



# NATIONAL STANDARDS COMMISSION

## CERTIFICATE OF APPROVAL No 6/9C/66

This is to certify that the pattern and variants of the  
Mercury Model 522AL Weighing Instrument

submitted by Mercury Scale Co. Pty Ltd,  
32 Dew Street,  
Thebarton, South Australia, 5031,

have been approved under the Weights and Measures (Patterns of  
Instruments) Regulations as being suitable for use for trade.

Date of Approval: 1 May 1979

The pattern and variants are described in Technical Schedule No  
6/9C/66, and in drawings and specifications lodged with the  
Commission.

The approval is subject to review on or after 30 May 1984, except  
for Variant 2, which is subject to review on 30 May 1980.

All instruments conforming to this approval shall be marked with the  
approval number "NSC No 6/9C/66".

Signed

Executive Director

10/8/79



# NATIONAL STANDARDS COMMISSION

## TECHNICAL SCHEDULE No 6/9C/66

Pattern: Mercury Model 522AL Weighing Instrument

Submittor: Mercury Scale Co. Pty Ltd,  
32 Dew Street,  
Thebarton, South Australia, 5031.

Date of Approval: 1 May 1979

### Condition of Approval:

All instruments conforming to the pattern shall be marked "NSC No 6/9C/66".

### Description of Pattern:

The pattern is a portable self-indicating platform weighing instrument with a maximum capacity of 150 kg (Figure 1).

The headwork comprises:

1. A headwork cabinet fitted with a level indicator adjacent to which is a notice that the instrument must be level when in use.
2. A pullrod which transmits the load to a lever and spring-resistant mechanism anchored to the base of the mechanism bracket. A rack assembly is attached to the lever, movement of which causes the rack to drive the indicator over a mass reading face marked with 750 scale intervals (Figure 2).
3. A dashpot connected to the lever.
4. A zero-adjustment mechanism attached to the spring anchoring device.
5. The headwork is sealed front and back by a sealing cup (Figures 2 and 3).

The basework comprises a load receptor fitted with self-aligning bearings supported on two main levers, one of which connects to the

pullrod. The main levers are suspended by swinging links from the frame (Figure 4). The basework is supported by four wheels and four adjustable feet.

**Markings:**

The nameplate is marked with the following data:

Manufacturer's name	
Serial number of instrument	
NSC approval number in the form:	NSC No 6/9C/66
Accuracy class in the form:	III
Maximum capacity in the form:	150 kg*
Minimum capacity in the form:	10 kg*
Verification scale interval in the form:	0,2 kg*

\* These markings are repeated on the dial

**Variants:**

1. The pattern in other capacities with a maximum of 750 scale intervals.
2. The baseworks of other Commission-approved patterns replacing the basework described in the pattern provided that:
  - (a) the basework is of an instrument conventionally known as a platform weighing machine, weighbridge or hopper scale, etc., where the headwork and basework are separate assemblies connected by a mechanical linkage; and
  - (b) the capacity of the instrument is not more than the capacity approved for the basework, and the headwork has a maximum of 750 scale intervals; and
  - (c) additional transfer levers may be used; and
  - (d) a levelling device and a level indicator are fitted, except for instruments installed in a fixed position or instruments which satisfy the accuracy requirements and tilt tests specified in Test Procedures when tilted to a slope of 1 in 20 in a longitudinal direction and a transverse direction; and
  - (e) if a level indicator is required, its sensitivity shall be such that, when the instrument is tilted so that the bubble in the level indicator moves 2 mm, the zero will not change

by more than 2 scale intervals, and when zero is reset in the tilted position the instrument will satisfy the accuracy requirements; and

- (f) the instrument is marked with the following approval numbers:

Headwork NSC No 6/9C/66

Basework NSC No .....

Test Procedures:

1. Tilt tests for other baseworks

- (a) Tilting at no-load — the zero indication should not vary more than  $2e$  when tilted to a slope of 1 in 20, the zero being first adjusted in the reference (level) position.
- (b) Tilting when loaded — the indication should not vary more than  $e$  when tilted to a slope of 1 in 20, the indication at zero being adjusted in the reference position before tilting and in the tilted position before reloading.

2. Accuracy requirements

The maximum permissible error is:

$\pm 0,5e$  for loads between zero and  $500e$  inclusive; and  
 $\pm 1e$  for loads above  $500e$ .



25/3/88

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## NOTIFICATION OF CHANGE

### VARIOUS CERTIFICATES OF APPROVAL

The following changes are made to the approval documentation for the approvals listed overleaf

submitted by Mercury Weighing and Control Systems Pty Ltd  
32 Dew Street  
Thebarton SA 5031.

In the Certificates and Technical Schedules listed, the following changes should be made:

- 1) The submitter should be changed to read;  
  
A & D Mercury Pty Ltd  
  
(the address remains unchanged)
  
- 2) Any Mercury instrument or component of an instrument approved in the documentation, may now also be known as "AND Mercury" or similar.

Signed

Executive Director

APPROVAL      PATTERN**TYPE:** weighing instruments counter scales6/3/007      Model 92  
6/3/008      Model 131**TYPE:** counter machines semi-self-indicating

6/4A/012      Model 304A

**TYPE:** counter machines freely-suspended < 30 kg (spring scales)

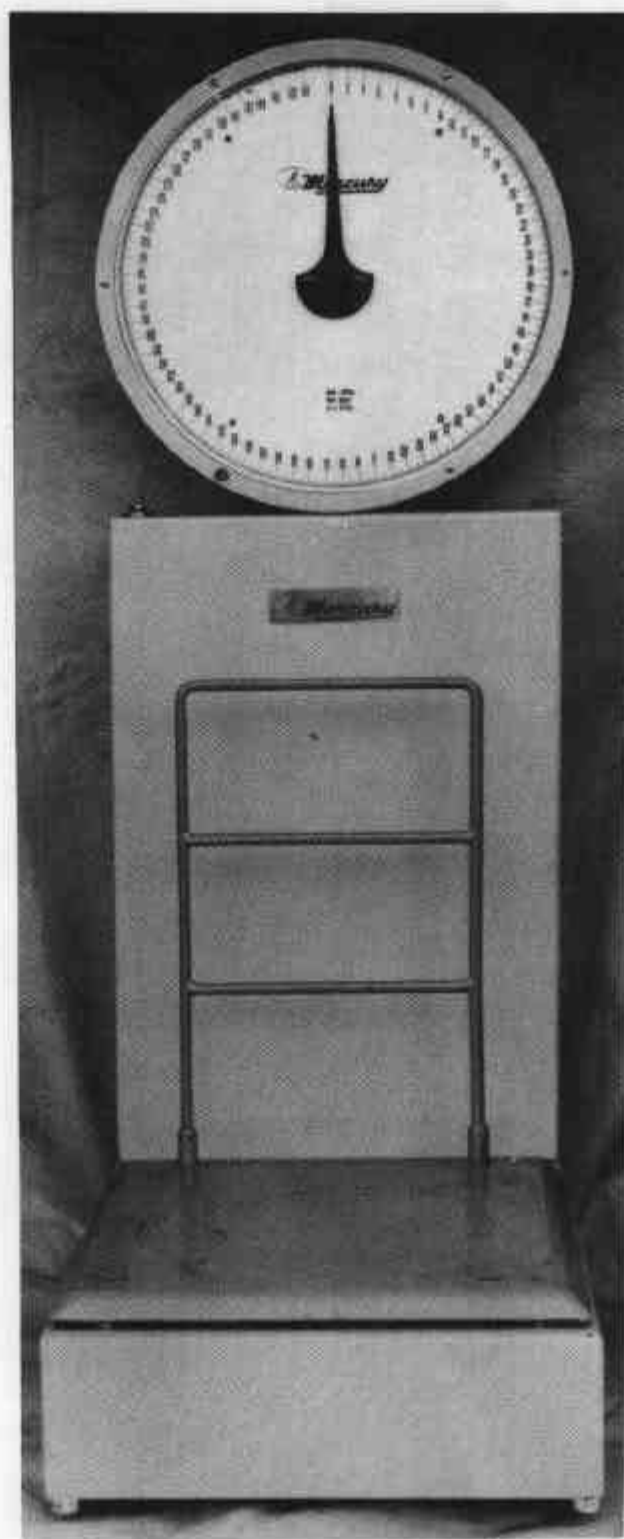
6/5/011      Model 211 DA

**TYPE:** weighing instruments non-self-indicating6/9A/001      Models 692 and 682  
6/9A/004      Model 522D  
6/9A/007      Model 211  
6/9A/008      Model 600**TYPE:** weighing instruments self-indicating6/9C/005      Model 211D  
6/9C/013      Up to 2500 lb or 1200 kg  
6/9C/066      Model 522 AL  
6/9C/067      Model SM100/479/522D  
6/9C/081      Model SB-LP 1200  
6/9C/088      Model 522D LT-10K**TYPE:** weighbridges self-indicating6/10B/040      Model WB-LT  
6/10B/045A      Model RVB-H20**TYPE:** automatic weighing instruments (except belt conveyors)

6/14B/012      Model HSD automatic hopper

**TYPE:** overhead weighing instrument (suspended load or receptor)6/18/005      With 211DA headwork  
6/18/017      Model OHT 500**TYPE:** digital indicatorsS114      Model 579  
S128      Model 1300  
S132      Model 900  
S161      Model AD4316  
S199      Model AD-4321**TYPE:** load cellsS117      Interface model SM25-12 kg  
S163      Transducers model B5112.1K  
S221      HBM model TRT-50 (Mercury model TRT3K-50)

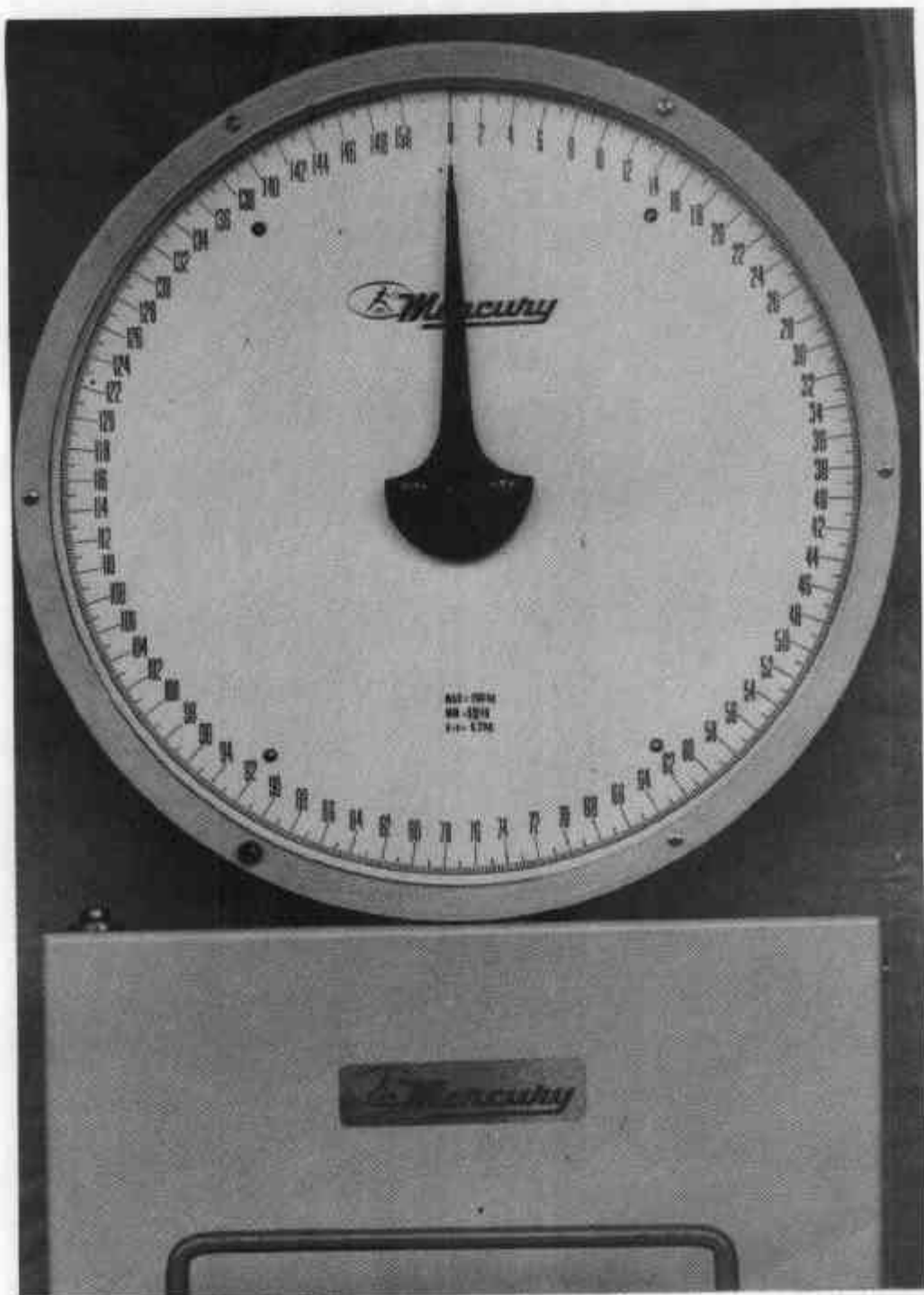
FIGURE 6/9C/66 - 1



Mercury Model 522AL

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FIGURE 6/9C/66 - 2

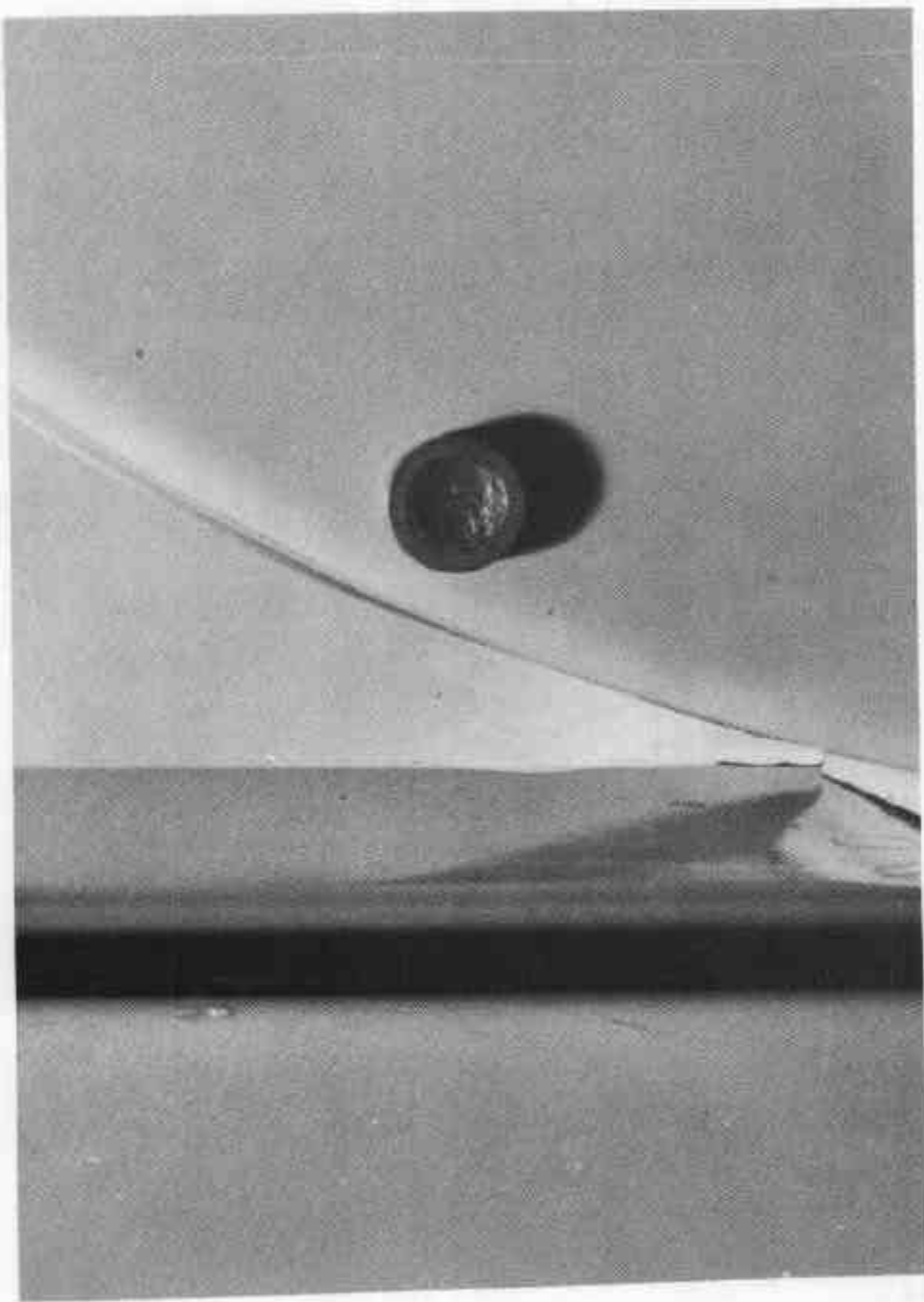


Mercury Model 522AL — Mass Reading Face

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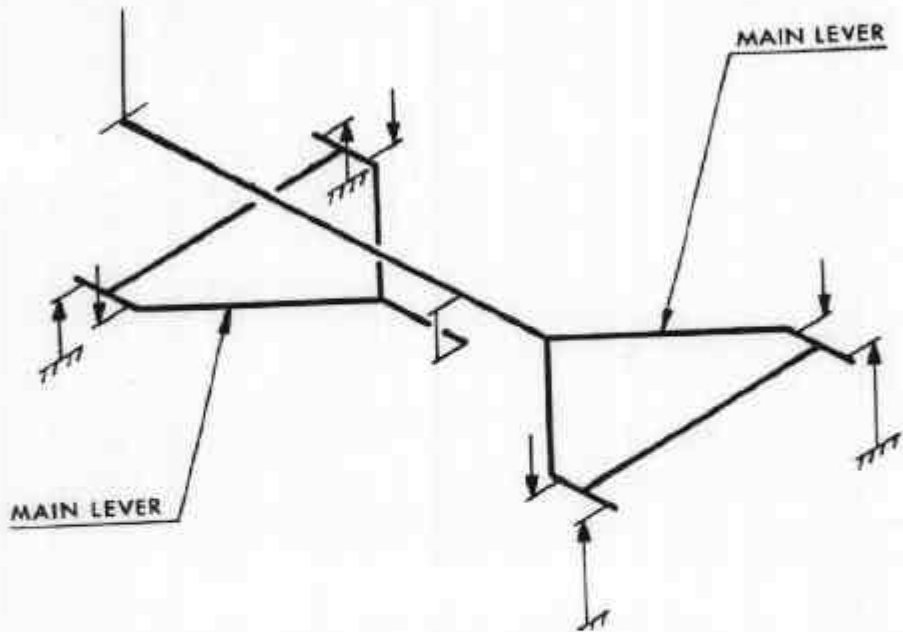


FIGURE 6/9C/66 - 3



Mercury 522AL — Rear View showing Seal

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Mercury 522AL — Schematic Diagram of Basework

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