

National Standards Commission



Certificate of Approval

No 6/4C/69

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

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

AND Model FX-6000 Weighing Instrument

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

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 6/4C/69 and only by persons authorised by the submittor.

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 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/A.

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

DESCRIPTIVE ADVICE

Pattern: approved 14/3/91

- . An AND model FX-6000 class II self-indicating weighing instrument of 6100 g maximum capacity.

Variant: approved 14/3/91

1. With battery-powered operation.

Variant: approved 5/8/92

2. Other models as listed in Table 1.

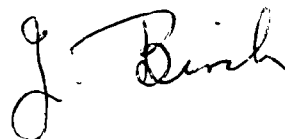
Technical Schedule No 6/4C/69 describes the pattern and variants 1 and 2.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/4C/69 dated 9/10/92
Technical Schedule No 6/4C/69 dated 9/10/92 (incl. Table 1 & Test
Procedure)
Figures 1 and 2 dated 9/10/92

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





National Standards Commission

TECHNICAL SCHEDULE No 6/4C/69

Pattern: AND Model FX-6000 Weighing Instrument

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

1. Description of Pattern

An AND model FX-6000 class II self-indicating weighing instrument (Figure 1 and Table 1) of 6100 g maximum capacity with a verification scale interval (e) of 1 g and a scale interval (d) of 0.1 g.

The instrument may be fitted with output sockets for the connection of peripheral and/or auxiliary devices. The instrument is approved for use over a temperature range of 10°C to 30°C, and must be so marked.

1.1 Zero and Tare

Zero setting and taring are accomplished by means of a common button that sets zero to within $\pm 0.25e$, as indicated by the right-hand digit (d) which is differentiated.

Tare capacity is up to the maximum capacity of the instrument.

1.2 Optional Mass Unit

A facility to configure the instrument with another mass unit (or display), as follows:

- (a) CM (ct), or oz tr (precious metals only).
- (b) Various other units including lb and gr - if the other mass unit is any unit other than g, CM (ct) or oz tr, the instrument shall be marked "lb ... gr (as applicable) not for trade use" or "lb ... gr (as applicable) for export use only". The scale interval, verification scale interval, maximum capacity and minimum capacity when used with these units (and CM) shall be marked in the vicinity of the reading face. The markings of the primary units shall be given in grams.

1.3 Management Functions

Instruments may be fitted with a number of management functions which are not approved for trade use, including counting and percentage.

1.4 Levelling

The instrument is provided with three feet, two of which are adjustable. 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 Verification/Certification Provision

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

1.7 Markings

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

Manufacturer's name or mark	
Serial number	
NSC approval number	NSC No 6/4C/69
Accuracy class	II
Maximum capacity	Max g *
Minimum capacity	Min g *
Verification scale interval	e = g *
Scale interval	d = g *
Maximum subtractive tare	T = - g
Special temperature limits	10°C - 30°C

* Repeated in the vicinity of each reading face.

In addition, instruments are marked NOT FOR TRADING DIRECT WITH THE PUBLIC, or similar wording. Refer also to clause 1.2 Optional Mass Unit.

2. Description of Variants

2.1 Variant 1

With battery-powered operation.

2.1 Variant 1

Other models of the FX and FY series as listed in Table 1, including some with partial range indication of scale interval (d), e.g. model FX-320 (Figure 2).

TEST PROCEDURE

Instruments should be tested in conjunction 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 5000e;
- $\pm 1.0e$ for loads over 5000e up to 20 000e; and
- $\pm 1.5e$ for loads over 20 000e.

TABLE 1

Model	FX-200	FX-300	FX-2000	FX-3000	FX-6000
Maximum capacity	210 g	310 g	2100 g	3100 g	6100 g
Verif. scale interval (e)	0.01 g	0.01 g	0.1 g	0.1 g	1 g
Scale interval (d)	0.001 g	0.001 g	0.01 g	0.01 g	0.1 g

Model	FX-320	FX-3200
Maximum capacity	310 g	3100 g
Verif. scale interval (e)	0.01 g	0.1 g
Scale interval (d)	0.001 g	0.01 g
for first g	60 g	600 g

Model	FY-200	FY-300	FY-2000	FY-3000
Maximum capacity	210 g	310 g	2100 g	3100 g
Verif. scale interval (e)	0.1 g	0.1 g	1 g	1 g
Scale interval (d)	0.01 g	0.01 g	0.1 g	0.1 g

Approved Models and Capacities

National Standards Commission



NOTIFICATION OF CHANGE
CERTIFICATE OF APPROVAL No 6/4C/69
CHANGE No 1

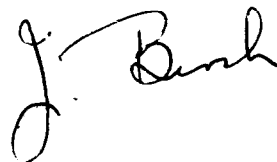
The following change is made to the approval documentation for the

AND Model FX-6000 Weighing Instrument

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

In Technical Schedule No 6/4C/69 dated 9/10/92, clause 1.1 Zero and Tare should be amended by changing the reference to zero setting to read, in part, "... sets zero to within $\pm 0.5d$...", (rather than " $\pm 0.25e$ ").

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



National Standards Commission



Notification of Change Certificate of Approval No 6/4C/69 Change No 2

The following change is made to the approval documentation for the

AND Model FX-6000 Weighing Instrument

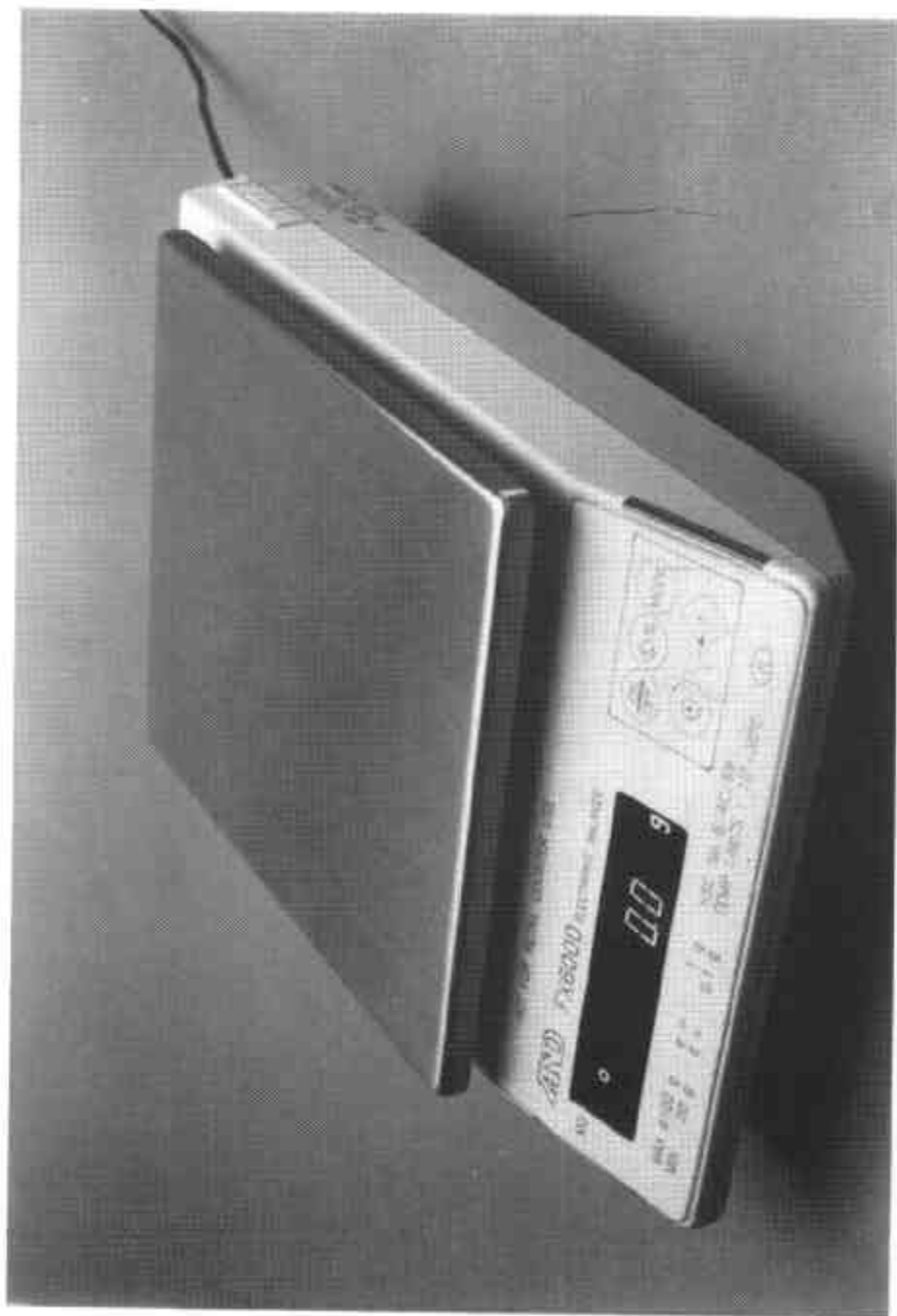
submitted by A & D Mercury Pty Ltd
 32 Dew Street
 Thebarton SA 5031.

In Certificate of Approval No 6/4C/69 dated 9 October 1992, the Condition of Approval referring to the expiry of the approval should be amended to read:

“This approval expires in respect of new instruments on 1 April 1998.”

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

FIGURE 6/4C/69 - 1



AND Model FX-6000 Weighing Instrument

FIGURE 6/4C/69 - 2



Model FX-320