



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

**Cancellation
Certificate of Approval
No 6/4D/315**

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 TP-II Weighing Instrument

submitted by CAS Corporation
#19, Ganap-Ri, Gwangjuk-Myun
Yangju-Gun, Gyeonggi-Do
Republic of Korea

has been cancelled in respect of new instruments as from 1 January 2009.

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.', written in a cursive style.



Australian Government

National Standards Commission

12 Lyonpark Road, North Ryde NSW 2113 Australia

Certificate of Approval

No 6/4D/315

Issued 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

CAS Model TP-II Weighing Instrument

submitted by CAS Corporation
#19, Ganap-Ri, Gwangjuk-Myun
Yangju-Gun, 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.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 November 2008, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 6/4D/315 and only by persons authorised by the submitter.

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 NSC P 106.

The Commission 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 29 October 2003

- A CAS model TP-II multi-interval price-computing weighing instrument of 6 kg maximum capacity.

Variants: approved 29 October 2003

1. With certain other maximum capacities.
2. As single interval instruments of certain capacities.

Technical Schedule No 6/4D/315 describes the pattern and variants 1 & 2.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/4D/315 dated 13 February 2004
Technical Schedule No 6/4D/315 dated 13 February 2004 (incl. Test Procedure)
Figures 1 to 3 dated 13 February 2004

Signed by a person authorised under Regulation 60 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.



TECHNICAL SCHEDULE No 6/4D/315

Pattern: CAS Model TP-II Weighing Instrument

Submittor: CAS Corporation
#19, Ganap-Ri, Gwangjuk-Myun
Yangju-Gun, Gyeonggi-Do
Republic of Korea

1. Description of Pattern

A CAS model TP-II multi-interval self-indicating price-computing weighing instrument (Figures 1 and 2) with a verification scale interval (e_1) of 0.001 kg up to 3 kg and with a verification scale interval (e_2) of 0.002 kg from 3 kg up the maximum capacity of 6 kg.

The instrument may have the displays incorporated within the body of the instrument (Figure 1) or mounted on a column (Figure 2).

Instruments have unit price to \$9999.99/kg, price to \$99999.99, and a product look up (PLU) facility for storage of unit prices only.

Instruments may be fitted with output sockets for the connection of peripheral and/or auxiliary devices.

Note: The instrument has keys intended for totalising transactions. This function is not approved and these keys are disabled.

1.1 Zero

Zero is automatically corrected to within $\pm 0.25e_1$ whenever power is applied and whenever the instrument comes to rest within $0.5e$ of zero.

The initial zero-setting device of the pattern 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 maximum capacity may be fitted.

1.3 Power Supply

Power may be either:

- supplied by an AC/DC mains adaptor; or
- by 4 x D size batteries (1.2 or 1.5 V rechargeable).

Note: The AC/DC mains adaptor supplied was a CAS model CK-231215K power supply (output 12 V DC, 1500 mA) – the submittor should be consulted regarding the acceptability of alternative power supply units.

1.4 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.

1.5 Display Check

A display check is initiated whenever power is applied.

1.6 Sealing Provision

Provision is made for the calibration adjustments in the indicator to be sealed by sealing the hole that provides access to the calibration switch. This may be carried out by use of a destructible adhesive label over the hole, or use of a cover and lead and wire (or similar) seal (Figure 3).

1.7 Verification/Certification Provision

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

1.8 Descriptive Markings

Instruments carry the following markings:

Manufacturer's mark, or name written in full
Name or mark of manufacturer's agent
Indication of accuracy class	Ⓜ
Pattern approval mark for the instrument	NSC No 6/4D/315
Maximum capacity	<i>Max</i>/..... kg *
Minimum capacity	<i>Min</i> kg *
Verification scale interval	<i>e</i> =/..... kg *
Maximum subtractive tare	<i>T</i> = - kg
Serial number of the instrument

* These markings shall also be shown near the display of the result if they are not already located there.

2. Description of Variants

2.1 Variant 1

As multi-interval instruments of certain other capacities as listed below:

- with a verification scale interval (e_1) of 0.002 kg up to 6 kg and with a verification scale interval (e_2) of 0.005 kg from 6 kg up to the maximum capacity of 15 kg; and
- with a verification scale interval (e_1) of 0.005 kg up to 15 kg and with a verification scale interval (e_2) of 0.01 kg from 15 kg up to the maximum capacity of 30 kg.

2.2 Variant 2

As single interval instruments of certain capacities as listed below:

- of 6 kg maximum capacity with a verification scale interval of 0.002 kg;
- of 15 kg maximum capacity with a verification scale interval of 0.005 kg; and
- of 30 kg maximum capacity with a verification scale interval of 0.01 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

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

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

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

FIGURE 6/4D/315 – 1



CAS Model TP-II Weighing Instrument With Integral Displays

6/4D/315
13 February 2004

FIGURE 6/4D/315 – 2



CAS Model TP-II Weighing Instrument With Column-mounted Displays

FIGURE 6/4D/315 – 3



A Typical Sealing Method