



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Cancellation
Certificate of Approval
No 6/4D/325

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

CAS Model ER Weighing Instrument

submitted by CAS Corporation
 19 Kanap-Ri, Gwangjoek-Myun
 Yangju-Si, Kyunggi-Do
 Republic of Korea

has been cancelled in respect of new instruments as from 1 March 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 a series of loops and flourishes, positioned to the right of the signature text.



Australian Government
**National Measurement
Institute**

12 Lyonpark Road, North Ryde NSW 2113

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No 6/4D/325

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of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the
CAS Model ER Weighing Instrument

submitted by CAS Corporation
19 Kanap-Ri, Gwangjoek-Myun
Yangju-Si, Kyunggi-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.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 October 2010, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 6/4D/325' and only by persons authorised by the submittor.

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.

DESCRIPTIVE ADVICE

Pattern: approved 21 September 2005

- A CAS model ER single interval self-indicating price-computing weighing instrument with a maximum capacity of 6 kg.

Variants: approved 21 September 2005

1. With the customer and the vendor display within the body of the instrument.
2. With liquid crystal displays.
3. With certain other maximum capacities.

Technical Schedule No 6/4D/325 describes the pattern and variants 1 to 3.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/4D/325 dated 28 April 2006
Technical Schedule No 6/4D/325 dated 28 April 2006 (incl. Test Procedure)
Figures 1 to 3 dated 28 April 2006

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, appearing to be 'J. G. T.', located in the bottom right corner of the page.

TECHNICAL SCHEDULE No 6/4D/325

Pattern: CAS Model ER Weighing Instrument

Submittor: CAS Corporation
19 Kanap-Ri, Gwangjoek-Myun
Yangju-Si, Kyunggi-Do
Republic of Korea

1. Description of Pattern

A CAS model ER single interval self-indicating price-computing weighing instrument (Figure 1) with a maximum capacity of 6 kg and a verification scale interval of 0.002 kg.

Instruments are fitted with the operator and the customer displays mounted on a column. The displays are vacuum fluorescent display (VFD) panels.

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

Instruments operate either from mains AC power or they are powered by an integral rechargeable battery.

1.1 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 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 the maximum capacity of the instrument may be fitted.

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 Verification/Certification Provision

Provision is made for the application of a verification/certification mark.

1.6 Sealing Provision

Provision is made for the calibration adjustments to be sealed by:

- (a) Applying a wire and lead (or similar) seal through the screwed studs that secure the cover plate on the underside of the base (Figure 2a) thereby preventing access to the calibration switch and also removal of the housing; and
- (b) Applying a destructible adhesive label over the cover plate when only one screwed stud is in place (Figure 2b).

1.7 Descriptive Markings

Instruments carry the following markings:

Manufacturer's mark, or name written in full	CAS Corporation
Indication of accuracy class	Ⓜ
Pattern approval mark for the instrument	6/4D/325
Maximum capacity	<i>Max</i> kg #1
Minimum capacity	<i>Min</i> kg #1
Verification scale interval	<i>e</i> = kg #1
Maximum subtractive tare	<i>T</i> = - 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 Variants

2.1 Variant 1

With the customer and the vendor display within the body of the instrument rather than mounted on a column (Figure 3).

2.2 Variant 2

With liquid crystal displays (Figure 3).

2.3 Variant 3

In certain other capacities as listed below:

- with a maximum capacity of 15 kg and a verification scale interval of 0.005 kg. The tare capacity is limited to a maximum of 9.995 kg; and
- with a maximum capacity of 30 kg and a verification scale interval of 0.010 kg. The tare capacity is limited to a maximum of 9.990 kg.

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 single interval instruments, the maximum permissible errors for increasing and decreasing loads on initial verification/certification for loads, m , expressed in verification scale intervals, e , are:

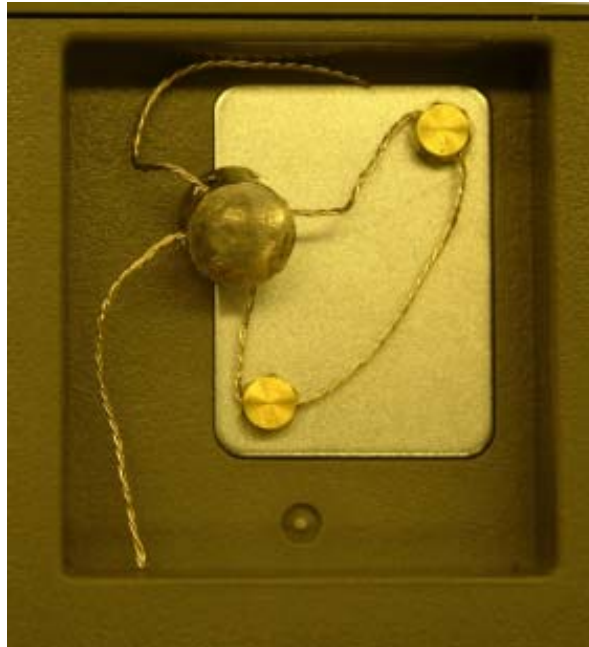
- $\pm 0.5e$ for loads $0 \leq m \leq 500$;
- $\pm 1.0e$ for loads $500 < m \leq 2\,000$; and
- $\pm 1.5e$ for loads $2\,000 < m \leq 10\,000$.

FIGURE 6/4D/325 – 1



CAS Model ER Weighing Instrument With Column-mounted VF Displays

FIGURE 6/4D/325 – 2

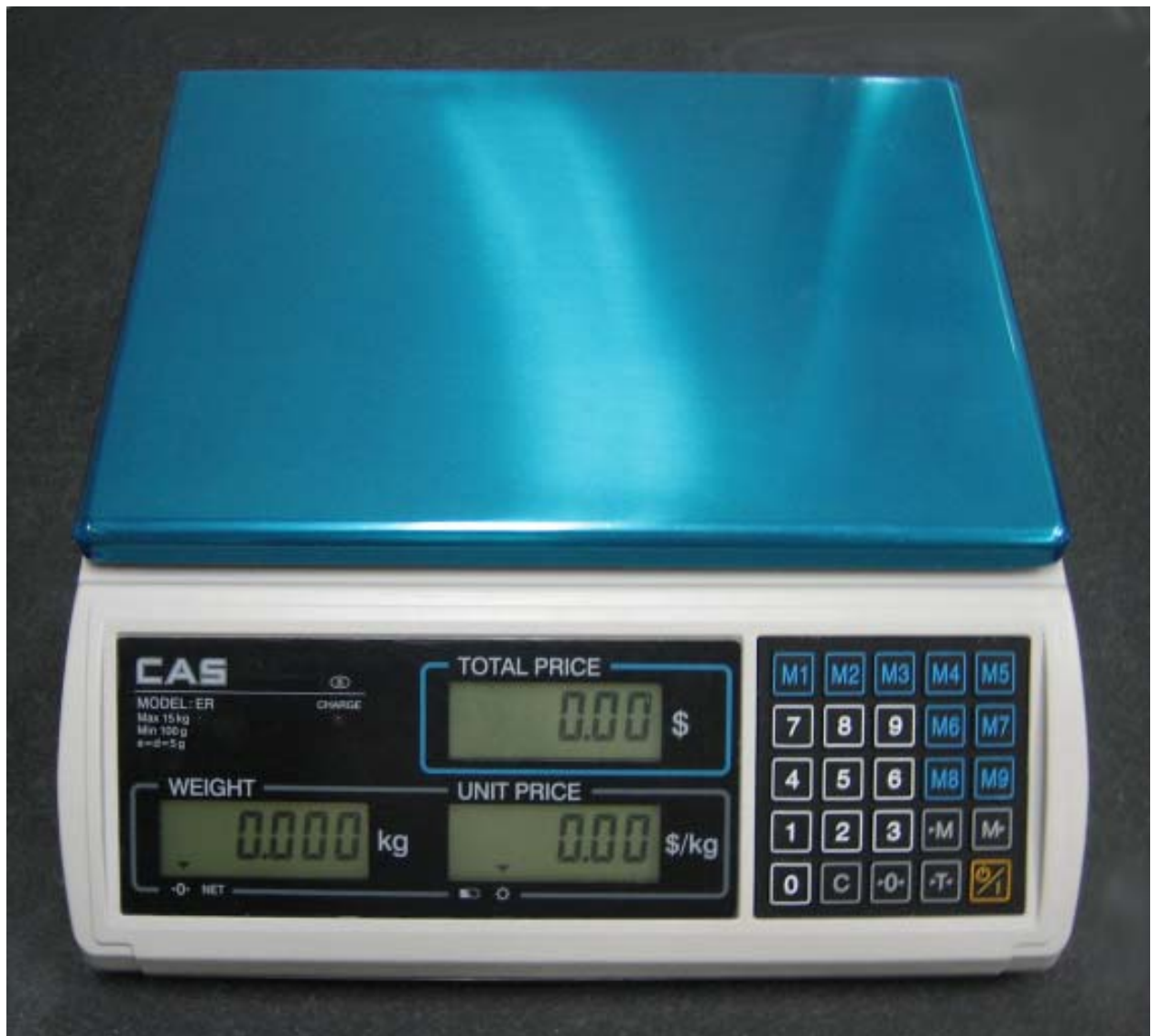


(a) Sealing of Calibration Access Hole – Beneath Instrument



(a) Alternative Sealing of Calibration Access Hole – Beneath Instrument

FIGURE 6/4D/325 – 3



CAS Model ER Weighing Instrument With Integral LC Displays