NATIONAL STANDARDS COMMISSION

WEIGHTS AND MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/4C/40

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

TEC Model SW-1230-M-23 Weighing Instrument

submitted by Swift - M.I.P. Pty Ltd
149-155 Milton Street
Ashfield, New South Wales, 2131

on behalf of Tokyo Electric Co Ltd
14-10, 1-Chome, Uchikanda
Chiyoda-Ku
Tokyo, Japan

are suitable for use for trade.

The approval is subject to review on or after 1/12/88.

Instruments purporting to comply with this approval shall be marked NSC No 6/4C/40.

The approval may be withdrawn if instruments are used other than as described in the drawings and specifications lodged with the Commission.

Signed

Executive Director

Descriptive Advice

Pattern: approved 3/11/83

- A model SW-1230-M-23 self-indicating weighing instrument of 30 kg capacity by 0.010 kg scale intervals.

Variant: approved 3/11/83

- With a basework of 15 kg capacity.

Technical Schedule No 6/4C/40 dated 29/11/83 describes the pattern and variant.

Filing Advice

The documentation for this approval comprises:

Certificate of Approval No 6/4C/40 dated 29/11/83
Technical Schedule No 6/4C/40 dated 29/11/83
Test Procedure No 6/4C/40 dated 29/11/83
Figures 1 and 2 dated 29/11/83.

29/11/83

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/4C/40

Pattern: TEC Model SW-1230-M-23 Weighing Instrument

Submittor: Swift - M.I.P. Pty Ltd
149-155 Milton Street
Ashfield, New South Wales, 2131

1. Description of Pattern

The pattern is a TEC self-indicating weighing instrument of 30 kg capacity by 0.010 kg scale intervals comprising a model S-1230-M basework and a model W1-23 indicator (Figure 1)

1.1 Zero

The instrument is automatically corrected to zero within ± 0.25e, indicated by the zero light illuminating, when the button marked Z is pressed.

An automatic zero tracking device rests zero whenever the instrument returns to zero within ±0.5e.

1.2 Display Check

Switching on power causes the indicator to display 0 to 9 sequentially, all indicator lights to flash, and then all to blank until the Z button is pressed.

1.3 Tare

(a) Semi-automatic tare is selected by pressing the button marked T.

(b) Tare can be digitally preset by pressing the button marked PT, followed by the value of tare required.

In both cases, the tare may be of any capacity up to the capacity of the instrument.

1.4 Levelling

(a) When counter or bench-mounted (Figure 1) the weighing unit has a level indicator, four adjustable feet and a notice advising that the unit must be level when in use.

(b) When the weighing unit is set into a pit the level indicator is situated within the basework assembly (Figure 2) and is for installation use only.

1.5 Marking

(a) The basework is marked with the following data:

Manufacturer's name or mark
Model number
Serial number of instrument
Serial numbers of load cells
NSC approval number NSC No .....

(b) The indicator is marked with the following data:

Manufacturer's name or mark	
Serial number of instrument	
Model number	
NSC approval number	NSC No .....
Accuracy class	(III)
Maximum capacity in the form	Max .....kg*
Minimum capacity in the form	Min .....kg*
Verification scale interval in the form	e = d = ...kg*
Maximum subtractive tare in the form	T = - .....kg

In addition, the indicator is marked NOT TO BE USED FOR SELLING DIRECT TO THE PUBLIC.

1.6 Output Socket

An output socket may be provided for the connection of a peripheral or auxilliary device.

1.7 Verification Provision

Provision is made for a verification mark to be applied.

2. Description of Variant 1

With the basework of the pattern replaced by one of 15 kg capacity approved for use with up to 3000 verification scale intervals.

*These markings are repeated in the vicinity of the reading face, if not already there.

TEST PROCEDURE No 6/4C/40

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 Range

Check that the range of the zero adjustment is not more than 4% of the maximum capacity (± 2% approximately). With zero balance indicated, apply a load of, say, 2.5% of maximum capacity to the instrument, and adjust the zero control; the instrument should not rezero.

2. Zero Test

(a) Check by means of Document 104, that when the zero light is lit, zero is set within 0.25e.

(b) As the automatic zero tracking device resets zero when the weighing mechanism is in equilibrium within 0.5 scale interval of zero, zero should be checked, with a load equal to, say, 10 scale intervals 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.

3. Range of Indication

(a) The maximum mass indicated should not exceed the maximum capacity (Max) by more than 10 scale intervals; above this indicated mass the indicator should be blank or show non-numerical symbols.

(b) Below zero the indication may blank or the mass will be indicated, prefixed by a minus sign.

4. Taring

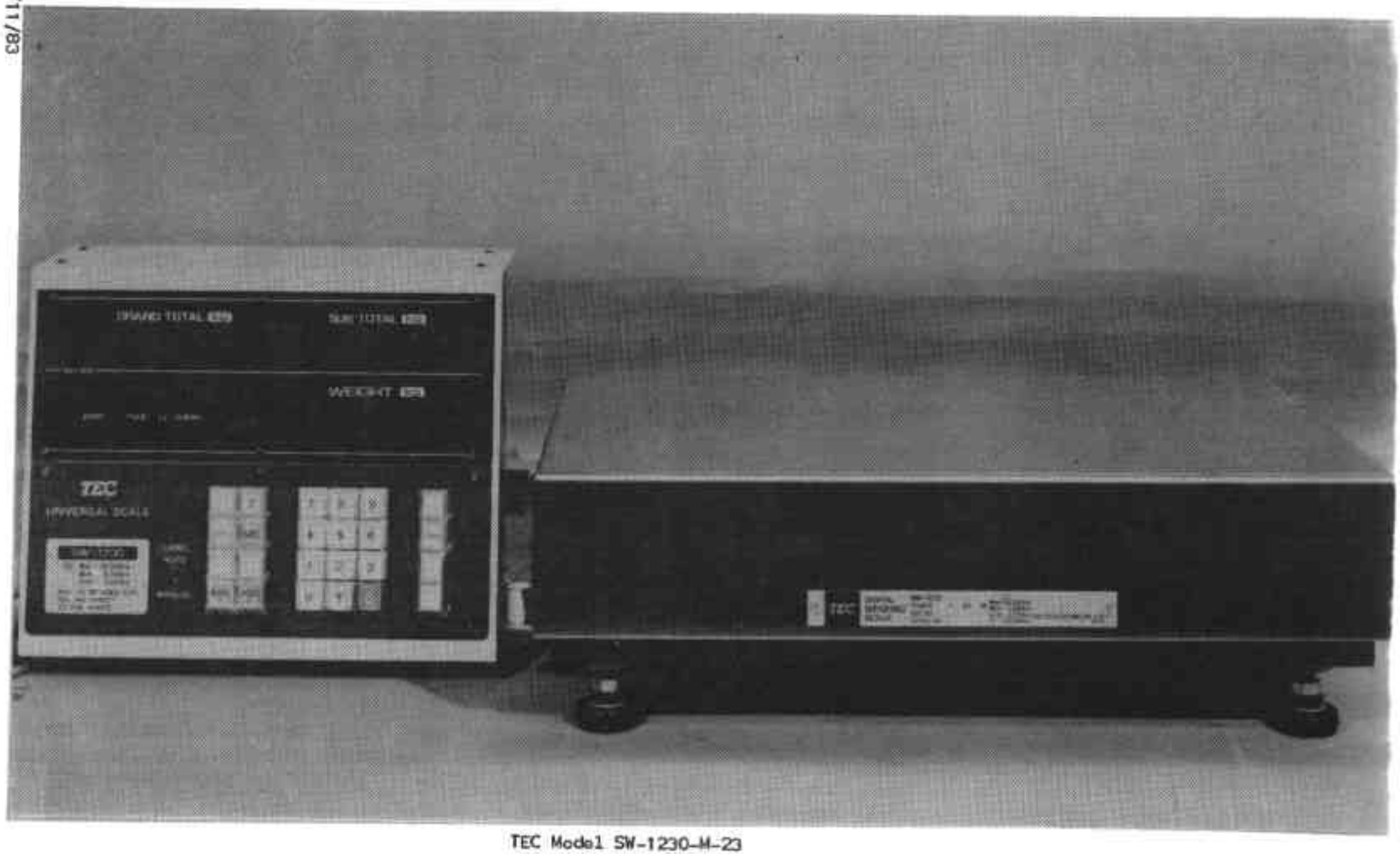
a) Attempt to tare a mass above maximum capacity as determined in 3(a). On removal of the mass no tare should have been entered, and the indicator should display all zeroes.

(b) The tare function should reset the mass indicator to zero within 0.25e at any load within its tare capacity. This may be checked as described under 2(a) - Zero Test.

5. Test Loads

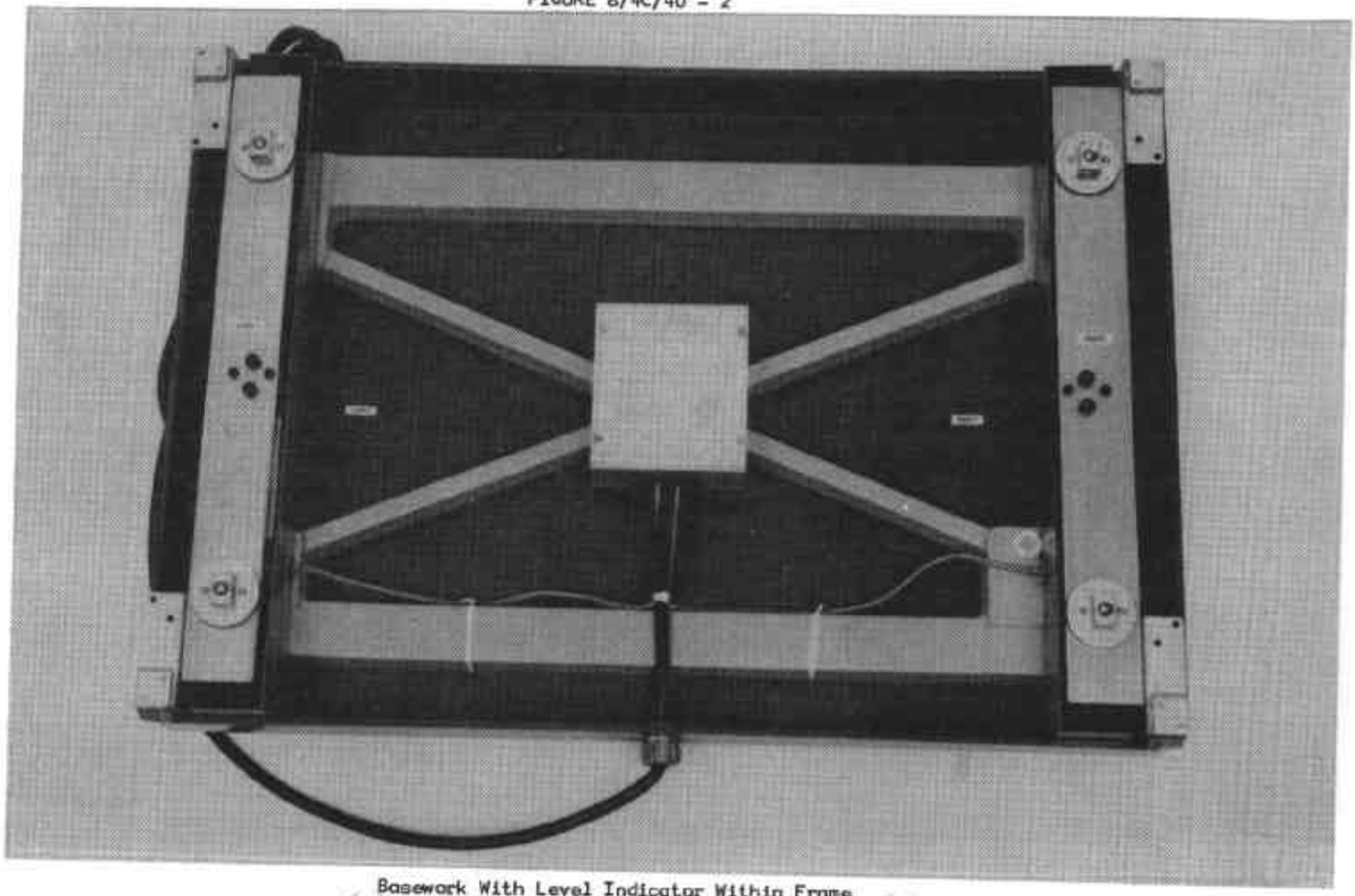
Test loads are to be applied to the complete weighing instrument increasing in not less than 5 approximately equal steps to maximum capacity, followed by decreasing loads in not less than 5 approximately equal steps to zero load.

FIGURE 6/4C/40 - 1



TEC Model SW-1230-M-23

FIGURE 6/4C/40 - 2



Basework With Level Indicator Within Frame