

Australian Government

Department of Industry and Science

### National Measurement Institute

## Cancellation

### **Supplementary Certificate of Approval**

## **NMI S435**

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

Digi Model DI-600 Digital Indicator

submitted by W W Wedderburn Pty Ltd 101 Williamson Road Ingleburn NSW 2565

has been cancelled in respect of new instruments as from 1 October 2015.

#### DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 & 2 approved – interim certificate issued	30/03/04
1	Pattern & variants 1 & 2 approved – certificate issued	17/05/04
2	Pattern & variants 1 & 2 reviewed & amended – notification of change issued	28/07/11
3	Pattern & variants 1 & 2 cancelled – cancellation certificate issued	20/08/15

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

**Dr A Rawlinson** 



# **Australian Government**

# **National Standards Commission**

12 Lyonpark Road, North Ryde NSW 2113 Australia

## **Supplementary Certificate of Approval**

## No S435

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

Digi Model DI-600 Digital Indicator

submitted by WWWedderburn Pty Ltd 90 Parramatta Road Summer Hill NSW 2130.

**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.



#### Supplementary Certificate of Approval No S435

#### CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 April 2009, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No S435 and only by persons authorised by the submittor.

Instruments incorporating a digital indicator purporting to comply with this approval shall be marked NSC No S435 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 30 March 2004

• A Digi model DI-600 digital indicator.

Variants: approved 30 March 2004

- 1. Model DI-600SS digital indicator in a stainless steel housing.
- 2. Model DI-600PRT digital indicator with integral printer.

Technical Schedule No S435 describes the pattern and variants 1 and 2.

#### FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S435 dated 17 May 2004 Technical Schedule No S435 dated 17 May 2004 (incl. Table 1 and Test Procedure) Figures 1 to 5 dated 17 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.

#### **TECHNICAL SCHEDULE No S435**

Pattern: Digi Model DI-600 Digital Indicator

Submittor: W W Wedderburn Pty Ltd 90 Parramatta Road Summer Hill NSW 2130

#### 1. Description of Pattern

Ē

A Digi model DI-600 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 7500 verification scale intervals (\*); or
- A multi-interval weighing instrument with two partial weighing ranges (each with its own verification scale interval) in which case it is approved for use with up to 7500 verification scale intervals (\*) per partial weighing range.

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

Instruments are mains powered or may be powered by an integral rechargeable 12 V battery.

If an alternative unit (lb/kg) button is fitted it must be inoperative.

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	7500 or 7500 per range (*)
Minimum sensitivity	1.6 μV/scale interval
Excitation voltage	12 V DC
Maximum excitation current	141 mA

(\*) If used with instruments which are NOT provided with wind protection then they shall be used with no more than 3000 verification scale intervals, in accordance with 'clause 4. Wind Effects' of NSC General Certificate of Approval No 6B/0.

#### 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 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 S435

#### 1.2 Tare

A semi-automatic and/or non-automatic keyboard-entered subtractive taring device, each of up to the 50% of maximum capacity of the instrument (or of up to 100% of  $Max_{1}$  for multi-interval instruments), may be fitted.

A net/gross button may be provided which allows switching of indication between net and gross values.

#### 1.3 Display Check

A display check is initiated whenever power is applied.

#### 1.4 Additional Features

The pattern also has certain additional functions (counting, set point controls). However 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.

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

If an alternative unit (lb/kg) button is fitted it must be inoperative.

#### 1.5 Markings and Notices

=

Instruments carry the following markings:

Indication of accuracy classImage: Constraint of accuracy classMaximum capacityMax kg #1Minimum capacityMin kg #1Verification scale interval $e = \dots kg #1$ Maximum subtractive tare $T = - \dots kg #2$ Serial number of the instrumentPattern approval mark for the indicatorNSC No S435Pattern approval mark for other components	Manufacturer's mark, or name written in full Name or mark of manufacturer's agent	Teraoka Wedderburn
Maximum capacityMax kg #1Minimum capacityMin kg #1Minimum capacityMin kg #1Verification scale interval $e = \dots kg #1$ Maximum subtractive tare $T = - \dots kg #2$ Serial number of the instrumentPattern approval mark for the indicatorNSC No S435Pattern approval mark for other components	Indication of accuracy class	
Minimum capacityMin kg #1Verification scale interval $e = \dots kg #1$ Maximum subtractive tare $T = - \dots kg #2$ Serial number of the instrumentPattern approval mark for the indicatorNSC No S435Pattern approval mark for other components	Maximum capacity	<i>Max</i> kg #1
Verification scale interval $e = \dots kg \#1$ Maximum subtractive tare $T = - \dots kg \#2$ Serial number of the instrument $\dots \dots$ Pattern approval mark for the indicatorNSC No S435Pattern approval mark for other components $\dots \dots \#3$	Minimum capacity	<i>Min</i> kg #1
Maximum subtractive tare $T = - \dots kg \# 2$ Serial number of the instrumentPattern approval mark for the indicatorNSC No S435Pattern approval mark for other components	Verification scale interval	e= kg #1
Serial number of the instrumentPattern approval mark for the indicatorNSC No S435Pattern approval mark for other components	Maximum subtractive tare	T= kg #2
Pattern approval mark for the indicatorNSC No S435Pattern approval mark for other components	Serial number of the instrument	
Pattern approval mark for other components	Pattern approval mark for the indicator	NSC No S435
	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 instruments the markings shall be as above, with the exception of the following:

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

Page 3

#### **1.6 Verification/Certification Provision**

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

#### 1.7 Sealing Provision

Provision is made for the calibration adjustments to be sealed as shown in Figure 2.

#### 2. Description of Variants

#### 2.1 Variant 1

Model DI-600SS digital indicator in a stainless steel housing (Figure 3).

#### 2.1.1 Sealing Provision

Provision is made for the calibration adjustments to be sealed as shown in Figure 4.

#### 2.2 Variant 2

The Digi model DI-600PRT digital indicator with integral printer (Figure 5).

#### 2.2.1 Sealing Provision

Provision is made for the calibration adjustments to be sealed as described for the pattern in clause **1.7 Sealing Provision**.

#### 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, *o*, are:

 $\pm 0.50 \text{ for loads } 0 \le m \le 500;$  $\pm 1.00 \text{ for loads } 500 < m \le 2.000; \text{ and}$  $\pm 1.50 \text{ for loads } 2.000 < m \le 10.000.$ 

For multi-interval instruments with verification scale intervals of  $e_1, e_2, ..., apply e_4$  for zero adjustment, and for maximum permissible errors apply  $e_4, e_2, ..., as applicable for the load.$ 



**Australian Government** 

National Measurement Institute Bradfield Road, West Lindfield NSW 2070

## Notification of Change Supplementary Certificate of Approval No S435 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

Digi Model DI-600 Digital Indicator

submitted by W W Wedderburn Pty Ltd now of 101 Williamson Road Ingleburn NSW 2565.

- A. In Supplementary Certificate of Approval No S435 dated 17 May 2004;
- 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 April **2015**, and then every 5 years thereafter."

Note: The review date was previously amended by Notification of Change No 1 dated 16 August 2006.

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

"Notification of Change No 1 dated 28 July 2011"

B. In Supplementary Certificate of Approval No S435 and its Technical Schedule both dated 17 May 2004, all references to the address of the submittor should be amended to read:

> "101 Williamson Road Ingleburn NSW 2565"

- C. In Technical Schedule No S435 dated 16 May 2001:
- 1. Clause **1. Description of Pattern** should be amended by adding the following as the last paragraph:

"Instruments are approved for use over a temperature range of 0°C to +40°C and must be so marked."

#### Notification of Change No 1 to S435

2. Clause **1.5 Markings** should be amended by adding the following to the list of required markings:

"Special temperature limits 0°C to +40°C"

3. The TEST PROCEDURE should be replaced by the following:

"Instruments shall be tested in accordance with any relevant tests specified in the national instrument test procedures.

#### Maximum Permissible Errors

The maximum permissible errors are specified in Schedule 1 of The *National Trade Measurement Regulations 2009.* 

Ensure that instruments are only being used within the special temperature limits stated elsewhere in this Technical Schedule."

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

m. Cotto

FIGURE S435 - 1



Digi Model DI-600 Digital Indicator

FIGURE S435 - 2

#### At Least One Case Screw To Be Sealed



**Over Metal Bracket** 

Screwed In Place

Sealing of Digi Model DI-600 Digital Indicator

FIGURE S435 - 3



Digi Model DI-600SS Digital Indicator

S435 17 May 2004

FIGURE S435 - 4



Sealing of Digi Model DI-600SS Digital Indicator

FIGURE S435 - 5



Digi Model DI-600PRT Digital Indicator