



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Cancellation
Certificate of Approval
No 6/4C/218

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 TRIMWEIGH III TW1N006B Weighing Instrument

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

has been cancelled in respect of new instruments as from 1 April 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 a series of loops and flourishes, positioned to the right of the signature text.



Australian Government

National Standards Commission

12 Lyonpark Road, North Ryde NSW 2113 Australia

Certificate of Approval

No 6/4C/218

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 TRIMWEIGH III TW1N006B Weighing Instrument

submitted by Mettler Toledo Limited
220 Turner 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 July 2008, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 6/4C/218 and only by persons authorised by the submittor.

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 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.

This approval shall NOT be used in conjunction with General Certificate No 6B/0.

DESCRIPTIVE ADVICE

Pattern: provisionally approved 13 June 2003
approved 12 September 2003

- A Mettler Toledo model TRIMWEIGH III TW1N006B self-indicating weighing instrument of 6 kg maximum capacity. May also be known as a model WHN 006B.

Variants: provisionally approved 13 June 2003
approved 12 September 2003

1. Certain other models and capacities as listed in Table 1.
2. Certain baseworks of this approval with a compatible Commission-approved indicator.

Technical Schedule No 6/4C/218 describes the pattern and variants 1 & 2.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/4C/218 dated 27 October 2003
Technical Schedule No 6/4C/218 dated 27 October 2003 (incl. Test Procedure)
Figures 1 and 2 dated 27 October 2003

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. H. T.', is written on a light-colored background.

TECHNICAL SCHEDULE No 6/4C/218

Pattern: Mettler Toledo Model TRIMWEIGH III TW1N006B Weighing Instrument

Submittor: Mettler Toledo Limited
220 Turner Street
Port Melbourne VIC 3207

1. Description of Pattern

A Mettler Toledo model Trimweigh III TW1N006B self-indicating weighing instrument (Table 1 and Figure 1) with a maximum capacity of 6 kg and a verification scale interval of 0.002 kg. May also be known as a model WHN 006B.

Instruments are powered by the mains power supply.

1.1 Basework

The Mettler Toledo model TW1N006B basework (Figure 2) has the load receptor fully supported by a single load cell. The basework may also be known as a model WHN 006B.

The load receptor has maximum nominal dimensions of 229 x 229 mm.

1.2 Load Cell

The load cell used is a Mettler Toledo model 0799 of 20 kg maximum capacity.

1.3 Indicator

A Mettler Toledo model Panther or Panther *Plus* digital indicator is used (Figure 1). The indicator is also described in the documentation of NSC approval No S353, however when used as the indicator of this instrument it may be marked as a model Trimweigh III. The indicator may be attached directly to the base or mounted on a column; it may also be located remotely.

The indicator is NOT FOR TRADING DIRECT WITH THE PUBLIC and is so marked.

1.3.1 Zero

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

The initial zero-setting device of the pattern has a nominal range of not more than 4% 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.

1.3.2 Tare

A semi-automatic and/or an automatic subtractive taring device, each having a capacity of up to maximum capacity of the instrument, may be fitted.

1.3.3 Display Check

A display check is initiated whenever power is applied.

1.4 Levelling

The instrument is provided with adjustable feet and a level indicator. Adjacent to the level indicator is a notice advising that the instrument must be level when in use.

1.5 Sealing Provision

Provision is made for the calibration adjustments to be sealed as described in the approval documentation for the indicator used.

1.6 Verification/Certification Provision

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

1.7 Descriptive Markings and Notices

Instruments carry the following markings:

Manufacturer's mark, or name written in full
Indication of accuracy class	Ⓜ
Pattern approval mark for the instrument	NSC No 6/4C/218
Maximum capacity	Max kg *
Minimum capacity	Min kg *
Verification scale	e kg *
Maximum subtractive tare	T = - kg #
Serial number of the instrument

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

Required only if the maximum subtractive tare capacity of the instrument is not equal to the maximum capacity of the instrument.

Instruments not greater than 100 kg capacity are not for trading direct with the public and are so marked.

2. Description of Variants

2.1 Variant 1

Certain other Mettler Toledo Trimweigh III (or WHN) models and capacities as listed in Table 1.

2.2 Variant 2

Certain baseworks of this approval used with a compatible Commission-approved (by Supplementary Certificate) indicator provided the conditions set out below are met. Instruments may be known according to the Trimweigh III model number (instrument model TW....), or the WHN model number (basework model WHN ...).

In addition to the markings specified in clause **1.7 Descriptive Markings and Notices**, instruments are marked with the NSC approval number for the indicator used, together in the same location.

Instruments not greater than 100 kg capacity may be used for trading direct with the public unless the NSC approval for the indicator used states that they cannot be so used; in the latter case, instruments are marked NOT FOR TRADING DIRECT WITH THE PUBLIC, or similar wording.

The approved baseworks and their limiting characteristics are given in Table 1.

The conditions to be met are:

- The excitation voltage used is within the range approved for the baseworks.
- The maximum load applied to the basework (live load plus any dead load) does not exceed the load cell maximum capacity.
- The verification scale interval is not less than the minimum value specified.
- The number of verification scale intervals is less than or equal to the n_{max} value specified.
- The signal voltage per verification scale interval is not less than the minimum sensitivity value per verification scale interval for the indicator (as specified in the approval documentation for the indicator), i.e.

$$\text{Indicator Sensitivity} < 1000 \times E_x \times LC_Sens \times e / E_{max}$$

where E_x = Excitation from indicator (V)

LC_Sens = Load cell sensitivity (mV/V)

E_{max} = Load cell maximum capacity (nominal) (kg)

e = verification scale interval of the instrument (kg).

Indicator Sensitivity = Minimum sensitivity value per verification scale interval for the indicator (mV)

TEST PROCEDURE

Instruments should be tested in accordance with any relevant tests specified in the Uniform Test Procedures.

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:

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

TABLE 1

Instruments:	Mettler Toledo Trimweigh III (or WHN) Series				
Instrument model (#1)	TW1N006B	TW2N015B	TW2N030B	TW2N060B TW2N060L	W2N150B
Basework model (#2)	WHN 006B	WHN 015B	WHN 030B	WHN 060B WHN 060L	WHN150B
Maximum capacity	6 kg	15 kg	30 kg	60 kg	150 kg
Maximum number of verification scale intervals n_{max}	3000	3000	3000	3000	3000
Minimum value of verification scale interval (e)	0.002 kg	0.005 kg	0.01 kg	0.02 kg	0.05 kg
Maximum platform size (mm)	229x229	305x305	305x305	305x305 457x457	457x457
Load cells: Mettler Toledo Model 0799	[P/N 16536300A]	[P/N 16406000A]	[P/N 16406100A]	[P/N 16406200A]	[P/N 16406300A]
Load cell maximum capacity (E_{max})	20 kg	20 kg	50 kg	100 kg	200 kg
Number of load cells	1	1	1	1	1
Load cell sensitivity at E_{max}	2 mV/V	2 mV/V	2 mV/V	2 mV/V	2 mV/V
Input impedance	350 Ω	350 Ω	350 Ω	350 Ω	350 Ω
Excitation voltage (maximum)	5-15 V	5-15 V	5-15 V	5-15 V	5-15 V
Cable length (± 0.1 m) (#3)	3 m	3 m	3 m	3 m	3 m
Number of leads (plus shield)	4	4	4	4	4

(#1) The 'Trimweigh III' model number by which the instrument is typically known when used with a Mettler Toledo Panther or Panther *Plus* indicator (NSC No S353). Instruments may also be known according to basework model number.

(#2) The instrument may also be known by the basework model number (typically when used with alternative Commission-approved indicators. See variant 2.

(#3) The load cell cable length supplied with the basework shall not be shortened.

Approved Instruments

FIGURE 6/4C/218 – 1



Mettler Toledo Model TRIMWEIGH III TW1N006B Weighing Instrument

6/4C/218
27 October 2003

FIGURE 6/4C/218 – 2



Mettler Toledo Model TW1N006B Basework