



**Australian Government**  

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**National Measurement  
Institute**

12 Lyonpark Road, North Ryde NSW 2113

**Cancellation**  
**Certificate of Approval No 6/4C/203**

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 Certificate  
of Approval No 6/4C/203 issued 27 April 1999 in respect of the

Mettler Toledo Model 1997 Weighing Instrument

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

has been cancelled in respect of new instruments as from 1 October 2004.

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. G. T.', written in a cursive style.



## National Standards Commission

### Certificate of Approval

**No 6/4C/203**

Issued under Regulation 9  
of the  
National Measurement (Patterns of Measuring Instruments) Regulations

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

Mettler Toledo Model 1997 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 September 2003, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 6/4C/203 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 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 5 August 1998

- A Mettler Toledo model 1997 weighing instrument of 15 kg maximum capacity.

**Variants:** approved 5 August 1998

1. Model 2097 of 60 kg maximum capacity.
2. Model UB60LP of 60 kg maximum capacity.

**Variant:** approved 30 March 1999

3. With the Panther indicator replaced by a compatible indicator Commission-approved for use with Mettler Toledo 'DigiTOL' load cells.

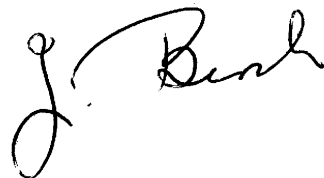
Technical Schedule No 6/4C/203 describes the pattern and variants 1 to 3.

#### FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/4C/203 dated 13 April 1999  
Technical Schedule No 6/4C/203 dated 13 April 1999 (incl. Test  
Procedure)  
Figures 1 to 4 dated 13 April 1999

Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Measuring Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.



## TECHNICAL SCHEDULE No 6/4C/203

**Pattern:** Mettler Toledo Model 1997 Weighing Instrument.

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

### 1. Description of Pattern

A Mettler Toledo model 1997 weighing instrument (Figure 1) of 15 kg maximum capacity with a verification scale interval of 0.005 kg.

Instruments are comprised of a model 1997 basework (Figure 1) and a model Panther indicator (Figures 2 and 3). Instruments are marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' unless the display is located such that all primary indications are displayed clearly and simultaneously to both the vendor and the customer.

#### 1.1 Basework

The model 1997 basework uses a Mettler Toledo model 756 load cell of 30 kg maximum capacity mounted as shown in Figure 1.

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.

#### 1.2 Indicator

The model Panther indicator is approved in the housings shown in Figures 2 and 3) and is described in the documentation of NSC approval No S353. Instruments may be fitted with output sockets for the connection of peripheral and/or auxiliary devices.

#### 1.3 Markings and Notices

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

Manufacturer's mark, or name written in full	Mettler-Toledo Inc.
Indication of accuracy class	Ⓜ
Maximum capacity	Max ..... kg *
Minimum capacity	Min ..... kg *
Verification scale interval	e = ..... kg *
Serial number of the instrument	.....
Pattern approval mark for the instrument	NSC No 6/4C/203

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

- (ii) In addition, instruments used with a single display may need to be marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' or similar wording – refer to clause **1. Description of Pattern**.

#### **1.4 Verification/Certification Provision**

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

#### **1.5 Sealing Provision**

The instrument is sealed as described in the approval documentation for the indicator used.

### **2. Description of Variants**

#### **2.1 Variant 1**

Model 2097 weighing instrument of 60 kg maximum capacity with a verification scale interval of 0.02 kg.

Instruments are comprised of a model 2097 basework (Figure 4) and a model Panther indicator.

The model 2097 basework uses a Mettler Toledo model 756 load cell of 100 kg maximum capacity mounted as shown in Figure 4.

#### **2.2 Variant 2**

Model UB60LP weighing instrument of 60 kg maximum capacity with a verification scale interval of 0.02 kg.

Instruments are comprised of a model UB60LP basework and a model Panther indicator.

The model UB60LP basework uses a Mettler Toledo model 754 load cell of 140 kg maximum capacity.

#### **2.3 Variant 3**

With the Panther indicator replaced by a compatible indicator Commission-approved for use with Mettler Toledo 'DigiTOL' load cells.

In addition to the markings specified in clause **1.3 Markings and Notices**, instruments are marked with the NSC approval number for the indicator used, together in the same location.

## TEST PROCEDURE

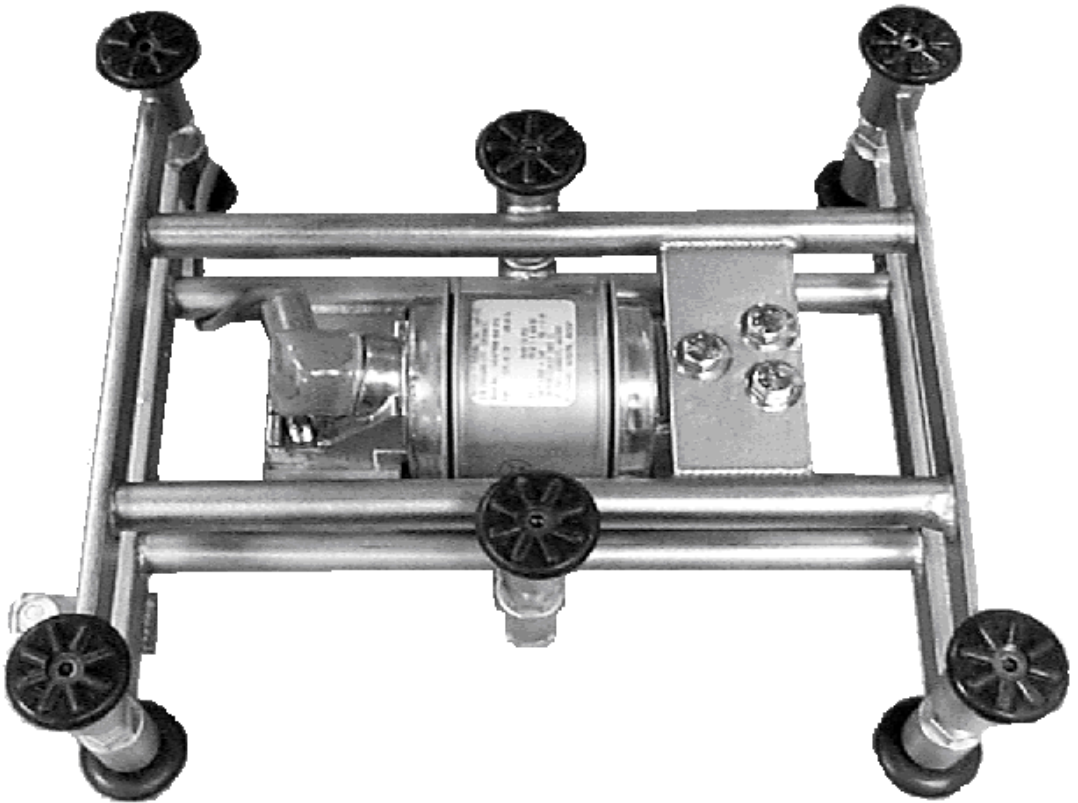
Instruments should be tested in accordance with any relevant tests specified in the Inspector's Handbook.

### **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  $2\,000 < m \leq 10\,000$ .

FIGURE 6/4C/203 - 1



Mettler Toledo Model 1997 Basework

FIGURE 6/4C/203 - 2



Mettler Toledo Model Panther Indicator -  
Harsh Environment Version

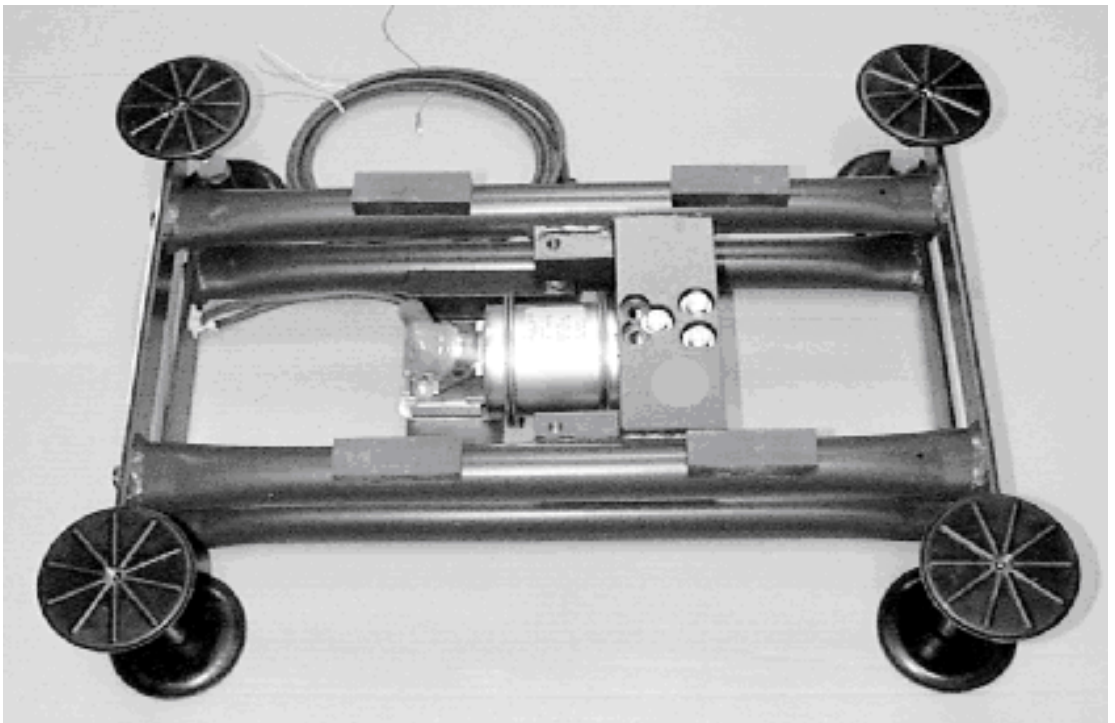


FIGURE 6/4C/203 - 3



Mettler Toledo Model Panther Indicator -  
Panel Mount Version

FIGURE 6/4C/203 - 4



Mettler Toledo Model 2097 Basework