Australian Government
National Measurement Institute
Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

NMI 6/4D/333

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the instruments herein described.

CAS Model CL 5000 P Weighing Instrument

submitted by CAS Corporation
482-841, 19 Ganap-Ri, Gwangjoek-myeon
Yangju-si, Gyeonggi-do
Republic of Korea

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.

This approval becomes subject to review on **1/01/17**, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 to 3 approved – interim certificate issued	15/12/06
1	Pattern & variants 1 to 3 approved – certificate issued	22/01/07
2	Variants 4 & 5 approved – interim certificate issued	16/06/10
3	Variants 4 & 5 approved – certificate issued	8/07/10
4	Pattern & variants 1 to 5 reviewed & updated – certificate issued	31/05/12

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number ‘NMI 6/4D/333’ and only by persons authorised by the submittor.

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 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.

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

Special

Certain aspects of this instrument (in particular label and ticket formats) are able to be configured by the user. Whilst NMI believes that acceptable label and ticket formats can be achieved for typical basic sales modes, it is also possible for the instrument to be configured to produce unacceptable formats, and use of some formats may be inappropriate for different sales modes. It is the responsibility of the user to ensure that acceptable and appropriate formats are used in any particular situation.

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 6/4D/333

1. Description of Pattern ……approved on 15/12/06

A CAS model CL 5000 P self-indicating multi-interval class (III) non-automatic price-computing weighing instrument (Figure 1) with a verification scale interval of 0.002 kg up to 6 kg and with a verification scale interval of 0.005 kg from 6 kg up to 15 kg.

Instruments are fitted with two column-mounted seven segment displays, one for the operator and one for the customer. There is also a dot matrix supplementary display for additional information such as product look up (PLU) description, etc. An integral label printer is fitted (#).

Instruments have unit price to $9999.99/kg, price to $9999.99, a PLU facility, and may be fitted with output sockets (output interfacing capability) for the connection of peripheral and/or auxiliary devices.

The instrument operates from mains AC power (100-240 V AC, 50/60 Hz).

(#) Refer to the Special Condition of Approval.

1.1 Zero

Zero is automatically corrected to within ±0.25e whenever power is applied and whenever the instrument comes to rest within 0.5e of zero.

The initial zero-setting device 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.

1.2 Tare

A semi-automatic subtractive tare device of up to 5.998 kg capacity and/or a non-automatic keyboard-entered pre-set subtractive tare device of up to 5.998 kg capacity, may be fitted.

Pre-set tare values may be associated with product look up (PLU) items.

A separate display of pre-set tare value is provided (marked PT). For both pre-set tare and semi-automatic tare, the tare value is displayed as a negative mass value when the load receptor is empty.

1.3 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.

1.4 Display Check

A display check is initiated whenever power is applied.

1.5 Networking

A number of instruments may be connected in a network to share common PLU data, and to accumulate and retrieve management information.

In addition, the network may be interfaced with a computer for the collection of management data, or the downloading of PLU data.

Note: The weighing and price computing functions of each weighing instrument in the network are independent, and the removal, repair or replacement of a particular weighing instrument does not necessitate re-verification of any other weighing instrument in the network.

1.6 Verification Provision

Provision is made for the application of a verification mark.

1.7 Sealing Provision

Provision is made for access to the 'calibration switch' (which is located below a cover plate underneath the platter and its support plate) to be sealed as shown in Figure 2. Sealing may be by either a lead and wire type seal or destructible adhesive label.

1.8 Descriptive Markings

Instruments carry the following markings:

Manufacturer's mark, or name written in full	CAS, Korea	
Name or mark of manufacturer's agent	……..	
Indication of accuracy class	(III)	
Pattern approval mark for the instrument	NMI 6/4D/333	
Maximum capacity	*Max*…… g or kg	#1
Minimum capacity	*Min*……. g or kg	#1
Verification scale interval	*e* = ……. g or kg	#1
Maximum subtractive tare	*T* = - …. g or kg	#2
Serial number of the instrument	……..	

#1 These markings are also shown near the display of the result if they are not already located there.

#2 This marking is required if *T* is not equal to *Max*.

2. Description of Variant 1 **approved on 15/12/06**

Certain other models of the CL series as listed below:

(i) Model CL 5000 B which is similar to the pattern, except that the operator and customer displays are integral within the main body of the instrument (Figure 3a).

(ii) Model CL 5000 R which is similar to the pattern, except that the operator and customer displays are in a different display housing (Figure 3b).

3. Description of Variant 2 **approved on 15/12/06**

As a multi-interval instrument with a verification scale interval of 0.005 kg up to 15 kg and with a verification scale interval of 0.01 kg from 15 kg up to 30 kg. The maximum semi-automatic and pre-set tare capacity is 14.995 kg.

4. Description of Variant 3 approved on 15/12/06

The pattern or variants as single interval instruments of certain capacities as listed below:

(i) of 6 kg maximum capacity with a verification scale interval of 0.002 kg. The maximum tare capacity is 6 kg;

(ii) of 15 kg maximum capacity with a verification scale interval of 0.005 kg. The maximum tare capacity is 15 kg; and

(iii) of 30 kg maximum capacity with a verification scale interval of 0.010 kg. The maximum tare capacity is 30 kg.

5. Description of Variant 4 approved on 16/06/10

The pattern and variants 1 to 3 may be fitted with certain alternative load receptors, known as ‘large tray’ (440 × 275 mm, nominal) or ‘fish tray’ (430 × 289 mm, nominal) as shown in Figure 4.

6. Description of Variant 5 approved on 16/06/10

The pattern and variants may be fitted with an integral printer which is suitable for ticket/receipt printing. Refer to the Special Condition of Approval in regard to ticket/receipt printing.

TEST PROCEDURE No 6/4D/333

Instruments shall be tested in accordance with any relevant tests specified in the National Instrument Test Procedures.

Maximum Permissible Errors

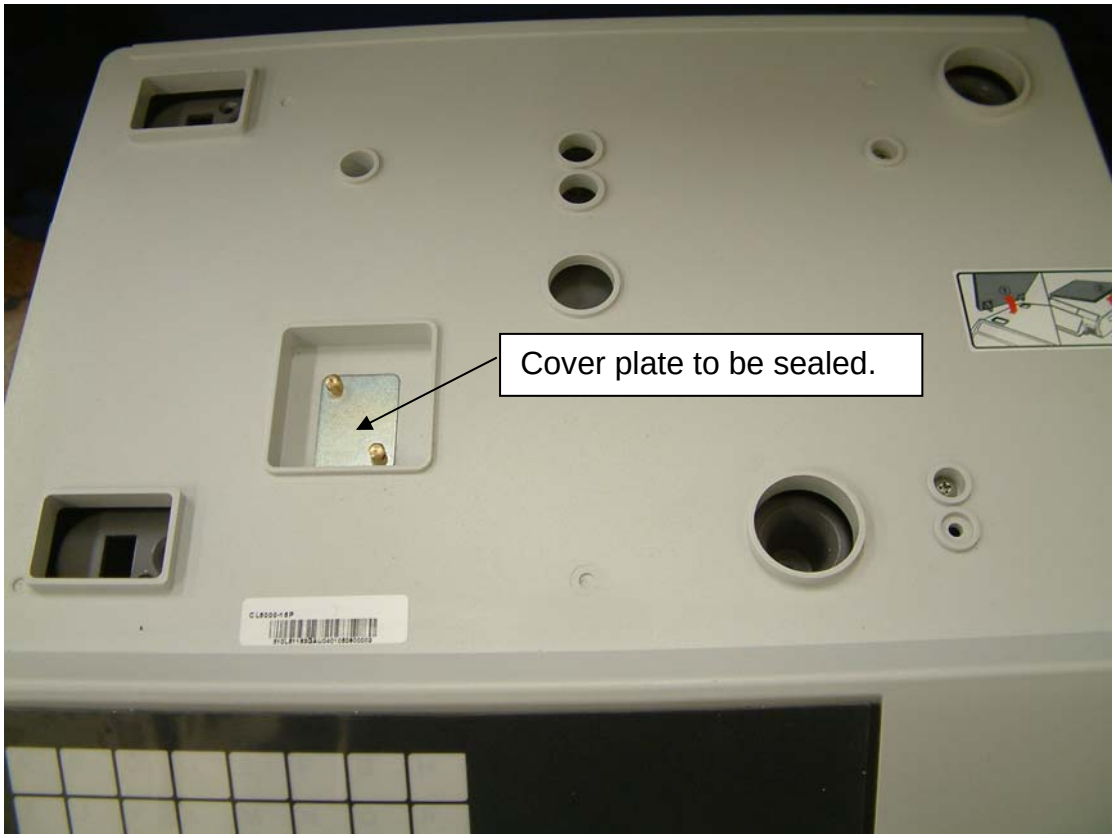
The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

For multi-interval and multiple range instruments with verification scale intervals of e_1, e_2 …, apply e_1 for zero adjustment, and maximum permissible errors apply e_1, e_2 …, as applicable for the load.

FIGURE 6/4D/333 – 1

CAS Model CL 5000 P Weighing Instrument

FIGURE 6/4D/333 – 2



Cover plate screw to be sealed (typical)

Sealing of Calibration Access

FIGURE 6/4D/333 – 3

(a) Model CL 5000 B

(b) Model CL 5000 R

Other Approved Models

FIGURE 6/4D/333 – 4

(a) With alternative load receptor known as a ‘large tray’

(b) With alternative load receptor known as a ‘fish tray’

Typical Model CL 5000 P Instrument With Certain Alternative Load Receptors

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