# NATIONAL STANDARDS COMMISSION

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/9C/211

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

A & D Model FV 150 Weighing Instrument

submitted by Geo. Salter Pty Ltd
16 Grosvenor Street
Abbotsford Vic 3067.

CONDITIONS OF APPROVAL

General:

This approval is subject to review on or after 1/12/92.
This approval expires in respect of new instruments on 1/12/93.

Instruments purporting to comply with this approval shall be marked NSC No 6/9C/211.

This approval may be withdrawn if instruments are constructed other than in accordance with the drawings and specifications lodged with the Commission.

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

Special:

The instrument is not approved with a counting function.

Signed

J. Birch.

Executive Director

Descriptive Advice

Pattern: approved 23/11/87

- A self-indicating weighing instrument of 150 kg maximum capacity.

Variant: approved 23/11/87

1. Of 60 kg capacity and known as a model FV 60.

Technical Schedule No 6/9C/211 describes the pattern and variant.

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## Filing Advice

The documentation for this approval comprises:

Certificate of Approval No 6/9C/211 dated 8/2/88
Technical Schedule No 6/9C/211 dated 8/2/88
Test Procedure No 6/9C/211 dated 8/2/88
Figures 1 and 2 dated 8/2/88

# NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/9C/211

Pattern: A & D Model FV 150 Weighing Instrument.

Submittor: Geo. Salter Pty Ltd
16 Grosvenor Street
Abbotsford Vic 3067

## 1. Description of Pattern

A self-indicating weighing instrument of 150 kg maximum capacity with a verification scale interval of 0.05 kg (Figure 1). The instrument may also be operated by battery-power or using an external plug-in power supply.

The instrument may be fitted with an output socket for the connection of a peripheral or an auxiliary device.

### 1.1 Zero

Zero is automatically corrected to within ± 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.

### 1.2 Display Check

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

### 1.3 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 Basework

The basework (Figure 2) has a Litra model LC4103-K150 load cell mounted directly between the main frame and the weighing platform frame. The maximum platform dimensions are 390 mm x 530 mm.

### 1.6 Markings

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

| | |
|---|---|
| Manufacturer's name or mark | |
| Serial number | |
| NSC approval number | NSC No 6/9C/211 |
| Accuracy class | (III) |
| Maximum capacity | Max ... kg * |
| Minimum capacity | Min ... kg * |
| Verification scale interval | e = d =... kg * |
| Maximum subtractive tare | T = - ... kg |

* Repeated adjacent to each reading face.

..../2

1.7 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.

1.8 Verification Provision

Provision is made for a verification mark to be applied.

2. Description of Variant 1

The model FV 60 of 60 kg maximum capacity with a verification scale interval of 0.02 kg, using a Litra model LC4103-K60 load cell.

# NATIONAL STANDARDS COMMISSION

## TEST PROCEDURE No 6/9C/211

All load applications to the instrument should be in accordance with the Commission's recommended testing procedure for the elimination of rounding error as set out in Document 104.

The maximum permissible errors are:

± 0.5e for loads between 0 and 500e;
± 1.0e for loads between 501e and 2000e; and
± 1.5e for loads above 2000e.

### 1. Zero Test

As the automatic device resets zero when the weighing mechanism is in equilibrium within 0.5e of zero, zero should be checked as described in Document 104, with a load equal to, say, 10e on the load receptor. The indications with 0.25e and 0.75e additional mass on the load receptor will be 10e and 11e respectively.

### 2. Zero Range

The maximum range of operation of the zero setting device should not exceed 4% of the maximum capacity. The device shall be capable of both negative and positive adjustments of at least one-quarter of the zero adjustment range. With zero balance indicated apply a load of, say, 3.5% of maximum capacity and press the zero button; the instrument should not rezero.

### 3. Load Test

Test loads are to be applied increasing in not less than 5 approximately equal steps to maximum capacity, followed by decreasing loads in not less than 5 approximately equal steps to zero load.

### 4. Range of Indication

The maximum mass indicated should not exceed the marked maximum capacity by more than 10e; above this indicated mass the indication should be blank or show non-numerical characters.

Below zero the display may show a mass preceded by a minus sign.

### 5. Taring

The tare function should be able to reset the mass indicator to zero within 0.25e at any load within its capacity. This may be checked as described for Zero Test. A tare should not be able to be acquired above the marked tare capacity.

### 6. Non-approved Functions

Check, using the MODE (or UNIT) button, that the counting facility and the capability to display in "lb" are both disabled.

29/1/90

# National Standards Commission

## NOTIFICATION OF CHANGE

## VARIOUS CERTIFICATES OF APPROVAL

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

submitted by Geo Salter Pty Ltd
16 Grosvenor Street
Abbotsford VIC 3067.

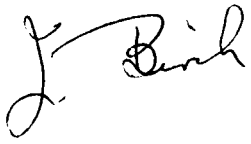
1) The submittor's name and address should be changed to read:

Salter Weightronix Pty Ltd
1 Apollo Court
Blackburn VIC 3130.

2) Any Salter instrument or component of an instrument approved in the documentation, may now also be known as "Salter Weightronix" or "Weightronix" or similar.

| APPROVAL | PATTERN |
|---|---|
| 6/5/12A | Salter Model 610T (freely-suspended) Weighing Instrument |
| 6/9C/203 | Salter Model LC2424 (platform) Weighing Instrument |
| 6/9C/211 | A & D Model FV 150 (platform) Weighing Instrument |
| S194 | Salter Electroscale Model WML Digital Indicator |
| S200 | Salter Electroscale Model CWM Digital Indicator |

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



# National Standards Commission

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/9C/211

CHANGE No 1

The following changes are made to the approval documentation for the

A & D Model FV 150 Weighing Instrument

submitted by Salter Weightronix Pty Ltd
1 Apollo Court
Blackburn VIC 3130.

1. In Certificate of Approval No 6/9C/211 dated 8/2/88, delete the Special Condition of Approval.

2. In Technical Schedule No 6/9C/211 dated 8/2/88, add the following:

   1.9 Counting Function

   The instrument may be fitted with a counting facility for determining the number of items, of nominally equal mass, from the mass of a quantity of the items. The unit mass of an item must be entered by weighing a sample of 5, 10, 20, 50 or 100 items.

3. In Test Procedure No 6/9C/211 dated 8/2/88, make the following changes:

   (i) Amend test 6. Non-approved functions to read;

   "Check, using the MODE (or UNIT) button, that the capability to display in 'lb' is disabled."

   (ii) Add the following test;

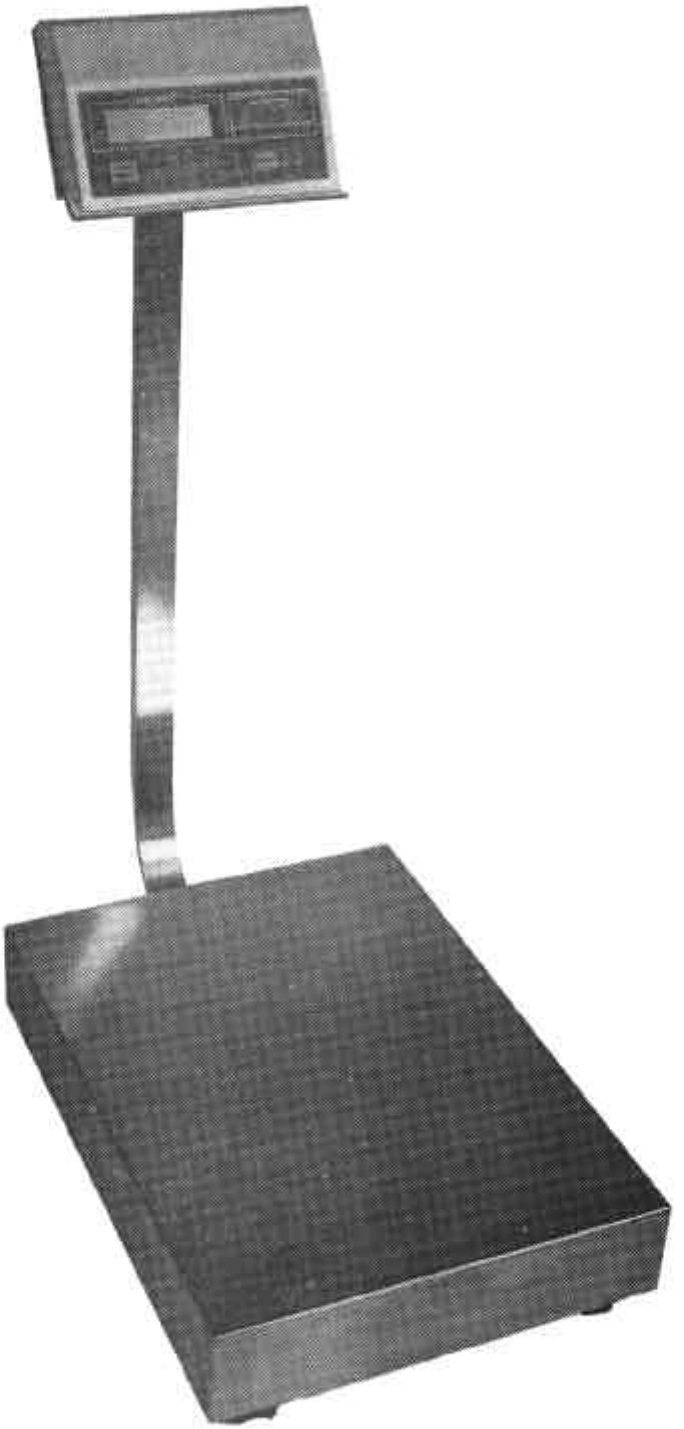
   "7. Counting Function

   A test may be carried out for accuracy of count for a unit mass equal to or greater than the verification scale interval. The number counted shall be correct to one count. All tests shall be carried out using standard masses."

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.

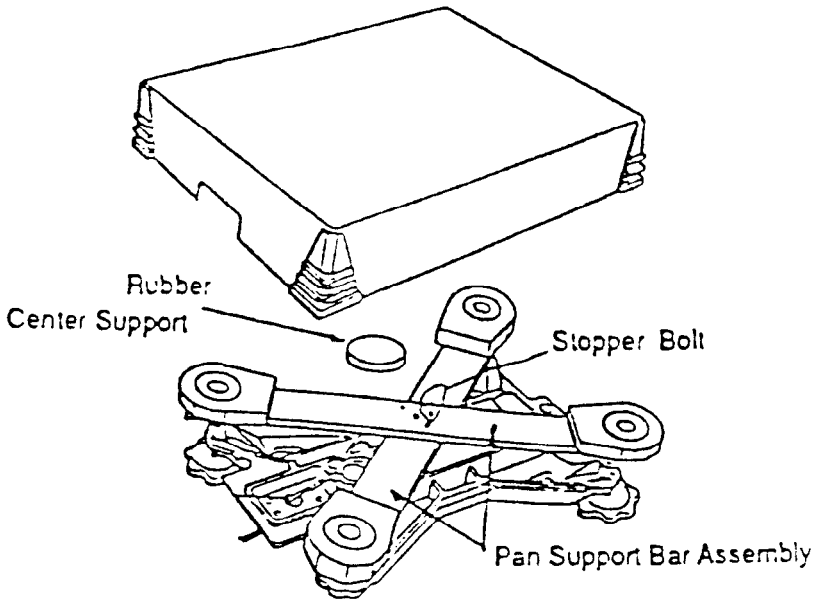
J. Bink.
7 February 1990.

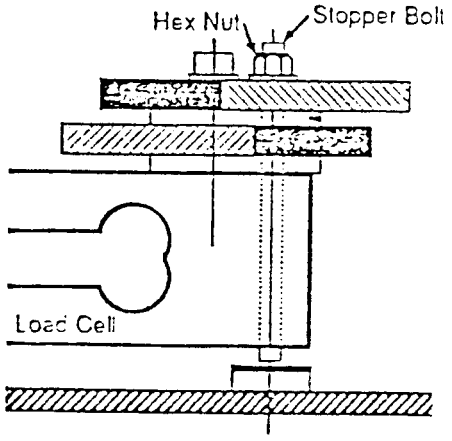
FIGURE 6/9C/211 - 1



A & D Model FV150

FIGURE 6/9C/211 - 2




Showing Load Cell Mounting