



**Australian Government**  
**National Measurement  
Institute**

Bradfield Road, West Lindfield NSW 2070

**Cancellation**  
**Certificate of Approval**  
**No 6/4D/286**

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

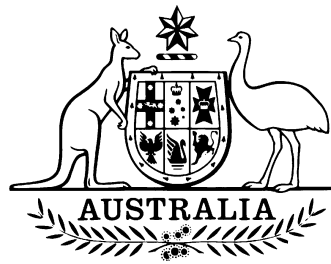
This is to certify that the approval for use for trade granted in respect of the  
Digi Model SM-80 Weighing Instrument

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

has been cancelled in respect of new instruments as from 1 February 2011.

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

A handwritten signature in black ink, consisting of stylized cursive letters, positioned to the right of the signature text.



## **National Standards Commission**

12 Lyonpark Road, North Ryde NSW

### **Certificate of Approval**

**No 6/4D/286**

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

Digi Model SM-80 Weighing Instrument

submitted by W W Wedderburn 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.

### CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 December 2002, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 6/4D/286 and only by persons authorised by the submitter.

It is the submitter'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 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 27 November 1997

- A Digi model SM-80 multi-interval self-indicating price-computing weighing instrument of 15 kg maximum capacity.

**Variants:** approved 27 November 1997

1. The model SM-90 which has an alphanumeric display.
2. For use in a network.

Technical Schedule No 6/4D/286 describes the pattern and variants 1 and 2.

**Variants:** approved 8 February 1999

3. The model SM-80SX which has the customer and vendor displays within the main housing of the instrument.
4. The model SM-80SX with a single integral display on the operator's side of the instrument.

Technical Schedule No 6/4D/286 Variation No 1 describes variants 3 and 4.

**Variant:** approved 7 February 2000

5. The model SM-90 with a touch-screen display keypad.

Technical Schedule No 6/4D/286 Variation No 2 describes variant 5.

**Variant:** approved 21 March 2000

6. The model SM-90H weighing instrument with hanging load receptor.

Technical Schedule No 6/4D/286 Variation No 3 describes variant 6.

**Variant:** approved 13 September 2000

7. The model SM-90E.

Technical Schedule No 6/4D/286 Variation No 4 describes variant 7.

#### FILING ADVICE

Certificate of Approval No 6/4D/286 dated 14 April 2000 is superseded by this Certificate, and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No 6/4D/286 dated 17 October 2000  
Technical Schedule No 6/4D/286 dated 2 March 1998 (incl. Test Procedure)  
Technical Schedule No 6/4D/286 Variation No 1 dated 30 April 1999  
Technical Schedule No 6/4D/286 Variation No 2 dated 1 March 2000  
Technical Schedule No 6/4D/286 Variation No 3 dated 14 April 2000  
Technical Schedule No 6/4D/286 Variation No 4 dated 17 October 2000  
Figures 1 and 2 dated 2 March 1998  
Figure 3 dated 30 April 1999  
Figure 4 dated 1 March 2000  
Figure 5 dated 14 April 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.

A handwritten signature in black ink, consisting of a large, stylized initial 'P' followed by several loops and a long horizontal stroke extending to the right.

## TECHNICAL SCHEDULE No 6/4D/286

**Pattern:** Digi Model SM-80 Weighing Instrument.

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

### 1. Description of Pattern

A Digi model SM-80 multi-interval self-indicating price-computing weighing instrument (Figure 1) with a verification scale interval ( $e_1$ ) of 0.002 kg up to 6 kg and with a verification scale interval ( $e_2$ ) of 0.005 kg from 6 kg up to the maximum capacity of 15 kg.

Instruments are fitted with an integral label printer.

Instruments have unit price to \$9999.99/kg, price to \$9999.99, a price look up (PLU) facility, and may be fitted with output sockets for the connection of peripheral and/or auxiliary devices.

#### 1.1 Zero

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

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

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.

#### 1.2 Tare

A semi-automatic subtractive tare device and/or a keyboard-entered pre-set subtractive taring device each of up to 5.998 kg maximum capacity may be fitted.

#### 1.3 Display Check

A display check is initiated whenever power is applied.

#### 1.4 Verification/Certification Provision

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

#### 1.5 Levelling

Instruments are provided with adjustable feet and a level indicator.

## 1.6 Sealing Provision

Provision is made for the calibration adjustments to be sealed by means of destructible labels placed over the join of the removable baseplate and the chassis, on the underside of the instrument.

## 1.7 Markings

Instruments carry the following markings, in the form shown at right:

Manufacturer's mark, or name written in full	
Indication of accuracy class	Ⓜ
Maximum capacity	Max ...../..... kg *
Minimum capacity	Min ..... kg *
Verification scale interval	e = ...../..... kg *
Tare capacity	T = ..... kg *
Serial number of the instrument	
Pattern approval mark for the instrument	NSC No 6/4D/286

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

## 2. Description of Variants

### 2.1 Variant 1

The model SM-90 which is similar to the pattern and in addition has an alphanumeric display (Figure 2).

### 2.2 Variant 2

The model SM-80 and SM-90 instruments may be connected in a network with compatible Digi instruments, to share common PLU data, for totalisation across machines ('floating system'), and to accumulate and retrieve management information.

In addition, the network may be interfaced with a computer for the collection of management data, or the downloading of PLU data.

Note: The weighing and price-computing functions of each weighing instrument in the network are independent, and the removal, repair or replacement of a particular weighing instrument does not necessitate reverification of any other weighing instrument in the network.

## TEST PROCEDURE

Instruments should be tested 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:

- $\pm 0.5 e$  for loads  $0 \leq m \leq 500$ ;
- $\pm 1.0 e$  for loads  $500 < m \leq 2\,000$ ; and
- $\pm 1.5 e$  for loads  $2\,000 < m \leq 10\,000$ .

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

TECHNICAL SCHEDULE No 6/4D/286  
VARIATION No 1

**Pattern:** Digi Model SM-80 Weighing Instrument.

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

## 1. Description of Variants

### 1.1 Variant 3

The model SM-80SX (Figure 3) which has the customer and vendor displays within the main housing of the instrument.

### 1.2 Variant 4

The model SM-80SX with a single integral display on the operator's side of the instrument. This instrument may be either:

- NOT FOR TRADING DIRECT WITH THE PUBLIC in which case it carries a notice to this effect; or
- Used in a self-service arrangement in which case all keys on the integral keyboard, other than the REZERO key, are disabled, and the instrument is connected to an LCD touch screen unit which serves as a price-look-up (PLU) display/keyboard, as well as providing additional mass, unit price and price displays.

The use of a totalisation across machines ('floating system') arrangement described in variant 2 is not approved in this self-service arrangement, and neither tare nor stored tare arrangements are functional, though the tare display is retained.

**Note:** Testing of the self-service arrangement should include checks to ensure that values displayed on the touch screen unit do not differ from those of the instrument.



TECHNICAL SCHEDULE No 6/4D/286  
VARIATION No 2

**Pattern:** Digi Model SM-80 Weighing Instrument.

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

**1. Description of Variant 5**

The model SM-90 (Variant 1) with price-look-up (PLU) access provided by a touch screen liquid crystal display panel (Figure 4) rather than by a conventional keypad.

Instruments incorporate a revised main circuit board which may also be used in the pattern (model SM-80) and variants.

TECHNICAL SCHEDULE No 6/4D/286  
VARIATION No 3

**Pattern:** Digi Model SM-80 Weighing Instrument.

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

**1. Description of Variant 6**

The model SM-90H weighing instrument with hanging load receptor (Figure 5).

TECHNICAL SCHEDULE No 6/4D/286  
VARIATION No 4

**Pattern:** Digi Model SM-80 Weighing Instrument.

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

**1. Description of Variant 7**

The model SM-90E which is similar to the model SM-90 (Variant 1) but has the pre-set tare, weight, unit price and price information, and the commodity information presented on the one alphanumeric display. Hence the instrument appears similar to the model SM-80 (Figure 1 - for the version with column-mounted displays) and the model SM-80SX (Figure 3 - for the version with integral displays). The display of the commodity name appears for a short period following its selection (i.e. after a PLU is selected), and the weighing and pricing information is always displayed whilst a label is printing.

FIGURE 6/4D/286 - 1



Digi Model SM-80 Weighing Instrument

FIGURE 6/4D/286 - 2



Digi Model SM-90 Weighing Instrument

FIGURE 6/4D/286 - 3



Digi Model SM-80SX Weighing Instrument

FIGURE 6/4D/286 - 4



Digi Model SM-90 Weighing Instrument With Touch Screen Display

FIGURE 6/4D/286 - 5



Digi Model SM-90H Weighing Instrument