



Australian Government

**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Notification of Change

Certificate of Approval No 6/9C/268

Change No 1

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

The following changes are made to the approval documentation for the

A & D Model HV-200KGV Weighing Instrument

submitted by A & D Mercury Pty Ltd
 (now A & D Australasia Pty Ltd)
 32 Dew Street
 Thebarton SA 5031.

- A. In Certificate of Approval No 6/9C/268 dated 25 May 2005;
1. The Condition of Approval referring to the review of the approval should be amended to read:
- “This approval becomes subject to review on 1 January **2016**, and then every 5 years thereafter.”
- Note: The review date was previously amended by the Notification of Change included in Technical Schedule No 1 dated 25 May 2005.
2. The FILING ADVICE should be amended by adding the following:
- “Notification of Change No 1 dated 16 March 2011”
- B. In Technical Schedule No 6/9C/268 dated 13 February 2001 and its Variation No 1 dated 25 May 2005, the references to the name of the submitter should be amended to read:
- “A & D **Australasia** Pty Ltd”

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 above a horizontal line.



Australian Government

**National Measurement
Institute**

12 Lyonpark Road, North Ryde NSW 2113

Certificate of Approval

No 6/9C/268

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

A & D Model HV-200KGV Weighing Instrument

submitted by A & D Mercury Pty Ltd
32 Dew Street
Thebarton SA 5031.

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 January 2011, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NSC 6/9C/268' and only by persons authorised by the submitter.

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.

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.

This approval shall NOT be used in conjunction with General Certificate No 6B/0.

DESCRIPTIVE ADVICE

Pattern: approved 19 December 2000

- An A & D model HV-200KGV self-indicating multiple range weighing instrument of 220 kg maximum capacity.

Variants: approved 19 December 2000

1. Certain other capacities of the HV-**KGV series
2. Certain capacities of the HV-**KGL series

Technical Schedule No 6/9C/268 describes the pattern and variants 1 to 2.

Variant: approved 17 May 2005

3. Of a waterproof stainless steel construction.

Technical Schedule No 6/9C/268 Variation No 1 describes variant 3.

FILING ADVICE

Certificate of Approval No 6/9C/268 dated 13 February 2001 is superseded by this Certificate, and may be destroyed. The documentation for this approval now comprises:


Certificate of Approval No 6/9C/268 dated 25 May 2005
Technical Schedule No 6/9C/268 dated 13 February 2001 (incl. Test Procedure)
Technical Schedule No 6/9C/268 Variation No 1 dated 25 May 2005 (incl.
Notification of Change)
Figures 1 and 2 dated 13 February 2001
Figures 3 to 5 dated 25 May 2005

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 6/9C/268

Pattern: A & D Model HV-200KGV Weighing Instrument.

 **Submittor:** A & D Mercury Pty Ltd
32 Dew Street
Thebarton SA 5031.

1. Description of Pattern

An A & D model HV-200KGV self-indicating multiple range weighing instrument (Figure 1) with a maximum capacity of 220 kg.

1.1 Weighing Ranges

The instrument may be configured so that the weighing range changes automatically with increasing load and when the indication returns to zero. Alternatively, the weighing range may also be changed manually using the 'range' key.

The lowest range has a verification scale interval of 0.02 kg and a maximum capacity of 60 kg; the middle range has a verification scale interval of 0.05 kg and a maximum capacity of 150 kg; and the highest range has a verification scale interval of 0.10 kg up to the maximum capacity of 220 kg.

1.2 Basework

The basework (Figure 2) has the load receptor fully supported by a single load cell. The load receptor has maximum nominal dimensions of 390 x 530 mm.

1.3 Load Cell

An A & D model LC:128-220K load cell is used, mounted as shown in Figure 2.

1.4 Indicator

The indicator has a vacuum fluorescent display and the power supply is incorporated within the unit.

The indicator, which may be remote from the basework, may be fitted with output sockets for the connection of auxiliary and/or peripheral devices.

The indicator may be fitted with an integral printer.

A display check is initiated whenever power is applied.

1.4.1 Zero

Instruments have a zero light which illuminates whenever zero is correct within $\pm 0.25e$ (for the weighing range in use).

The zero-tracking device automatically corrects zero to within $\pm 0.25e$ whenever the instrument comes to rest within $\pm 0.5e$ of zero, in the lowest range.

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.

1.4.2 Tare

A semi-automatic subtractive taring device of up to the maximum capacity of the instrument may be fitted. A keyboard-entered pre-set tare device may also be fitted - the maximum capacity of this device is limited to the maximum capacity of the low range.

1.4.3 Additional Features

Instruments may be fitted with a counting function, provision for display in terms of percentage of a set value, accumulation of mass values, and a facility for 'HI', 'LO' and 'OK' values to be entered to indicate a target range, for a visual and audible indication of when the target is reached, and for switching of outputs relating to the target range.

Indications other than the indications of measured mass (i.e. gross, or net) displayed either on the indicator or on an auxiliary or peripheral device, are not for trade use.

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 in the indicator to be sealed by means of a lead and wire seal sealing the access cover provided on the rear panel.

1.7 Markings

Instruments are marked with the following:

Manufacturer's mark, or name written in full	A & D Company, Limited
Name or mark of manufacturer's agent	A & D Mercury Pty Ltd
Indication of accuracy class	Ⓜ
For each range: Maximum capacity	Max kg *
Minimum capacity	Min kg *
Verification scale interval	e = kg *
Subtractive tare capacity	T = - kg #
Serial number of the instrument
Pattern approval mark for the instrument	NSC No 6/9C/268

* These markings shall also be repeated adjacent to each reading face, if they are not already located there.

The marking of tare capacity is not required if its value is the same as the maximum capacity of the instrument.

2. Description of Variants

2.1 Variant 1

Certain other capacities of the HV-**KGV series as listed below:

- **Model HV-60KGV**

The lowest range has a verification scale interval of 0.005 kg and a maximum capacity of 15 kg; the middle range has a verification scale interval of 0.01 kg and a maximum capacity of 30 kg; and the highest range has a verification scale interval of 0.02 kg up to the maximum capacity of 60 kg.

The load receptor has maximum nominal dimensions of 330 x 424 mm.

An A & D model LC:128-100K load cell is used.

- **Model HV-15KGV**

The lowest range has a verification scale interval of 0.001 kg and a maximum capacity of 3 kg; the middle range has a verification scale interval of 0.002 kg and a maximum capacity of 6 kg; and the highest range has a verification scale interval of 0.005 kg up to the maximum capacity of 15 kg.

The load receptor has maximum nominal dimensions of 250 x 250 mm.

An A & D model LC:126-15K load cell is used.

2.2 Variant 2

Certain capacities of the HV-**KGL series, namely HV-200KGL, HV-60KGL and HV-15KGL, which have the same capacities and other features as described for the HV-**KGV series of the pattern and variant 1, except as listed below:

- The indicator has a liquid crystal display;
- The instruments are powered through an AND model TB-124 AC power adapter, or may be battery operated; and
- The integral printer is not available.

TEST PROCEDURE

Instruments should be tested in conjunction with any tests specified in the approval documentation for the indicator used, and in accordance with any relevant tests specified in the Uniform Test Procedures.

Maximum Permissible Errors at Verification/Certification

For the weighing range in use, 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 $2\,000 < m \leq 10\,000$.

TECHNICAL SCHEDULE No 6/9C/268

VARIATION No 1

Pattern: A & D Model HV-200KGV Weighing Instrument

Submittor: A & D Mercury Pty Ltd
32 Dew Street
Thebarton SA 5031

1. Description of Variant 3

Any model instrument of this approval now of a waterproof stainless steel construction, in which case the model number has a '-WP' suffix, e.g. the pattern (model HV-200KGV) is now known as a model HV-200KGV-WP.

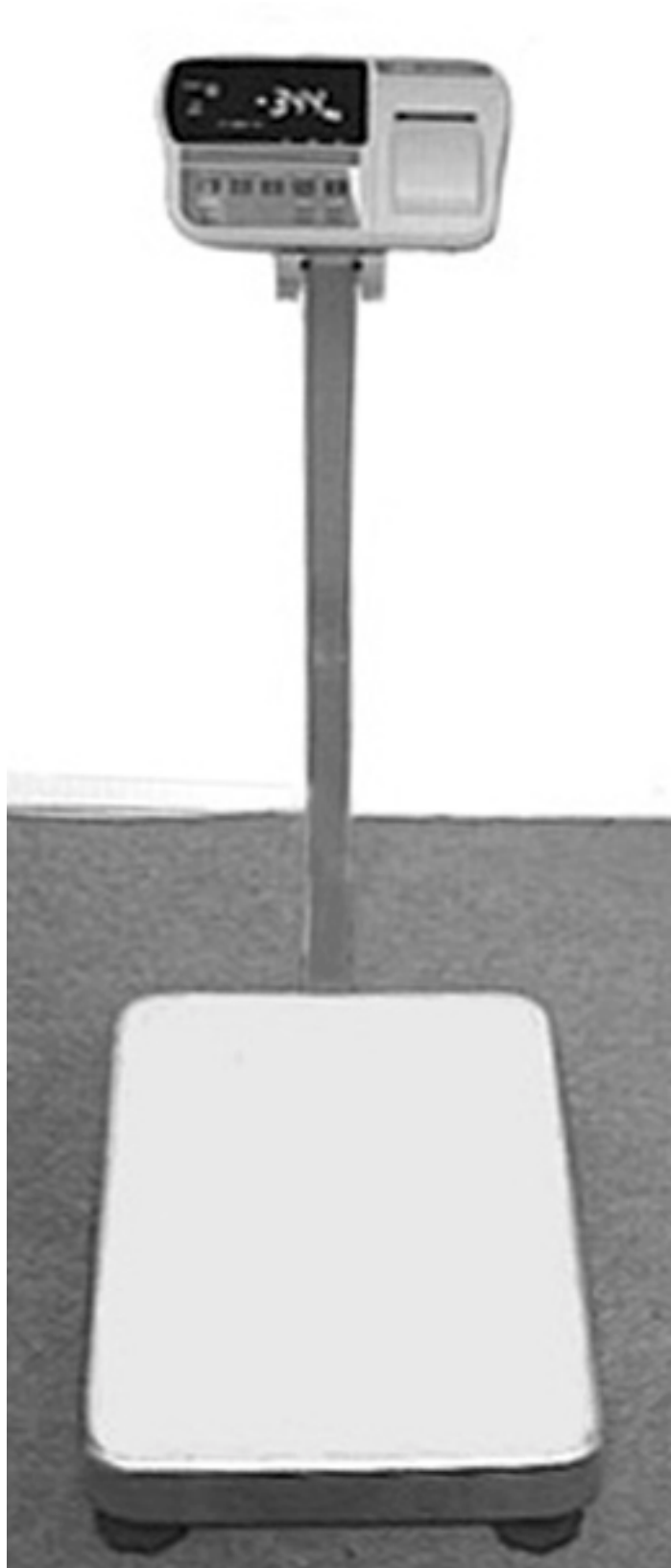
Figure 3 shows a typical 'WP' instrument and Figure 4 shows a typical 'WP' basework. Figure 5 shows the sealing arrangement for the 'WP' instruments.

NOTIFICATION OF CHANGE

In Certificate of Approval No 6/9C/268 dated 13 February 2001, the Condition of Approval referring to the review of the approval should be amended to read:

"This approval becomes subject to review on 1 January 2011, and then every 5 years thereafter."

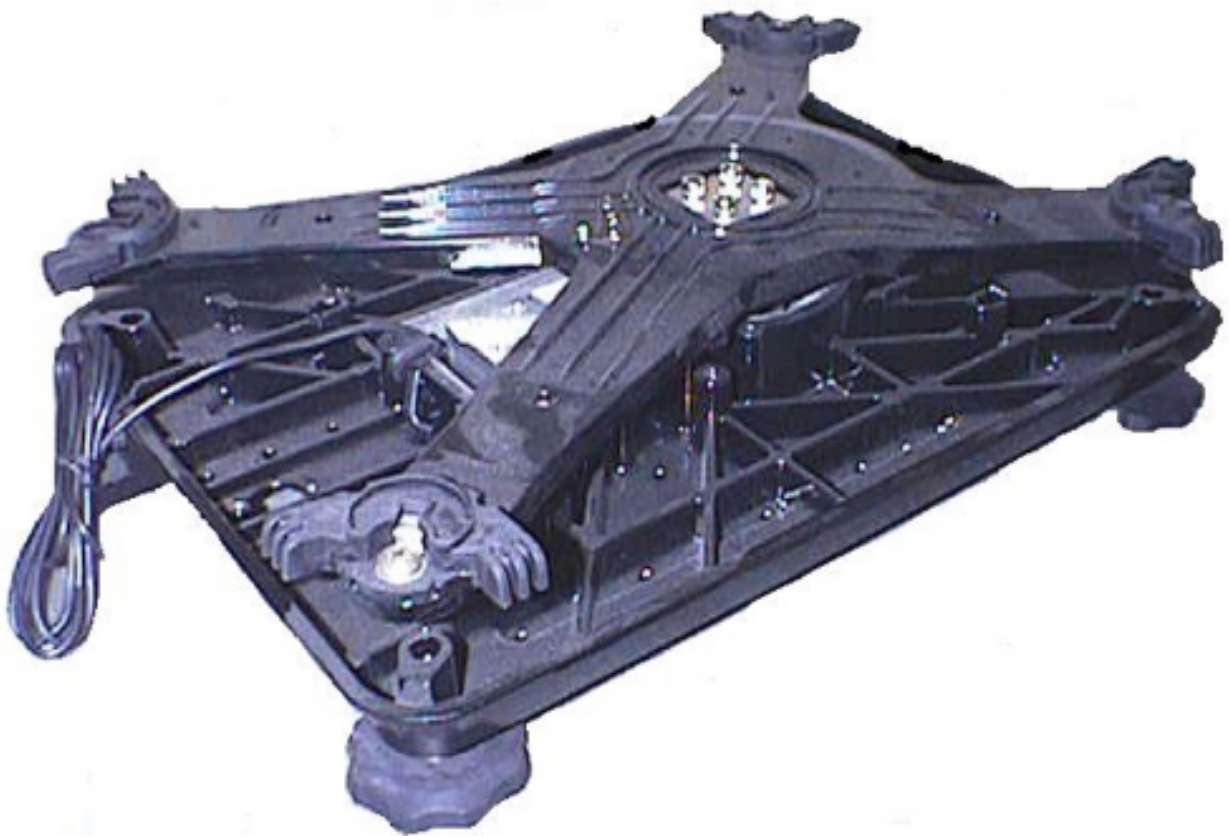
FIGURE 6/9C/268 - 1



A & D Mercury Model HV-200KGV Weighing Instrument

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FIGURE 6/9C/268 - 2



Typical HV Series Basework

FIGURE 6/9C/268 – 3



Typical 'WP' Instrument (Variant 3)

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FIGURE 6/9C/268 – 4



Typical 'WP' Basework (Variant 3)

FIGURE 6/9C/268 – 5



Typical 'WP' Sealing (Variant 3)