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NATIONAL STANDARDS COMMISSION

WEIGHTS & MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/14B/13

This is to certify that an approval has been granted by the Commission that the pattern and variant of the

Ultra/Molenschot Model AB Automatic Hopper Weighing Instrument

submitted by Ultra Scales Pty Ltd
33-35 Judge Street
Sunshine, Victoria, 3020

are suitable for use for trade.

The approval is subject to review on or after 1/12/88.

Instruments purporting to comply with this approval shall be marked NSC No **6/14B/13.**

The approval may be withdrawn if instruments are used other than as described in the drawings and specifications lodged with the Commission.

Signed

J. Peling

Executive Director

Descriptive Advice

Pattern: approved 11/11/83

. Ultra/Molenschot model AB automatic hopper weighing instrument of 5000 kg maximum capacity and with up to 1000 scale intervals.

Variant: approved 11/11/83

1. With the load cell(s) and indicating system of the pattern replacing the indicating system of any Commission-approved hopper weighing instrument.

Technical Schedule No 6/14B/13 dated 2/12/83 describes the pattern and variant.

Filing Advice

The documentation for this approval comprises:

Certificate of Approval No 6/14B/13 dated 2/12/83
Technical Schedule No 6/14B/13 dated 2/12/83
Test Procedure No 6/14B/13 dated 2/12/83
Figures 1 and 2 dated 2/12/83.

2/12/83

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/14B/13

Pattern: Ultra/Molenschot Model AB Automatic Hopper Weighing Instrument

Submittor: Ultra Scales Pty Ltd
33-35 Judge Street
Sunshine, Victoria, 3020.

1. Description of Pattern

A self-indicating automatic hopper weighing system (Figures 1 and 2) of 5000 kg maximum capacity and with up to 1000 scale intervals, using four Molenschot model SSS-M-5-A-C3 5 t load cells (NSC approval No S150) and an Ultra series 85 digital indicator (NSC approval No S151).

The indicator is approved for use with up to 6000 scale intervals and the load cells for use with up to 3000 scale intervals.

1.1 Markings

Instruments are marked with the following data:

Manufacturer's name or mark	
Model number	
Serial number	
NSC approval numbers	NSC No 6/14B/13 Indicator NSC No S151 Load cell NSC No S150
Accuracy class	(III)
Maximum capacity in the form	Max .....kg*
Minimum capacity in the form	Min .....kg*
Verification scale interval in the form	e = d = ...kg*

1.2 Verification Provision

Provision is made for a verification mark to be applied.

1.3 Testing Provision

Provision is made for test loads to a total of 2500 kg to be applied along two opposite sides of the instrument.

2. Description of Variant 1

With the indicating system of the pattern replacing the indicating system of any Commission-approved hopper weighing instrument and the load cell(s) of the pattern either replacing the lever-mechanism or being fitted in the pull rod of the nose end of the lever mechanism of any Commission-approved hopper weighing instrument.

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*These markings are repeated in the vicinity of each reading face if not already there.

All load applications to the instrument should be in accordance with the Commission's recommended testing procedure for the elimination of rounding error as set out in Document 104.

The maximum permissible errors are:

±0.5e for loads between 0 and 500e;
±1.0e for loads between 501e and 1000e.

1. Zero Range

Check that the range of the zero adjustment is not more than 4% of the maximum capacity (± 2% approximately). With zero balance indicated, apply a load of, say, 2.5% of maximum capacity to the instrument, and adjust the zero control; the instrument should not rezero.

2. Zero Test

(a) Check by means of Document 104, that when the zero light is lit, zero is set within 0.25e.

(b) As the automatic zero tracking device resets zero when the weighing mechanism is in equilibrium within 0.5 scale interval of zero, zero should be checked, with a load equal to, say, 10 scale intervals on the load receptor. The indications with 0.25e and 0.75e additional mass on the load receptor will then be 10e and 11e respectively.

3. Range of Indication

(a) The maximum mass indicated should not exceed the maximum capacity (Max) by more than 10 scale intervals; above this indicated mass the indicator should be blank or show non-numerical symbols.

(b) Below zero the indication may blank or the mass will be indicated, prefixed by a minus sign.

4. Test Loads

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.

5. Off-centre Load Tests

Off-centre load tests are conducted by loading the hopper so that each load cell, in turn, is subjected to not less than 10% of maximum capacity.

6. Multiple Indications

Where more than one indicating system is used, the variation between indications or printings for the same load shall not be greater than the absolute value of the maximum permissible error for that load on the device with the largest verification scale interval.

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NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/14B/13

CHANGE No 1

The following change is made to the approval documentation for the

Ultra/Molenschot Model AB Automatic Hopper Weighing Instrument

submitted by Ultra Scales Pty Ltd
33-35 Judge Street
Sunshine, Victoria, 3020.

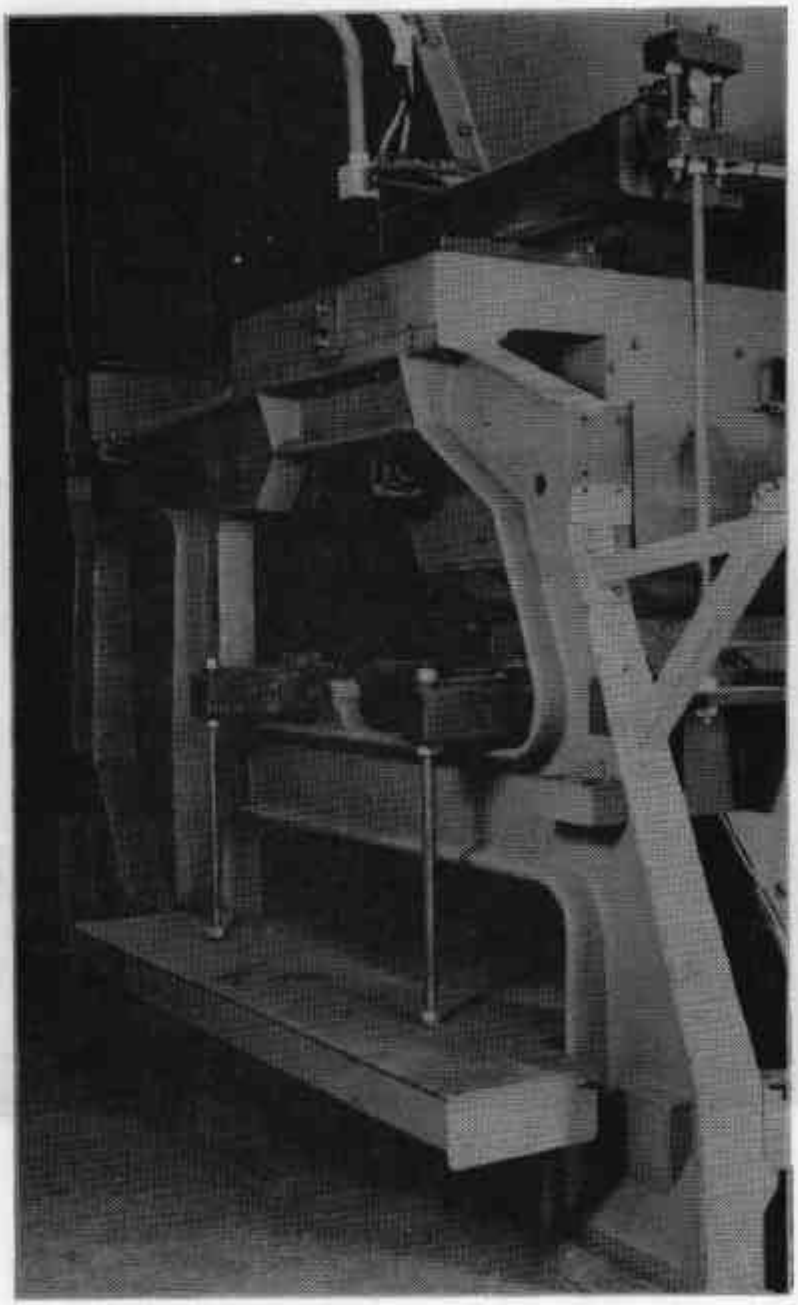
In Technical Schedule No 6/14B/13 dated 2/12/83 paragraph 1. Description of Pattern, the number of scale intervals for which the Molenschot SSS-M-5-A-C3 5 t load cells are approved should be altered to read "1500".

Signed

Executive Director

1/2/84

FIGURE 6/148/13 - 1



Ultra/Molenschot Hopper Weighing Instrument

2/12/83

FIGURE 6/14B/13 - 2

Ultra/Molenschot Hopper Weighing Instrument Control Unit

2/12/83