

# National Standards Commission



## Supplementary Certificate of Approval

**No S319**

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

Molen Model Simecs T/2000 Digital Indicator

submitted by United Weighing Australia Pty Ltd  
Cnr Cranwell & Annesley Streets  
Braybrock VIC 3019.

**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 May 2000.  
This approval expires in respect of new instruments on 1 May 2001.

Instruments purporting to comply with this approval shall be marked NSC No S319 and only by persons authorised by the submitter.

Instruments incorporating a component purporting to comply with this approval shall be marked NSC No S319 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.

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 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 3 April 1995

• A Molen model Simecs T/2000 digital mass indicator.

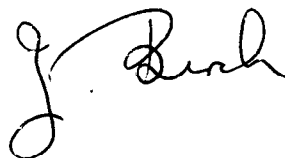
Technical Schedule No S319 describes the pattern.

#### FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S319 dated 25 July 1995  
Technical Schedule No S319 dated 25 July 1995 (incl. Table 1 and  
Test Procedure)  
Figure 1 dated 25 July 1995

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 S319

**Pattern:** Molen Model Simecs T/2000 Digital Indicator.

**Submittor:** United Weighing Australia Pty Ltd  
Cnr Cranwell & Annesley Streets  
Braybrock VIC 3019.

### 1. Description of Pattern

A Molen model Simecs T/2000 digital mass indicator (Figure 1 and Table 1) which may be fitted with input/output sockets for the connection of auxiliary and/or peripheral devices.

#### 1.1 Zero

Zero is automatically set to within  $\pm 0.25e$  whenever the instrument comes to rest within  $\pm 0.5e$ . 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 range of not more than  $\pm 20\%$  of the maximum capacity of the instrument.

#### 1.2 Display Check

A display check is initiated whenever power is applied.

#### 1.3 Tare

A keyboard-entered subtractive pre-set taring device of up to maximum capacity is fitted.

A semi-automatic subtractive taring device of up to maximum capacity may also be fitted.

#### 1.4 Management Function

Instruments may be fitted with a set point management function which is not approved for trade use.

#### 1.5 Sealing and Verification/Certification Provision

Provision is made for the calibration adjustments of the instrument to be sealed using the load cell connector at the rear of the indicator.

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

## 1.6 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 S319
	- other components	NSC No ..... #

\* Repeated in the vicinity of each reading face.

# May be located separately from the other markings.

TABLE 1

Type: Model Simecs T/2000

Maximum number of verification scale intervals	3500
Minimum sensitivity	$2.0 \times 10^{-3}$ mV/scale interval
Excitation voltage	10 V DC
Minimum load impedance	50 $\Omega$
Maximum excitation current	200 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.

### 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  $\pm 0.25e$  at no load, are:

- $\pm 0.5e$  for loads from 0 to 500e;
- $\pm 1.0e$  for loads over 500e up to 2000e; and
- $\pm 1.5e$  for loads over 2000e.

FIGURE S319 - 1



Molen Model Simecs T/2000 Digital Indicator