

National Standards Commission



Certificate of Approval

No 6/9C/240

Issued under Regulation 9
of the
National Measurement (Patterns of Instruments) Regulations

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

AND Mercury Model FW-600KA3 Weighing Instrument

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

Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.

A handwritten signature in black ink, appearing to read 'J. Birch'. The signature is written in a cursive style with a large initial 'J'.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/4/96.

This approval expires in respect of new instruments on 1/4/97.

Instruments purporting to comply with this approval shall be marked NSC No 6/9C/240 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 drawings and specifications 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 106.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0.

The values of the performance criteria (maximum number of scale intervals etc.) applicable to the instrument shall be within the limits specified herein and in any approval documentation for the components where they are approved separately.

The Commission reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

DESCRIPTIVE ADVICE

Pattern: approved 22/3/91

- An AND Mercury model FW-600KA3 self-indicating weighing instrument of 600 kg maximum capacity and approved for use with up to 3 000 verification scale intervals.

Variant: approved 22/3/91

1. With a load receptor of nominal sizes up to 1 200 mm x 1 800 mm.

Technical Schedule No 6/9C/240 describes the pattern and variant 1.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/9C/240 dated 10/10/91
Technical Schedule No 6/9C/240 dated 10/10/91 (incl. Test Procedure)
Figures 1 to 3 dated 10/10/91



National Standards Commission

TECHNICAL SCHEDULE No 6/9C/240

Pattern: AND Mercury Model FW-600KA3 Weighing Instrument.

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

1. Description of Pattern

An AND Mercury model FW-600KA3 self-indicating weighing instrument of 600 kg maximum capacity and approved for use with up to 3 000 verification scale intervals.

1.1 Basework

The model KA3 basework has load cells which fully support the load receptor (Figure 1). The basework is positioned above ground, with or without loading ramps, or let into a pit in which case the platform is level with the ground. If the instrument is not in a pit or permanently fixed in place, it shall be fitted with a level indicator, adjacent to which is the notice INSTRUMENT MUST BE LEVEL WHEN IN USE.

The load receptor has a nominal size of 1 200 mm x 1 200 mm.

1.2 Load Cells

Two AND model LC4204-K300 load cells of 300 kg capacity are used as described in the documentation of NSC approval No S241 and mounted as shown in Figure 2.

1.3 Indicator (Figure 3)

An AND model FW digital indicator is used. The indicator, which may be remote from the basework, may be fitted with an output socket for the connection of a peripheral or an auxiliary device, and may also be in an alternative waterproof enclosure.

1.3.1 Zero

Zero is automatically corrected to within $\pm 0.25e$ whenever the instrument comes to rest within $0.5e$ of zero. If the instrument comes to rest outside that range but within the zero reset range, zero is reset by use of the zero button.

1.3.2 Display Check

A display check is initiated whenever the instrument is switched on.

1.3.3 Tare

A semi-automatic subtractive taring device of up to maximum capacity may be fitted.

1.4 Set Point

The instrument may be fitted with a set point function, whereby HI and LO set points may be entered by means of the SET, HI/LO/S.SIZE and MODE (or UNIT) buttons.

1.5 Verification Provision

Provision is made for a verification mark to be applied.

1.6 Markings

Instruments are marked with the following data, together in one location:

Manufacturer's name or mark		
Serial number		
NSC approval numbers	- instrument	NSC No 6/9C/240
	- load cells	NSC No S
	- indicator	NSC No S
Accuracy class		III
Maximum capacity		Max kg *
Minimum capacity		Min kg *
Verification scale interval		e = d = kg *
Maximum subtractive tare		T = - kg

* These are repeated adjacent to each reading face.

2. Description of Variant 1

With a load receptor of other nominal sizes up to 1 200 mm x 1 800 mm.

TEST PROCEDURE

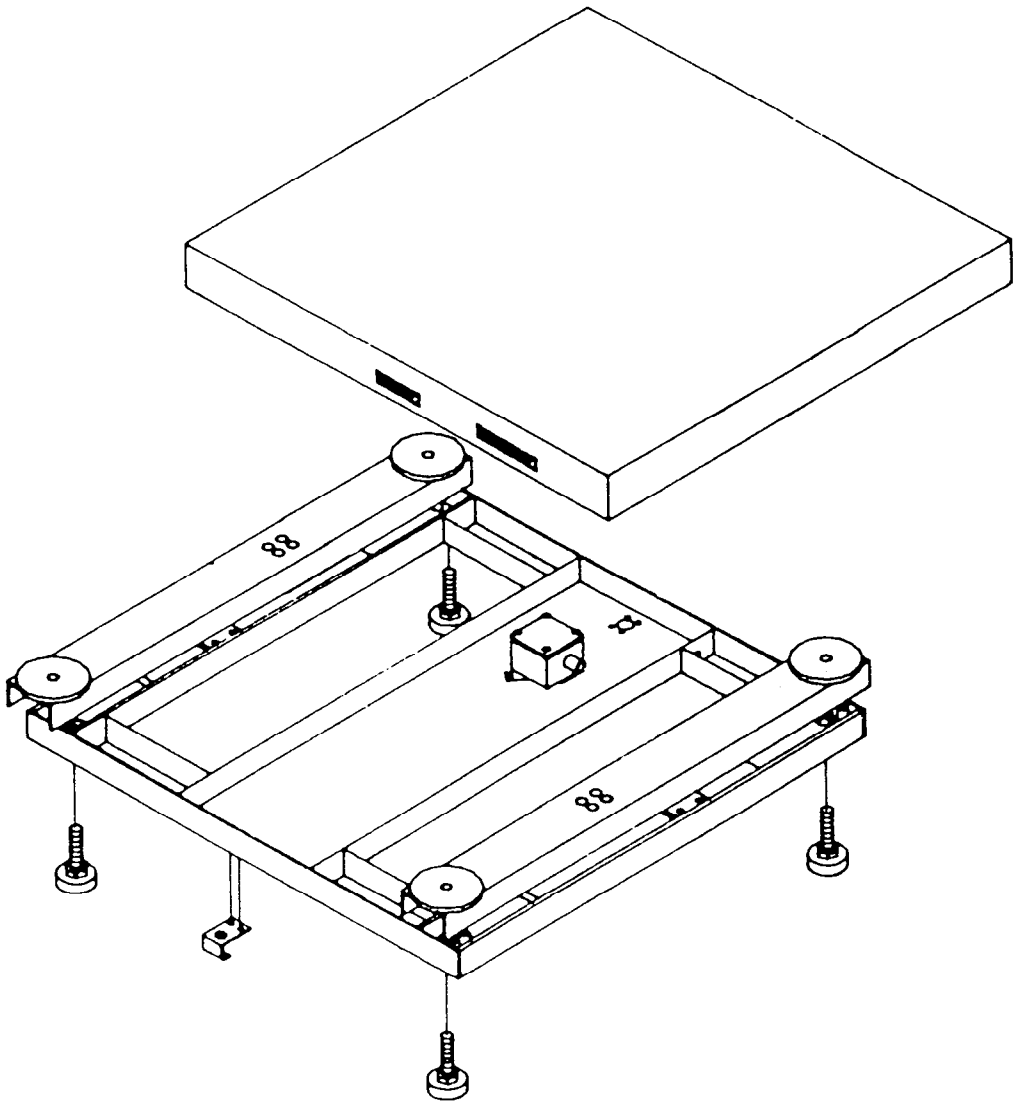
Instruments should be tested in conjunction with any tests specified in the approval documentation for the indicator used, and in accordance with any relevant tests specified in the Inspector's Handbook.

Maximum Permissible Errors at Verification/Certification

The maximum permissible errors for increasing and decreasing loads, expressed in terms of verification scale interval (e), with the instrument adjusted to zero within $\pm 0.25e$ at no load, are:

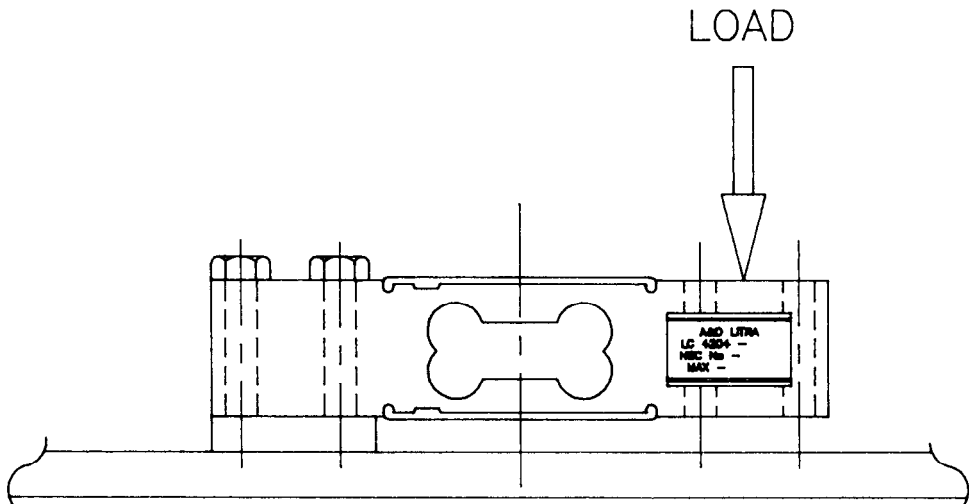
- $\pm 0.5e$ for loads from 0 to $500e$;
- $\pm 1.0e$ for loads over $500e$ up to $2\,000e$; and
- $\pm 1.5e$ for loads over $2\,000e$.

FIGURE 6/9C/240 - 1



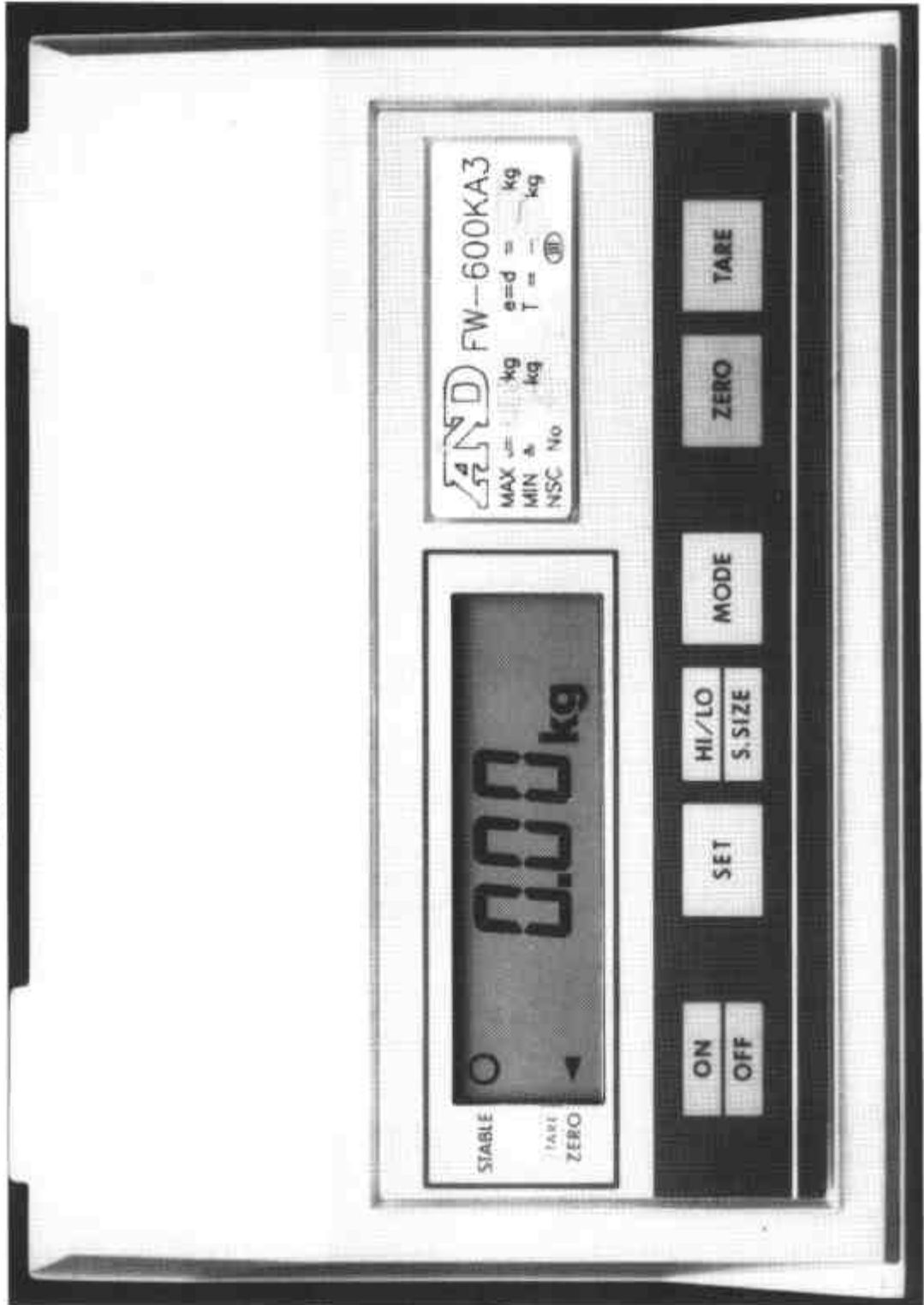
AND Model FW-600KA3 Weighing Instrument

FIGURE 6/9C/240 - 2



Showing Load Cell Mounting Method

FIGURE 6/9C/240 - 3



AND Model FW Digital Indicator