



Australian Government
National Measurement
Institute

Bradfield Road, West Lindfield NSW 2070

Cancellation
Certificate of Approval No 6/4D/285

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

Mettler Toledo Model 8450 Weighing Instrument

submitted by Mettler Toledo Ltd
 220 Turner Street
 Port Melbourne VIC 3207

has been cancelled in respect of new instruments as from 1 June 2008.

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, appearing to be 'J. H. T.', is written in a cursive style.



National Standards Commission

12 Lyonpark Road, North Ryde NSW

Certificate of Approval

No 6/4D/285

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

Mettler Toledo Model 8450 Weighing Instrument

submitted by Mettler Toledo Limited
525 Graham Street
Port Melbourne VIC 3207.

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/285 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 NSC P 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 4 November 1997

- A Mettler Toledo model 8450 multiple-range price-computing weighing instrument of 15 kg maximum capacity.

Variant: approved 4 November 1997

1. For use in a network.

Technical Schedule No 6/4D/285 describes the pattern and variant 1.

Variant: approved 12 April 1999

2. Model 8461 *Smart Touch* weighing instrument.

Technical Schedule No 6/4D/285 Variation No 1 describes variant 2.

Variant: provisionally approved 14 November 2000
approved 18 December 2000

3. A model 355 indicator/printer with a model 8270 basework.

Technical Schedule No 6/4D/285 Variation No 2 describes variant 3.

FILING ADVICE

Certificate of Approval No 6/4D/285 dated 24 May 1999 is superseded by this Certificate, and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No 6/4D/285 dated 30 March 2001
Technical Schedule No 6/4D/285 dated 23 March 1998 (incl. Test Procedure)
Technical Schedule No 6/4D/285 Variation No 1 dated 24 May 1999
Technical Schedule No 6/4D/285 Variation No 2 dated 30 March 2001 (incl.
Notification of Change)
Figure 1 dated 23 March 1998
Figure 2 dated 24 May 1999
Figures 3 to 6 dated 30 March 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.

A handwritten signature in black ink, appearing to read "Jim Bennett". The signature is written in a cursive, flowing style with a large initial "J".

TECHNICAL SCHEDULE No 6/4D/285

Pattern: Mettler Toledo Model 8450 Weighing Instrument.

Submittor: Mettler Toledo Limited
525 Graham Street
Port Melbourne VIC 3207.

1. Description of Pattern

A Mettler Toledo model 8450 multiple-range price-computing weighing instrument (Figure 1) having a low range of 6 kg maximum capacity with a verification scale interval (e_1) of 0.002 kg and having a high range of 15 kg maximum capacity with a verification scale interval (e_2) of 0.005 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.

Instruments are approved for use over a temperature range of -5°C to $+40^{\circ}\text{C}$, and are so marked.

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.

1.2 Tare

A subtractive pre-set taring device 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 Sealing Provision

Provision is made for the calibration adjustment access hole located on the lower left hand side of the instrument to be sealed by means of either a bracket and sealing screw, or by a destructible label.

1.6 Levelling

Instruments are provided with adjustable feet and a level indicator.

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	Ⓜ
For each range:	
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/285
Special temperature limits	-5°C to / 40°C

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

2.1 Description of Variant 1

The instrument may be connected in a network with compatible Mettler Toledo instruments, to share common PLU data, and to accumulate and retrieve management information.

The model 8450 instrument is available as a 'satellite' only; the network contains a compatible Commission-approved Mettler Toledo instrument as the 'master'. A master instrument contains a 'master' circuit board and memory to operate as a network master in addition to the circuitry of the 'satellite'.

Each satellite in the network is able to access the network master for programming common PLU data and other management functions (only one instrument in the network can carry out such functions at any time).

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. Refer to the manufacturer's instructions before beginning the test.

Ensure that the instruments are being used within the special temperature limits specified in this approval.

- (a) To exercise the instrument, apply a test load equal to the maximum capacity of the instrument. Remove the load.
- (b) To overcome the effect of the zero-tracking facility, place $10e_1$ on the load receptor and check that the instrument has been set to zero within $\pm 0.25e_1$.
- (c) With the $10e_1$ still on the load receptor, complete a load test in at least five steps up to a value just below the maximum capacity of the first range ($Max_1 - 5e_1$). The test loads selected shall include Min_1 and values at or near those at which the maximum permissible errors change. Similarly remove the test loads to check zero at $10e_1$. Zero shall be correct to within $\pm 0.5e_1$.
- (d) If the instrument has maintained the correct zero setting, retain the $10e_1$ on the receptor and complete a load test to the maximum capacity of the instrument in at least five steps. The first step shall be at $Max_1 + 5e_2$ and other test loads shall include Max_2 and values at or near those at which the maximum permissible errors change. Similarly remove the test loads to check zero at $10e_1$. Zero shall be correct to within $\pm 0.5e_2$.

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 multiple-range 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/285
VARIATION No 1

Pattern: Mettler Toledo Model 8450 Weighing Instrument.

Submitter: Mettler Toledo Limited
525 Graham Street
Port Melbourne VIC 3207.

1. Description of Variant 2

A Mettler Toledo model 8461 Smart *Touch* multi-interval price-computing weighing instrument (Figure 2) with a verification scale interval (e_1) of 0.002 kg up to 6 kg, and 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 LCD touch screen display/keyboard and an integral *label* printer. Instruments also have a price look up (PLU) facility.

Instruments are approved for use over a temperature range of -5°C to 40°C, and are so marked.

Instruments are provided with adjustable feet and a level indicator. Adjacent to the level indicator is a notice stating 'instrument must be level when in use', or similar wording.

TECHNICAL SCHEDULE No 6/4D/285
VARIATION No 2

Pattern: Mettler Toledo Model 8450 Weighing Instrument.

Submittor: Mettler Toledo Limited
525 Graham Street
Port Melbourne VIC 3207.

1. Description of Variant 3

An instrument comprising the Mettler Toledo model 355 indicator/printer connected to a model 8270 basework (Figure 3). The instrument is a price-computing weighing instrument of 20 kg maximum capacity with a verification scale interval of 0.005 kg.

The model 355 indicator/printer incorporates the displays, keyboard and printer of the model 8450 instrument (Figure 1) into a stainless steel casing (Figure 3) which is connected to the separate model 8270 basework.

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.

A pre-set subtractive taring device of up to 10 kg maximum capacity may be fitted.

Instruments are not to be used for trading direct with the public and are so marked.

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

1.1 Markings

(a) Model 355 indicator/printers carry the following markings:

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
Model number
Pattern approval mark for the instrument	NSC No 6/4D/285
Special temperature limits	0°C to +40°C

Instruments are marked with a notice stating NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC, or similar wording.

* These markings (and the above notice) shall also be shown near the display of the result if they are not already located there.

(b) Model 8720 baseworks carry the following markings:

Manufacturer's mark, or name written in full
Indication of accuracy class	Ⓜ
Serial number
Model number
Pattern approval mark for the instrument	NSC No 6/4D/285
Special temperature limits	0°C to +40°C

1.2 Sealing

Provision is made for access to the calibration adjustments to be prevented by sealing of the cover below the platter of the model 8270 basework (Figure 4). Provision is also made to prevent access within the casing of the model 355 indicator/printer (other than to the label roll compartment) by the application of destructible adhesive labels on the left-hand side panel (Figure 5) and by a sealing plate and either a lead-and-wire seal or destructible adhesive label over the access hole on the rear of the model 355 (Figure 6).

NOTIFICATION OF CHANGE

In Technical Schedule No 6/4D/285 dated 23 March 1998;

- A. Clause **1.7 Markings** should be amended by removing the words "in the form shown at right" from the first sentence.
- B. The Test Procedure should be amended by adding the following:
"Ensure that instruments are only being used within the special temperature limits stated elsewhere in this approval."



Australian Government

National Standards Commission

12 Lyonpark Road, North Ryde NSW 2113 Australia

Notification of Change

Certificate of Approval No 6/4D/285

Change No 1

The following changes are made to the approval documentation for the

Mettler Toledo Model 8450 Weighing Instrument

submitted by Mettler Toledo Limited
now of 220 Turner Street
Port Melbourne VIC 3207.

1. In Certificate of Approval No 6/4D/285 dated 30 March 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 December 2007, and then every 5 years thereafter."
2. In Technical Schedule No 6/4D/285 dated 23 March 1998, its Variation No 1 dated 24 May 1999, and its Variation No 2 dated 30 March 2001, the address of the submitter should be amended to read:
"220 Turner Street
Port Melbourne VIC 3207".

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.

A handwritten signature in black ink, appearing to be 'J. G. T.', located at the bottom right of the page.

FIGURE 6/4D/285 - 1



Mettler Toledo Model 8450 Weighing Instrument

FIGURE 6/4D/285 - 2



Mettler Toledo Model 8461 *Smart Touch* Weighing Instrument

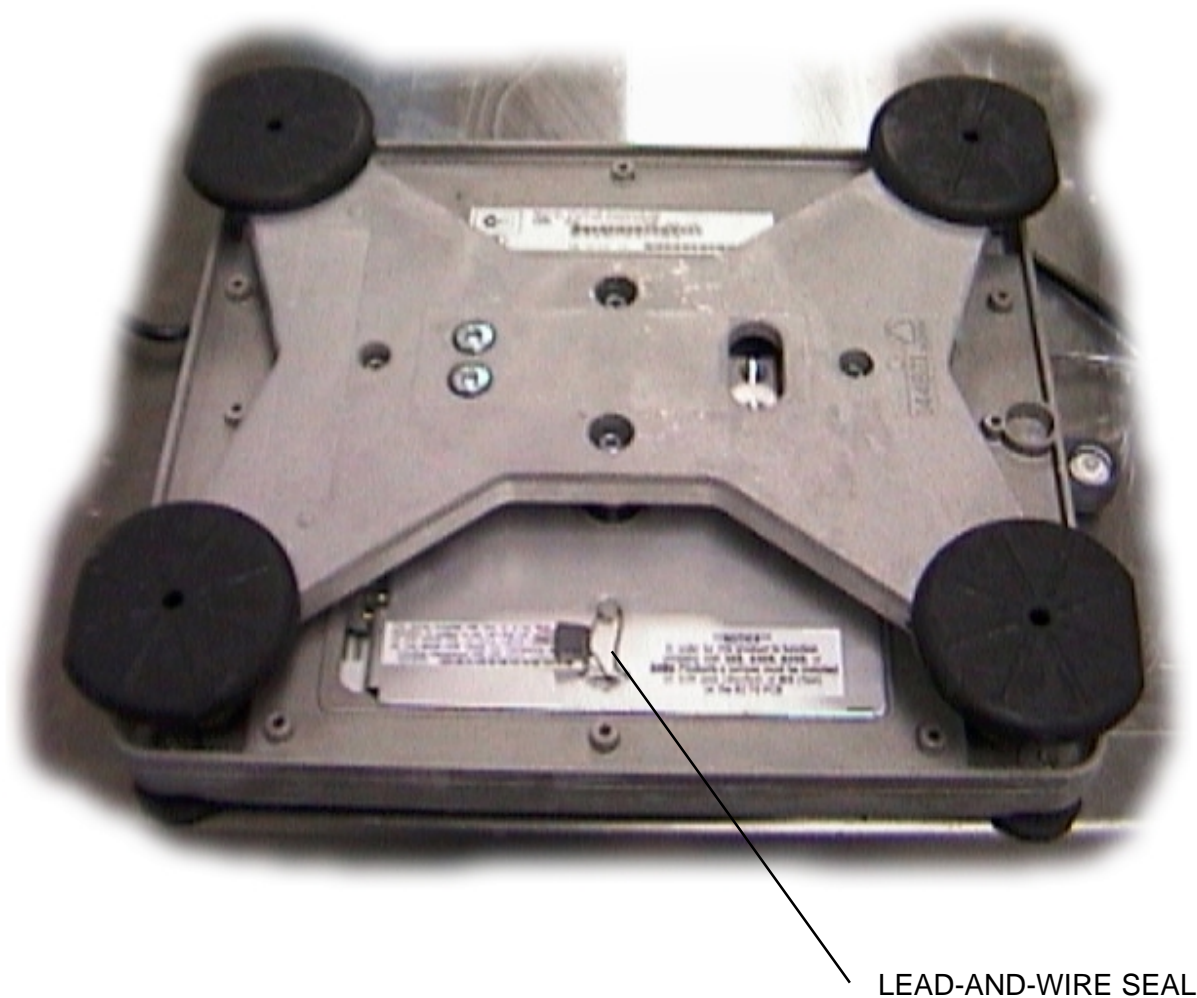
FIGURE 6/4D/285 - 3



Mettler Toledo Model 355 Indicator/Printer
and Model 8270 Basework

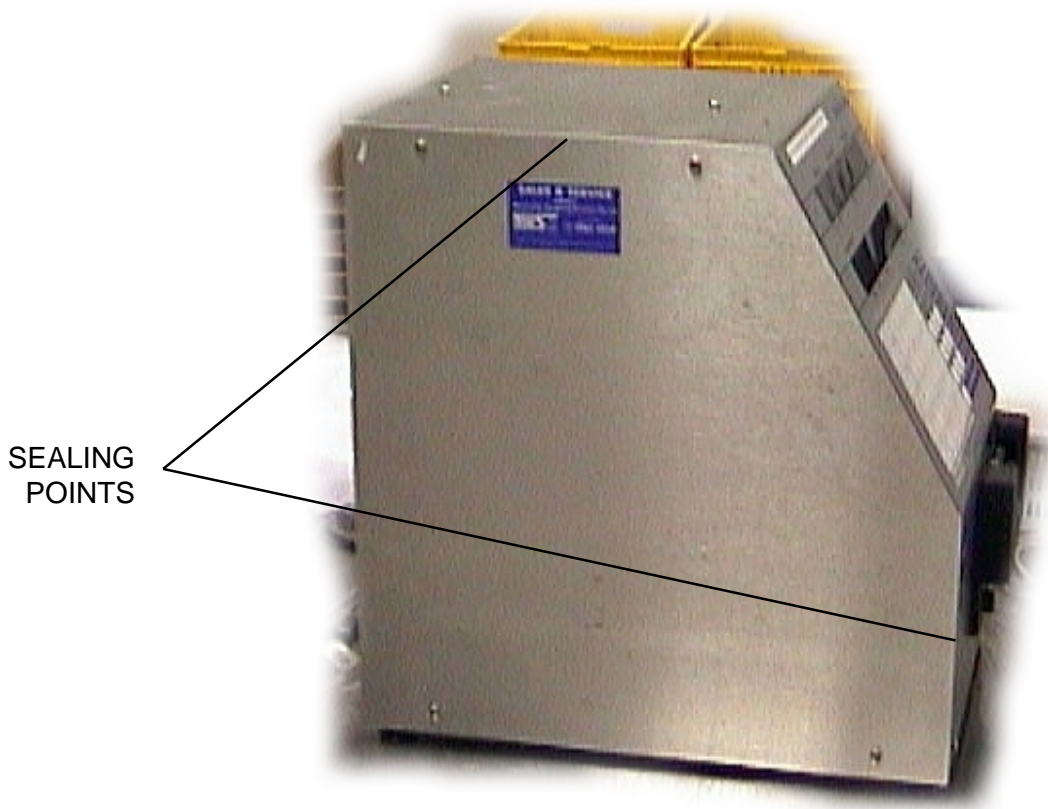
6/4D/285
30 March 2001

FIGURE 6/4D/285 - 4



Showing Sealing of Model 8270 Basework

FIGURE 6/4D/285 - 5



Showing Sealing of Model 355 Indicator/Printer

6/4D/285
30 March 2001

FIGURE 6/4D/285 - 6



Showing Sealing of Model 355 Indicator/Printer (Rear)