S253A
22 May 2002

National Standards Commission

12 Lyonpark Road, North Ryde NSW

Cancellation

Supplementary Certificate of Approval

No S253A

Issued 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 8530 Digital Indicator

submitted by Mettler Toledo Limited
(now Mettler Toledo United)
220 Turner Street
Port Melbourne VIC 3207

has been cancelled in respect of new instruments as from 1 June 2002.

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.

National Standards Commission

Supplementary Certificate of Approval

No S253A

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 8530 Digital Indicator

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.

This Certificate is issued upon completion of a review of NSC approval No S253.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 May 2001 and every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No S253A and only by persons authorised by the submittor.

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Instruments incorporating a component purporting to comply with this approval shall be marked NSC No S253A 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 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 component of an instrument purporting to comply with this approval.

Special:

The indicator approved herein shall only be used with Commission-approved Mettler Toledo 'DigiTol' load cells.

The calculations of Section 6 of General Certificate No 6B/0 shall apply to all ranges and all capacities of multi-interval instruments.

DESCRIPTIVE ADVICE

Pattern: approved 10 April 1996

- A Mettler Toledo model 8530 single-interval digital indicator.

Variants: approved 10 April 1996

1. As a dual-interval instrument.

2. With a facility to configure the instrument with another mass unit.

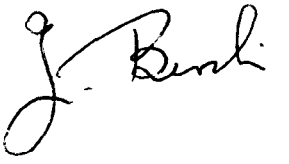
Technical Schedule No S253A describes the pattern and variants 1 & 2.

FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S253A dated 16 September 1996
Technical Schedule No S253A dated 16 September 1996 (incl. Test Procedure)
Figures 1 to 3 dated 16 September 1996

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.



National Standards Commission

TECHNICAL SCHEDULE No S253A

Pattern: Mettler Toledo Model 8530 Digital Indicator.

Submittor: Mettler Toledo Scale (Australia) Ltd
525 Graham Street
Port Melbourne VIC 3207.

1. Description of Pattern

A Mettler Toledo model 8530 single-interval digital mass indicator which is approved for use with Commission-approved Mettler Toledo 'Digitol' load cells only.

The instrument is approved for use with up to 10 000 verification scale intervals and may be fitted with output sockets for the connection of auxiliary and/or peripheral devices.

The indicator may be in any of the housings shown in Figures 1 to 3.

1.1 Zero

Zero is automatically set to within ±0.25e whenever the instrument comes to rest within ±0.5e. If the instrument comes to rest outside that range but within the zero setting range, zero may be set by pressing the zero button.

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

1.2 Display Check

A display check is initiated whenever power is applied.

1.3 Tare

The instrument may be fitted with a semi-automatic subtractive taring device and/or a non-automatic keyboard-entered taring device. Each device may operate up to maximum capacity, and the tare values may be stored.

1.4 Linearisation

The indicator has a single fixed point (mid range) linearisation facility.

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1.5 Function Key

The FUNCTION key allows access to various management facilities including a totalising function and also to a set point facility which has up to 4 set points.

1.6 Sealing and Verification/Certification Provision

Provision is made for the calibration adjustments of the instrument to be sealed by means of the sealing screw and adjacent sealing lug on the rear of the indicator.

Provision is made for a verification/certification mark to be applied.

1.7 Markings

Instruments are marked with the following data, together in one location:

Manufacturer's name or mark			
Serial number			
Accuracy class			(III)
Maximum capacity			Max ..... *
Minimum capacity			Min ..... *
Verification scale interval			e = ... *
NSC approval numbers	-	indicator	NSC No S253A
	-	other components	NSC No ..... #

* Repeated in the vicinity of each reading face.
\# May be located separately from the other markings.

2. Description of Variants

2.1 Variant 1

As a dual-interval mass indicator.

2.1.1 Limits of Ranges

Instruments shall comply with the following:

(i) With a maximum of 5000 verification scale intervals per range.

(ii) $\frac{\text{Maximum capacity of the low range}}{\text{Verification scale interval of the high range}} \geq 500$

2.1.2 Markings

In addition to the markings specified in clause **1.7 Markings**, instruments are marked with the following data, together in the same location:

High range: (similarly for low range)

Maximum capacity	Max ..... *
Verification scale interval	e = ... *

* These are repeated adjacent to each reading face.

2.2 Variant 2

With a facility to configure the instrument with another mass unit viz. lb, in which case the instrument must be marked "lb not for trade use" or "lb for export use only". The scale interval, verification scale interval, maximum capacity and minimum capacity when used with this unit shall be marked in the vicinity of the reading face, in addition to the markings specified in clause **1.7 Markings**.

TEST PROCEDURE

Instruments shall 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 Inspector's Handbook.

Maximum Permissible Errors at Verification/Certification

The maximum permissible errors for increasing and decreasing loads, expressed in terms of verification scale interval (e), with the instrument adjusted to zero within ±0.25e at no load, are:

±0.5e for loads from 0 to 500e;
±1.0e for loads over 500e up to 2000e; and
±1.5e for loads over 2000e.

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

1. **Load Test** (dual-interval instruments)

Test loads are to be applied to the instrument in not less than 6 steps increasing to maximum capacity, followed by decreasing loads in not less than 6 steps to zero load. The loads should be selected such that there are 3 approximately-equal steps in each range, but avoiding the changeover point of the ranges.

FIGURE S253A - 1

Mettler Toledo Model 8530 Digital Indicator

FIGURE S253A - 2

Model 8530 in an Alternative Housing

FIGURE S253A - 3

Model 8530 in an Alternative Housing