NATIONAL STANDARDS COMMISSION

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/18/20

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

Sauter Model E0600 Overhead-track Weighing Instrument

submitted by FSE Scientific
40 Hilly Street
Mortlake Point NSW 2137.

Conditions of Approval

This approval is subject to review on or after 1/5/91.

Instruments purporting to comply with this approval shall be marked NSC No 6/18/20.

This approval may be withdrawn if instruments are constructed and used other than in accordance with the drawings and specifications lodged with the Commission.

Signed

J. Birch

Executive Director

Descriptive Advice

Pattern: approved 30/4/86

- A multi-range self-indicating overhead-track weighing instrument of 600 kg maximum capacity and with a weigh-rail up to 800 mm long.

Technical Schedule No 6/18/20 describes the pattern.

Filing Advice

The documentation for this approval comprises:

Certificate of Approval No 6/18/20 dated 23/7/86
Technical Schedule No 6/18/20 dated 23/7/86
Test Procedure No 6/18/20 dated 23/7/86
Figures 1 and 2 dated 23/7/86

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/18/20

Pattern: Sauter Model E0600 Overhead-track Weighing Instrument

Submittor: FSE Scientific
40 Hilly Street
Mortlake Point NSW 2137

1. Description of Pattern

A multi-range self-indicating overhead-track weighing instrument with a verification scale interval of e = 0.05 kg from zero to 150 kg, e = 0.1 kg from 150 kg to 300 kg and e = 0.2 kg from 300 kg to the maximum capacity of 600 kg.

1.1 Basework

The E0600 basework (Figure 1) uses a lever system to support the load receptor and a measuring cell which operates on the magnetic force compensation principle. The weigh-rail may be of round or rectangular section and must be no greater than 800 millimetres long.

1.2 Indicator

The digital indicator may be in any one of the following configurations:

Model E2000, basic model, without output sockets or printer;

Model E2100, which has output sockets for the connection of auxiliary and/or peripheral devices;

Model ED2100 (Figure 2) which is fitted with an inbuilt ticket printer and output sockets for the connection of auxiliary and/or peripheral devices. The printer is not approved for trade use and must be so marked.

Note: The instrument has various peripheral functions and a secondary display. This lower display shall be differentiated from the primary display and marked LOWER DISPLAY NOT FOR USE FOR TRADE.

1.3 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 within ± 0.25e.

1.4 Display Check

A display check is initiated whenever the test button is pressed.

1.5 Tare

A semi-automatic taring device of up to maximum capacity and a digital taring device of up to the maximum capacity of the low range may be fitted. Both taring devices are subtractive and their operation is mutually exclusive. Illumination of the TARE indicator indicates that a tare has been acquired.

1.6 Verification Provision

Provision is made for a verification mark to be applied.

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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 6/18/20
Accuracy class		(III)
Maximum capacity		Max 600 kg *
Minimum capacity		Min 2.5 kg *
Maximum subtractive tare		T = -600 kg
High Range	Max 600 kg *	e = d = 0.2 kg *
Medium Range	Max 300 kg *	e = d = 0.1 kg *
Low Range	Max 150 kg *	e = d = 0.05 kg *

* These markings are repeated close to each reading face.

The indicator is also marked NOT FOR RETAIL COUNTER USE and LOWER DISPLAY NOT FOR TRADE USE.

TEST PROCEDURE No 6/18/20

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 (± 2% approximately). With zero balance indicated apply a load of, say, 2.5% of maximum capacity to the instrument and press the zero button; the instrument should not rezero.

3. Load Test

Note: The maximum permissible error applicable is that for the range in which the measurement is made, using the verification scale interval of that range.

Test loads are to be applied to the instrument at the centre of the weigh rail, in not less than 9 steps increasing to maximum capacity, followed by decreasing loads in not less than 9 steps to zero load. The loads should be selected such that there are 3 approximately equal steps in each range, but avoiding the changeover point of the ranges.

This test should be repeated at each end of the weigh rail.

4. Range of Indication

(a) 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.

(b) Below zero, the indication must be blank, show non-numerical characters or show the mass preceded by a minus sign.

5. Taring

The semi-automatic tare function should be able to reset the mass indicator to within ± 0.25e; this may be checked as described for Zero Test. The digital taring device should be able to reset the mass indicator to within ± 0.5e.

A tare should not be able to be acquired above the marked tare capacity, for the semi-automatic device, or above the capacity of low range for the digital device.

P5/6B/65
10/6/86

NATIONAL STANDARDS COMMISSION

CANCELLATION CERTIFICATE OF APPROVAL No P5/6B/65

This is to certify that the approval for use for trade granted in respect of the pattern and variants of the

Petroleum Product Flowmetering System with Avery-Hardoll BM600 Series Flowmeter

submitted by GEC Automation & Control
2 Giffnock Avenue
North Ryde NSW 2113

has been cancelled in respect of new instruments as from 1 May 1986.

Instruments which were verified before that date may, with the concurrence of the respective State or Territorial Weights and Measures Authority, be submitted for reverification.

Signed

Executive Director

FIGURE 6/18/20 - 1

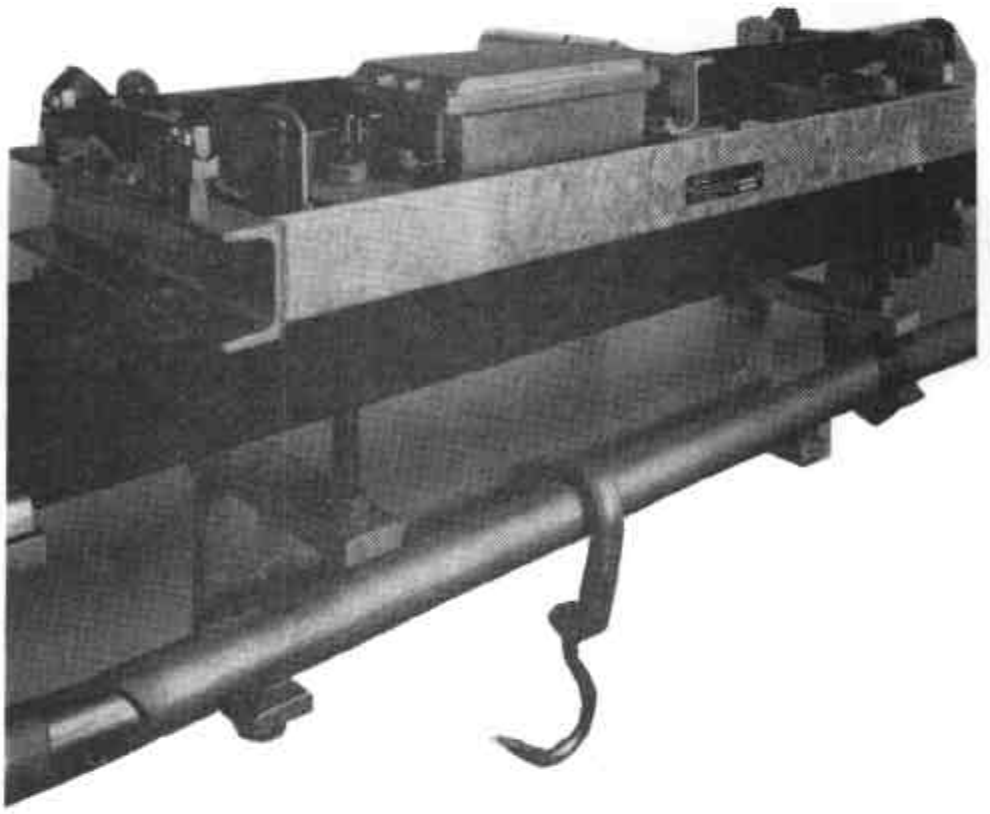

FIGURE 6/18/20 - 2

Souter ED2100 Indicator