

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/4D/227

Pattern: TEC Model HP93-15 Weighing Instrument

Submittor: Swift-MIP Pty Ltd 149 Milton Street Ashfield New South Wales 2131

1. Description of Pattern

A self-indicating price-computing weighing and label printing instrument (Figures 1 and 2) of 15 kg capacity by 0.005 kg scale intervals with unit price to \$99.99/kg and price to \$999.99. May be known as either a TEC model HP93-15 or a Franklin Electric model 950 and may be fitted with output sockets for the connection of auxiliary and/or peripheral devices.

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 may be reset by pressing the zero button. The zero light illuminates whenever zero is correct within 0.25e.

1.2 Display Check

Switching on power to the instrument causes the digital indicators to display 0 to 9 sequentially. Pressing the zero button then allows operation of the instrument.

- 1.3 Tare
- (a) Semi-automatic tare is selected by pressing the button marked T.
- (b) Up to four values of tare may be digitally preset by pressing the buttons marked PT1, PT2, PT3 or PT4 followed by the value of tare required.

In both cases, the tare is subtractive and has a capacity of up to 9.995 kg.

A tare entered by either method (a) or (b) will replace the value of tare previously used by the instrument.

1.4 Marking

The instrument is marked with the following data, together in one location:

Manufacturer's name or mark	
Serial number	
NSC approval number	NSC No 6/4D/227
Accuracy class	(II)
Maximum capacity	Max = 15 kg*
Minimum capacity	$Min = 0.100 \text{ kg}^*$
Verification scale interval	e = d = 0,005 kg*
Maximum subtractive tare	T = -9.995 kg

* These should be repeated adjacent to each reading face and in addition, notices advising that the instrument is not for retail counter use and that the instrument must be level when in use.

1.5 Levelling

The weighing unit is provided with four adjustable feet and adjacent to the level indicator is a notice advising that the instrument must be level when in use. This notice is repeated adjacent to the reading face.

1.6 Verification

Provision is made for the application of a verification mark.

TEST PROCEDURE No 6/4D/227

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 501 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 then 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 ($\pm 2\%$ approximately).

3. Load Test

Test loads are to be applied to the weighing instrument 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

- (a) The maximum mass indicated should not exceed the marked maximum capacity (Max) by more than 10e; above this indicated mass the indication should be blank or show non-numerical characters.
- (b) The minimum mass indicated should be zero; below this the indication should be blank, show non-numerical characters or show a negative mass.

5. Taring

The semi-automatic 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.



NATIONAL STANDARDS COMMISSION

WEIGHTS AND MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/40/227

This is to certify that an approval has been granted by the Commission that the pattern of the

TEC Model HP93-15 Weighing Instrument

- submitted by Swift-MIP Pty Ltd 149 Milton Street Ashfield New South Wales 2131
- on behalf of Tokyo Electric Company Limited 14-10, 1-chome Uchi-Kanda, Chiyoda-ku Tokyo, Japan 101

is suitable for use for trade.

The approval is subject to review on or after 1/8/89.

Instruments purporting to comply with this approval shall be marked NSC No 6/4D/227.

The approval may be withdrawn if instruments are constructed and used other than as described in the drawings and specifications lodged with the Commission.

Executive Director

Descriptive Advice

Pattern: approved 9/7/84

A self-indicating price-computing weighing and label printing instrument of 15 kg capacity by 0.005 kg scale intervals with unit price to \$99.99/kg and price to \$999.99. Also known as a Franklin Electric model 950.

Technical Schedule No 6/4D/227 describes the pattern.

Filing Advice

The documentation for this approval comprises:

Certificate of Approval No 6/4D/227 dated 30/7/84 Technical Schedule No 6/4D/227 dated 30/7/84 Test Procedure No 6/4D/227 dated 30/7/84 Figures 1 and 2 dated 30/7/84.



NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/4D/227

CHANGE No 1

The following changes are made to the approval documentation for the

TEC Model HP93-15 Weighing Instrument

submitted by Swift-MIP Pty Ltd 149 Milton Street Ashfield NSW 2131.

In the documentation of NSC Approval No 6/4D/227 dated 30/7/84, all reference to the value of unit price should be changed to read "\$999.99/kg", as follows;

1. In the Certificate, Descriptive Advice.

2. In the Technical Schedule, Description of Pattern, paragraph 1.

In addition, Figure 2 dated 30/7/84 is replaced by the attached Figure 2 showing labels in which the \$ sign for unit price has been moved to allow room for 5 digits.

Note: The total price display blanks when a total price of greater than \$999.99 is calculated; in this case, printing is inhibited.

Signed

Udans

Acting Executive Director

FIGURE 6/40/227 - 1



TEC Model HP93-15 Weighing Instrument

FIGURE 6/4D/227 - 2





Typical Labels

FIGURE 6/4D/227 - 2



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T	NET WT kg	PRICE/kg	TOTAL PRICE
00000	3.000	S232.22 Date Packed	\$ 696.66
		USE BY	
THANK-YOU			