National Standards Commission

Supplementary Certificate of Approval

No S206A

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 8140 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.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/8/98.
This approval expires in respect of new instruments on 1/8/99.

Instruments purporting to comply with this approval shall be marked NSC No S206A and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked NSC No S206A in addition to the approval number of the instrument.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0/A.

..../2

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.

DESCRIPTIVE ADVICE

Pattern: approved 26/7/93

- A Mettler Toledo model 8140 digital mass indicator.

Technical Schedule No S206A describes the pattern.

Variant: approved 17/2/94

1. A model 8142 digital mass indicator.

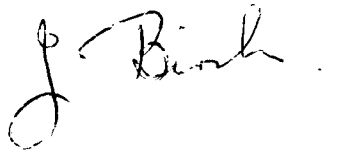
Technical Schedule No S206A Variation No 1 describes variant 1.

FILING ADVICE

Supplementary Certificate of Approval No S206A dated 6/10/93 is superseded by this Certificate, and may be destroyed. The documentation for this approval now comprises:

Supplementary Certificate of Approval No S206A dated 11/4/94
Technical Schedule No S206A dated 6/10/93 (incl. Table 1 & Test Procedure)
Technical Schedule No S206A Variation No 1 dated 11/4/94 (incl. Table 2)
Figure 1 dated 6/10/93
Figures 2 and 3 dated 11/4/94

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 S206A

Pattern: Mettler Toledo Model 8140 Digital Indicator

Submittor: Mettler Toledo Limited
525 Graham Street
Port Melbourne VIC 3027.

1. Description of Pattern

A Mettler Toledo model 8140 digital mass indicator approved for use with up to 5000 verification scale intervals (Table 1). Instruments may be fitted with input/output sockets for the connection of auxiliary and/or peripheral devices.

Instruments may be as shown in Figure 1 or in alternative housings.

1.1 Zero

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

1.2 Display Check

A display check is initiated whenever the TEST key is pressed.

1.3 Tare

The instrument may be fitted with a semi-automatic subtractive taring device of up to maximum capacity.

1.4 Memory/Totalising

The instrument may be fitted with a memory function allowing successive weighings to be totalised.

1.5 Optional Mass Unit

The instrument may be configured to display in 'lb'. The instrument shall 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. The markings of the primary units shall be given in 'kg' or 't'.

1.6 Verification/Certification Provision

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

..../2

1.7 Sealing Provision

Provision is made for a destructive label to be placed across the joint of the casing halves.

1.8 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 = d = ...	*
Maximum subtractive tare		T = -	
NSC approval numbers	- indicator	NSC No S206A	
	- other components	NSC No S.....	#

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

In addition, when the instrument is weighing in 'lb', the mass display shall be denominated 'lb' and the instrument shall be marked 'not for trade use' or 'for export use only'. Refer also to clause **1.5 Optional Mass Unit**.

TABLE 1

Type: Mettler Toledo	8140
Maximum number of verification scale intervals	5000
Minimum sensitivity	1.0 x 10^{-3} mV/scale interval
Excitation voltage	12.5 V DC
Minimum load impedance	90 ohms
Maximum excitation current	138 mA

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.

The maximum permissible errors applicable are those applicable to the instrument to which the pattern approved herein is fitted, as stated in the approval documentation for the instrument.

National Standards Commission

TECHNICAL SCHEDULE No S206A

VARIATION No 1

Pattern: Mettler Toledo Model 8140 Digital Indicator

Submittor: Mettler Toledo Limited
525 Graham Street
Port Melbourne VIC 3027.

1. Description of Variant 1

A Mettler Toledo model 8142 digital mass indicator approved for use with up to 10 000 verification scale intervals (Table 2). Instruments may be fitted with input/output sockets for the connection of auxiliary and/or peripheral devices.

Instruments may be as shown in Figure 2 or in alternative housings.

1.1 Display Check

A display check is initiated whenever power is applied or the TEST key is pressed.

1.2 Tare

The instrument may be fitted with a semi-automatic and/or a keyboard-entered non-automatic subtractive taring device, each of up to maximum capacity.

1.3 Dual Display

Instruments may have either a single or a dual display (Figure 3); in the latter case, the RECALL button may be used to display the tare mass value or other management data on the second display.

1.4 Set Point

Instruments may be fitted with a facility for up to 4 set points to be configured.

1.5 Management Functions

Instruments may be fitted with a number of management functions which are not approved for trade use, including counting.

..../2

1.6 Optional Mass Unit

The instrument may be configured to display in 'lb'. The instrument shall 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. The markings of the primary units shall be given in 't', 'kg' or 'g'.

TABLE 2

Type: Mettler Toledo	8142
Maximum number of verification scale intervals	10 000
Minimum sensitivity	0.75×10^{-3} mV/scale interval
Excitation voltage	12.5 V DC
Minimum load impedance	58.3 ohms
Maximum excitation current	214.4 mA

National Standards Commission

NOTIFICATION OF CHANGE

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S206A

CHANGE No 1

The following changes are made to the approval documentation for the

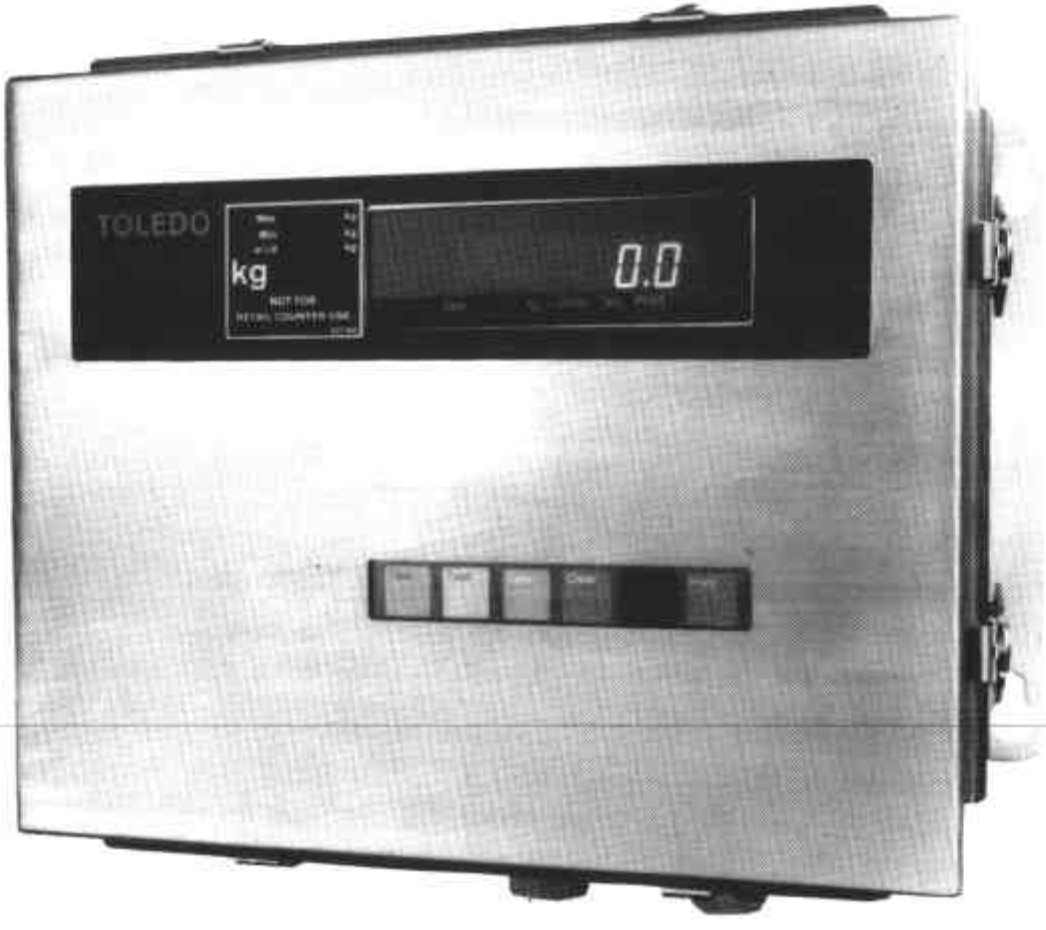
Mettler Toledo Model 8140 Digital Indicator

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

In Technical Schedule No S206A dated 6/9/93, Table 1 should be amended so that the value for Maximum Excitation Current is changed to read '143 mA'.

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.

FIGURE S206A - 1



Mettler Toledo Model 8140 Indicator

FIGURE S206A - 2

Mettler Toledo Model 8142 Digital Indicator

S206A
14/4/94

FIGURE S206A - 3

Model 8142 In An Alternative Housing