set the instrument to within $\pm 0.25e$ of zero) 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.

Technical Schedule No S426

1.2 Tare

A semi-automatic subtractive taring device of up to the maximum capacity of the instrument may be fitted. A pre-set taring device of up to the maximum capacity (or of up to the *Max*, for multi-interval instruments) may also be fitted.

1.3 Display Check

A display check is initiated whenever power is applied.

1.4 Power Supply

The power supply may be either:

- (a) 12-18 V DC supplied by an AC/DC mains adaptor or other DC source; or
- (b) Optional internal rechargeable batteries.
- Note: The AC/DC mains adaptor supplied was a DYNE Industries model 40402 power supply (output 12 V DC, 1 A) the submittor should be consulted regarding the acceptability of alternative power supply units.

1.5 Linearisation Facility

Instruments are fitted with a linearisation correction facility having a single correction point.

1.6 Sealing Provision

Provision is made for the calibration adjustments to be sealed by:

- (a) Sealing the cover which provides access to the calibration switch, either by use of a destructible adhesive label (as shown in Figure 2) or by use of a lead plug seal to prevent removal of the screw which secures the cover; and
- (b) Sealing to prevent access within the instrument case, by either:
 - (i) use of a lead plug seal to prevent removal of a screw securing the two halves of the instrument casing (provision for this is shown at the top right of Figure 2); or
 - (ii) use of destructible adhesive labels over the join in the instrument casing on two opposite sides of the instrument.

1.7 Verification/Certification Provision

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

Societa Cooperativa Bilanciai

1.8 Markings and Notices

Instruments carry the following markings:

	Campogalliano a.r.l., Italy
Name or mark of manufacturer's agent	
Indication of accuracy class	
Maximum capacity (for each range)	<i>Max</i> kg #1
Minimum capacity (for each range)	<i>Min</i> kg #1
Verification scale interval (for each range)	<i>e</i> = kg #1
Maximum subtractive tare	<i>T</i> = kg #2
Serial number of the instrument	
Pattern approval mark for the indicator	NSC No S426
Pattern approval mark for other components	#3

- #1 These markings are also shown near the display of the result if they are not already located there.
- #2 This marking is required if *T* is not equal to *Max*.
- #3 May be located separately from the other markings.

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.

Note:

For multi-interval and multiple range instruments the markings shall be as above, with the exception of the following (examples are for instruments with two partial ranges):

(i) For multi-interval instruments;

Maximum capacity	<i>Max</i> / kg *
Verification scale interval	e=kg *

(ii) For multiple range instruments, the maximum capacity, minimum capacity and verification scale interval for each range shall be marked, with an indication of the range to which they apply, e.g.

Range	1	2
Max	kg	kg
Min	kg	kg
e =	kg	kg

2. Description of Variant 1

The Bilanciai model EV7S digital mass indicator in a stainless steel housing (Figure 3).

Provision is made for the calibration adjustments to be sealed by preventing access within the instrument case – this is achieved by use of a lead and wire seal between two diagonally opposite sealing screws on the back of the indicator.

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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 Uniform Test Procedures.

Maximum Permissible Errors at Verification/Certification

For single range instruments, the maximum permissible errors for increasing and decreasing loads on initial verification/certification for loads, *m*, expressed in verification scale intervals, *e*, are:

 $\pm 0.5e$ for loads $0 \le m \le 500$; $\pm 1.0e$ for loads $500 < m \le 2000$; and $\pm 1.5e$ for loads $2000 < m \le 10000$.

For multi-interval and multiple range 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.

FIGURE S426 - 1



Bilanciai Model EV7 Digital Indicator

FIGURE S426 - 2



Showing Part of Sealing of Bilanciai Model EV7 Digital Indicator

FIGURE S426 - 3



Bilanciai Model EV7S Digital Indicator