



**Australian Government**  
**National Measurement**  
**Institute**

Bradfield Road, West Lindfield NSW 2070

**Cancellation**  
**Certificate of Approval**  
**No 6/9C/274**

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 WT300L 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 stylized cursive letters, likely representing the Chief Metrologist.



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## **Certificate of Approval**

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Issued by the Chief Metrologist under Regulation 60  
of the  
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This is to certify that an approval for use for trade has been granted in respect of the

Mettler Toledo Model WT300L 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.

This approval has been granted with reference to document NMI R 76, *Non-automatic weighing instruments, Parts 1 and 2*, dated July 2004.

#### **CONDITIONS OF APPROVAL**

This approval becomes subject to review on 1 December 2014, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NSC 6/9C/274' 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 National Measurement Institute (NMI) 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 document NMI P 106.

The National Measurement Institute 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:** approved 11 November 2002

- A Mettler Toledo model WT300L self-indicating single range weighing instrument of 300 kg maximum capacity.

**Variant:** approved 11 November 2002

1. Certain W series instruments as listed in Tables 1 to 3.

**Variant:** approved 13 December 2002

2. Certain baseworks of this approval with a compatible approved indicator.

Technical Schedule No 6/9C/274 describes the pattern and variants 1 & 2.

**Variant:** approved 6 August 2009

3. With alternative approved Mettler Toledo indicators.

Technical Schedule No 6/9C/274 Variation No 1 describes variant 3.

#### FILING ADVICE

Certificate of Approval No 6/9C/274 dated 17 December 2002 is superseded by this Certificate, and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No 6/9C/274 dated 7 August 2009  
Technical Schedule No 6/9C/274 dated 17 December 2002 (incl. Tables 1 to 3, and Test Procedure)  
Technical Schedule No 6/9C/274 Variation No 1 dated 7 August 2009  
Figures 1 to 4 dated 17 December 2002

Signed by a person authorised by the Chief Metrologist to exercise his powers under Regulation 60 of the *National Measurement Regulations 1999*.



TECHNICAL SCHEDULE No 6/9C/274

**Pattern:** Mettler Toledo Model WT300L Weighing Instrument

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

## **1. Description of Pattern**

A Mettler Toledo model WT300L self-indicating weighing instrument (Table 1 and Figure 1) with maximum capacity of 300 kg and a verification scale interval of 0.1 kg. Instruments are mains powered.

### **1.1 Basework**

The Mettler Toledo model WT300L basework (Figure 2) has the load receptor directly supported by a single load cell. The load receptor has maximum nominal dimensions of 600 x 800 mm.

### **1.2 Load Cell**

A Mettler Toledo model SSP1260-500 load cell of 500 kg capacity is used.

### **1.3 Indicator**

A Mettler Toledo model Hawk digital indicator is used (Figure 1). The indicator is also described in the documentation of NSC approval No S404. The indicator may be attached directly to the base or mounted on a column; it may also be located remotely.

#### **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 20% 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 subtractive tare device of up to maximum capacity may be fitted.

#### **1.3.3 Display Check**

A display check is initiated whenever power is applied.

## **1.4 Verification/Certification Provision**

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

## 1.5 Levelling

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

## 1.6 Sealing Provision

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

## 1.7 Markings

Instruments carry the following markings:

Manufacturer's mark, or name written in full	Mettler Toledo
Indication of accuracy class	Ⓜ
Pattern approval mark for the instrument	NSC No 6/9C/274
Maximum capacity	<i>Max</i> ..... kg *
Verification scale interval	<i>e</i> = ..... kg *
Minimum capacity	<i>Min</i> ..... kg *
Maximum subtractive tare	<i>T</i> = - ..... 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.	

## 2. Description of Variants

### 2.1 Variant 1

Certain W series instruments with specifications as listed in Tables 1 to 3. Instruments may also be known as the *WILDCAT* series with the specific basework model incorporated in a marking of "Fact. No.". Figures 3 and 4 show various models.

Instruments of 100 kg maximum capacity or less are not approved for trading direct with the public and are so marked.

Mettler Toledo model Hawk, Hawk Harsh or Wildcat digital indicators may be used. These indicators are also described in the documentation of NSC approval No S404.

### 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.

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

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

For the weighing range in use, 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  $2\,000 < m \leq 10\,000$ .

TABLE 1

Instruments: Mettler Toledo

Instrument model (#1)	WT60R	WT150R WT150M	WS150L WT150L	WT300R WT300M	WS300L WT300L
Maximum capacity	60 kg	150 kg	150 kg	300 kg	300 kg
Maximum number of verification scale intervals $n_{max}$	3000	3000	3000	3000	3000
Minimum value of verification scale interval (e)	0.02 kg	0.05 kg	0.05 kg	0.01 kg	0.01 kg
Maximum platform size (mm)	450x600	450x600 500x700	420x550 600x800	450x600 500x700	420x550 600x800

Load cells: Mettler Toledo SSP1260-\*\*\*

Model number [suffix] (#2)	150	300	300	500	500
Load cell maximum capacity ( $E_{max}$ )	150 kg	300 kg	300 kg	500 kg	500 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	387 $\Omega$	387 $\Omega$	387 $\Omega$	387 $\Omega$	387 $\Omega$
Excitation voltage (maximum)	5-15 V	5-15 V	5-15 V	5-15 V	5-15 V
Cable length ( $\pm 0.1$ m) (#3)	2 m	2 m	2 m	2 m	2 m
Number of leads (plus shield)	6	6	6	6	6

(#1) The basework model numbers may have an 'S' suffix to signify stainless steel construction.

(#2) The load cell model numbers are in the form SSP1260-\*\*\*, where \*\*\* is the suffix listed in the Table, and represents the capacity.

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

Approved W Series Instruments (With W Series Baseworks)

TABLE 2

Instruments: Mettler Toledo

Model	(#1)	WS15R	WS30R	WS60R WS60M	WS150M
Maximum capacity		15 kg	30 kg	60 kg	150 kg
Maximum number of verification scale intervals $n_{max}$		3000	3000	3000	3000
Minimum value of verification scale interval ( $e$ )		0.005 kg	0.01 kg	0.02 kg	0.05 kg
Maximum platform size (mm)		305x355	305x355	305x355 400x500	400x500

Load cells: Mettler Toledo SSP1241-\*\*\*

Model number [suffix]	(#2)	30	50	100	300
Load cell maximum capacity ( $E_{max}$ )		30 kg	50 kg	100 kg	300 kg
Number of load cells		1	1	1	1
Load cell sensitivity at $E_{max}$		2 mV/V	2 mV/V	2 mV/V	2 mV/V
Input impedance		387 $\Omega$	387 $\Omega$	387 $\Omega$	387 $\Omega$
Excitation voltage (maximum)		5-15 V	5-15 V	5-15 V	5-15 V
Cable length ( $\pm 0.1$ m)	(#3)	2 m	2 m	2 m	2 m
Number of leads (plus shield)		6	6	6	6

(#1) The basework model numbers may have an 'S' suffix to signify stainless steel construction.

(#2) The load cell model numbers are in the form SSP1241-\*\*\*, where \*\*\* is the suffix listed in the Table, and represents the capacity.

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

Approved W Series Instruments (With W Series Baseworks)

TABLE 3

Instruments: Mettler Toledo

Model (#1)	WS3XR	WS6XR	WS15XR
Maximum capacity	3 kg	6 kg	15 kg
Maximum number of verification scale intervals $n_{max}$	3000	3000	3000
Minimum value of verification scale interval (e)	0.001 kg	0.002 kg	0.005 kg
Maximum platform size (mm)	228×228	228×228	228×228
Load cells: Mettler Toledo SSP1022-**			
Model number [suffix] (#2)	10	10	30
Load cell maximum capacity ( $E_{max}$ )	10 kg	10 kg	30 kg
Number of load cells	1	1	1
Load cell sensitivity at $E_{max}$	2 mV/V	2 mV/V	2 mV/V
Input impedance	387 $\Omega$	387 $\Omega$	387 $\Omega$
Excitation voltage (maximum)	5-15 V	5-15 V	5-15 V
Cable length ( $\pm 0.1$ m) (#3)	2 m	2 m	2 m
Number of leads (plus shield)	6	6	6

- (#1) The basework model numbers may have an 'S' suffix to signify stainless steel construction.
- (#2) The load cell model numbers are in the form SSP1022-\*\*, where \*\* is the suffix listed in the Table, and represents the capacity.
- (#3) The load cell cable length supplied with the basework shall not be shortened.

Approved W Series Instruments (With W Series Baseworks)

TECHNICAL SCHEDULE No 6/9C/274

VARIATION No 1

**Pattern:** Mettler Toledo Model WT300L Weighing Instrument

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

**1. Description of Variant 3**

With the indicators described for the pattern and variant 1 now replaced by a Mettler Toledo model IND221 or model IND226 indicator (as described in the documentation of approval NMI S486) or any other compatible approved Mettler Toledo indicator.

NOTIFICATION OF CHANGE

In Technical Schedule No 6/9C/274 dated 17 December 2002 clause **2.2 Variant 2**, the 3<sup>rd</sup> paragraph should be amended to now read:

“The approved baseworks and their limiting characteristics are given in **Tables 1 to 3.**”

**NOTE:** The date at which this approval becomes due for review has been amended following completion of a review.

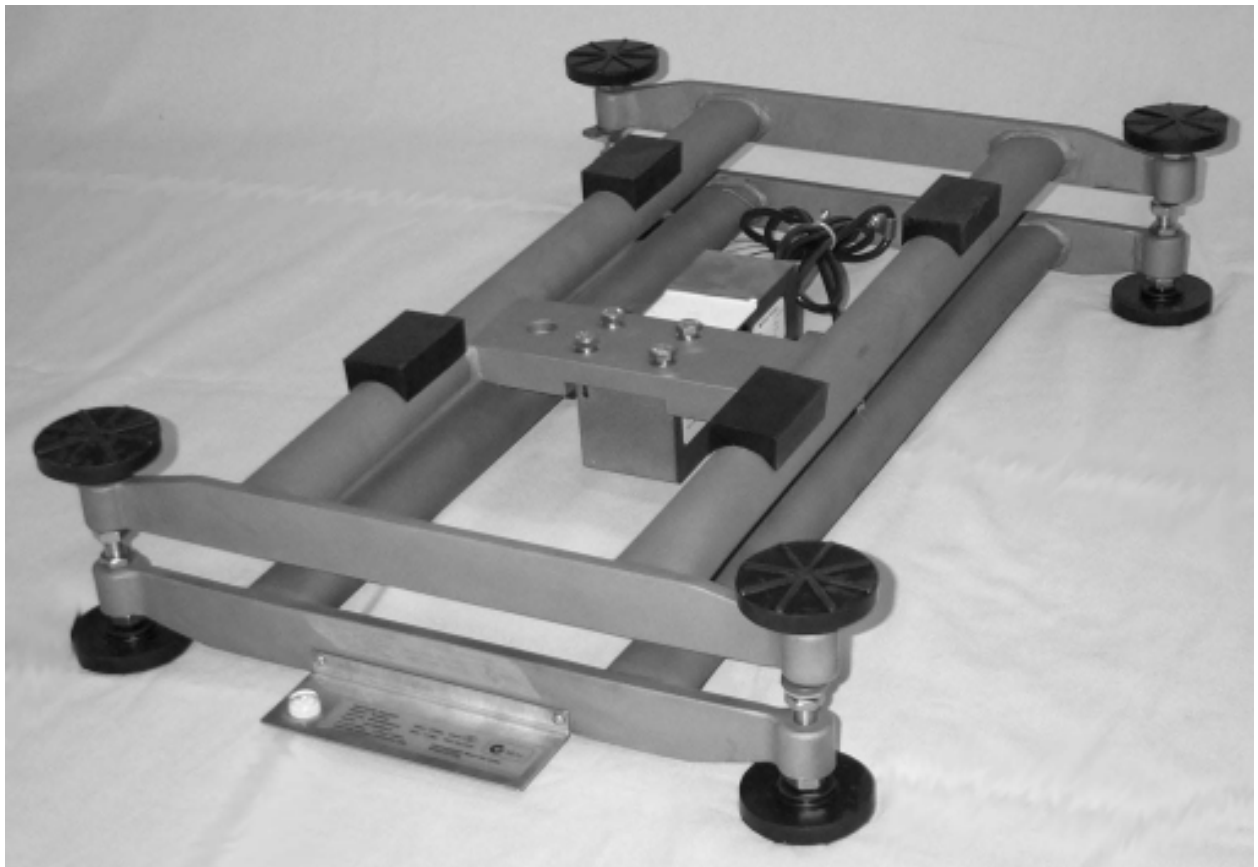
FIGURE 6/9C/274 - 1



Mettler Toledo Model WT300L Weighing Instrument  
With Hawk Indicator

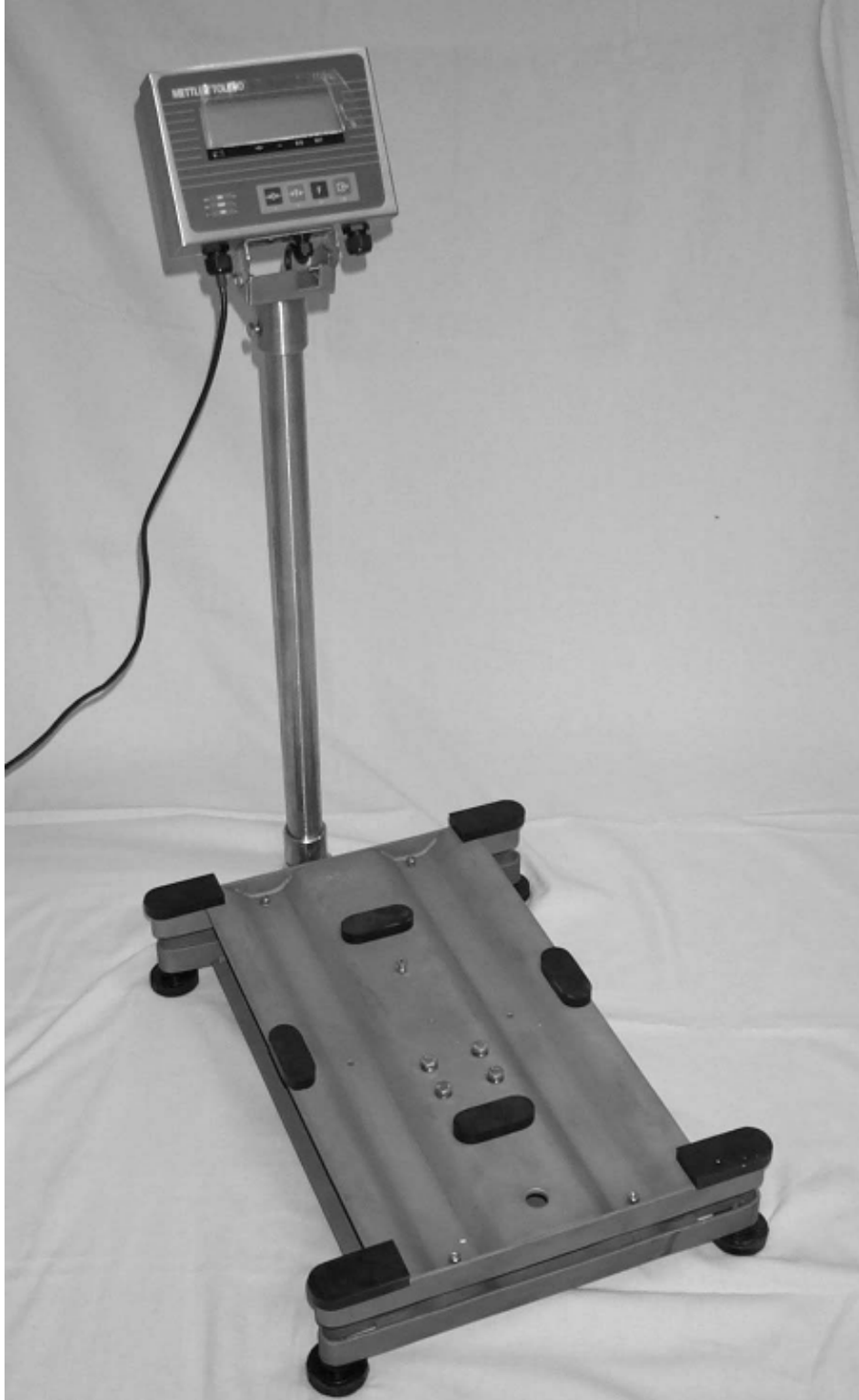
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FIGURE 6/9C/274 - 2



Mettler Toledo Model WT300L Basework

FIGURE 6/9C/274 - 3



Mettler Toledo Model WT150M Basework  
With Hawk Harsh Indicator

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FIGURE 6/9C/274 - 4



Model WS6XR Basework  
With Hawk Indicator



Model WS6XRS Basework  
With Hawk Harsh Indicator

Typical Mettler Toledo WS6 Series Weighing Instruments