

NATIONAL STANDARDS COMMISSION

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/9C/204

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

Modern Weighbridge Model LTS1000 Platform Weighing Instrument

submitted by Modern Weighbridge and Scale Service Pty Ltd 25 Davis Street Wingfield South Australia 5013.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/12/91. This approval expires in respect of new instruments on 1/12/92.

Instruments purporting to comply with this approval shall be marked NSC No 6/9C/204.

This approval may be withdrawn if instruments are constructed other than as described in the drawings and specifications lodged with the Commission.

The maximum number of scale intervals applicable to the instrument shall be no greater than the number of verification scale intervals approved for the basework, or the load cell, or the indicator, whichever is the smallest.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificates Nos S1/0 and/or S2/0, as appropriate.

The load cells shall be subject to regular certification by the Commission.

Signed

Executive Director

Descriptive Advice

Pattern: approved 28/11/86

 Modern Weighbridge model LTS1000 platform weighing instrument of between 4 tonne and 10 tonne capacity.

Variant: approved 12/5/87

1. Of up to 3 tonne capacity.

Technical Schedule No 6/9C/204 describes the pattern and variant 1.

Filing Advice

The documentation for this approval comprises:

Certificate of Approval No 6/9C/204 dated 21/9/87Technical Schedule No 6/9C/204 dated 21/9/87 (incl. Test Procedure) Figures 1 to 3 dated 21/9/87



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/9C/204

Pattern: Modern Weighbridge Model LTS1000 Platform Weighing Instrument.

<u>Submittor</u>: Modern Weighbridge and Scale Service Pty Ltd 25 Davis Street Wingfield South Australia 5013.

1. Description of Pattern

A self-indicating platform weighing instrument of between 4 t and 10 t capacity and approved for use with up to 5000 verification scale intervals.

1.1 Basework

The basework is permanently fixed either above ground or set into a pit and uses a 3-lever system to support the load receptor with a single load cell mounted at the nose-end of the transfer lever (Figure 1).

1.2 Indicator

A Gedge Systems model GS1650 digital indicator as described in the documentation of NSC approval No S193 which may be marked as specified in that approval cr alternatively as specified in 1.4.1 below, when fitted in this instrument.

1.3 Load Cell

A Teraoka model RW-150 load cell of 150 kg capacity as described in the documentation of NSC approval No S167 which may be marked as specified in that approval or alternatively as specified in 1.4.2 below, when fitted in this instrument.

1.4 Markings

1.4.1

Instruments are marked with the following data, in a clearly visible location:

Manufacturer's name or mark	
Serial number	
Approval number	NSC NO 6/9C/204
Accuracy class	
Maximum capacity	Max kg *
Minimum capacity	Min kg *
Verification scale interval	e = d = kg *
Maximum subtractive tare	$T = - \dots kg$
Load cell approval number)	-
Headwork approval number) where	
Basework approval number) appropri-	ate
Load cell serial number #	

- * Repeated adjacent to each reading face, if not already in that vicinity.
- # This may alternatively be marked on a metal tag attached to the indicator via a lead and wire seal.

1.4.2

The following is the minimum data required to be marked on the load cell:

Manufacturer's name or mark Model number Serial number Maximum capacity

1.5 Verification Provision

Provision is made for a verification mark to be applied to the indicator.

2. Description of Variant 1

Of up to 3 t capacity using a 2-lever system (Figures 2 and 3) and approved for use with up to 5000 verification scale intervals.

TEST PROCEDURE

Instruments should be tested in conjunction with any test procedure in the approval documentation for the indicator used.

The maximum permissible errors are:

 $\frac{+}{+}$ 0.5e for loads between 0 and 500e; $\frac{+}{+}$ 1.0e for loads between 500e and 2000e; and $\frac{+}{+}$ 1.5e for loads above 2000e.

1. Load Test

Test loads are to be applied to the complete weighing instrument increasing in not less than 5 approximately equal steps to maximum capacity, followed by decreasing loads in not less than 5 approximately equal steps to zero load.

2. Eccentricity Test

The specified maximum permissible errors shall apply to a test load corresponding to 1/3 of maximum capacity, distributed successively over an area of approximately 1/4 of the platform (at the edges of the platform).



FIGURE 6/9C/204 - 1





Schematic - 2-lever System

FIGURE 6/9C/204 - 3



(a) LTS1000 - 2-lever System



(b) Without Load Receptor Frame And Load Cell