

6/9C/92  
8/10/85



# NATIONAL STANDARDS COMMISSION

## NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

### REGULATION 9

#### CERTIFICATE OF APPROVAL No 6/9C/92

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

Sauter Model EB60 Weighing Instrument

submitted by FSE Scientific  
40 Hilly Street  
Mortlake Point NSW 2137

are suitable for use for trade.

#### Conditions of Approval

This approval is subject to review on or after 1/7/90.

Instruments purporting to comply with this approval shall be marked NSC No 6/9C/92.

This approval may be withdrawn if instruments are constructed and used other than in accordance with the drawings and specifications lodged with the Commission.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

Executive Director

#### Descriptive Advice

Pattern: approved 13/6/85

. A multi-range self-indicating weighing instrument of 60 kg maximum capacity.

Variant: approved 13/6/85

1. Various models and capacities as listed in Table 1.

Technical Schedule No 6/9C/92 describes the pattern and variant.

#### Filing Advice

The documentation for this approval comprises:

Certificate of Approval No 6/9C/92 dated 8/10/85  
Technical Schedule No 6/9C/92 dated 8/10/85  
Test Procedure No 6/9C/92 dated 8/10/85  
Figures 1 and 2 dated 8/10/85



# NATIONAL STANDARDS COMMISSION

## TECHNICAL SCHEDULE No 6/9C/92

Pattern: Sauter Model EB60 Weighing Instrument

Submittor: FSE Scientific  
40 Hilly Street  
Mortlake Point NSW 2137

### 1. Description of Pattern

A multi-range self-indicating platform weighing instrument of 60 kg maximum capacity.

#### 1.1 Basework

The EB60 basework (Figure 1 and Table 1) uses a lever system to support the load receptor, and uses a measuring cell which operates on the magnetic force compensation principle.

#### 1.2 Levelling

The instrument is provided with adjustable feet and adjacent to the level indicator (and repeated on the indicator) is a notice advising that the instrument must be level when in use.

#### 1.3 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.

#### 1.4 Zero

Zero is automatically corrected to within  $\pm 0.25e$  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  $0.25e$ .

#### 1.5 Display Check

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

#### 1.6 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. Illumination of the TARE indicator indicates that a tare has been acquired.

1.7 Verification Provision

Provision is made for a verification mark to be applied.

1.8 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/92	
Accuracy class		(III)	
Maximum capacity		Max .....	kg *
Minimum capacity		Min .....	kg *
Maximum subtractive tare		T = - .....	kg
High Range	Max ....	e = d = ....	kg *
Medium Range	Max ....	e = d = ....	kg *
Low Range	Max ....	e = d = ....	kg *

\* These markings are repeated close to each reading face.

The indicator is also marked NOT FOR RETAIL COUNTER USE, LOWER DISPLAY NOT FOR TRADE USE and, if a level indicator is required, INSTRUMENT MUST BE LEVEL WHEN IN USE.

2.1 Description of Variant 1

Various models and capacities as listed in Table 1.

Some models of the instrument are permanently fixed and do not require a level indicator (see Table 1).

TABLE 1

Model	EB60	EC240	EE1500	EGS3000
Maximum capacity (kg) - High range	60	240	1500	3000
Medium range	30	150	600	1500
Low range	15	60	300	600
Minimum capacity (kg)	0.1	0.4	2	4
Verification scale interval (kg)				
- High range	0.02	0.10	0.5	1
- Medium range	0.01	0.05	0.2	0.5
- Low range	0.005	0.02	0.1	0.2
Level indicator required?	Yes	Yes	No	No

Approved Basework Models and Capacities

TEST PROCEDURE No 6/9C/92

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

Test loads are to be applied to the instrument in not less than 5 approximately equal steps increasing 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 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 or show non-numerical characters.

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.

A tare should not be able to be acquired above the marked tare capacity.



# CANCELLED

6/9C/92  
28/7/86

## NATIONAL STANDARDS COMMISSION

### NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/9C/92

CHANGE No 1

The following changes are made to the approval documentation for the  
Sauter Model EB60 Weighing Instrument

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

1. In Technical Schedule No 6/9C/92 dated 8/10/85,
  - (a) Table 1 is replaced by the attached Table 1 which lists additional models and capacities. (Note: The Filing Advice in the Certificate should be amended to include "Table 1 dated 28/7/86").
  - (b) Clause 1.6 Tare should be amended by adding:  
"The operation of the taring devices shall be mutually exclusive".
2. In Test Procedure No 6/9C/92 dated 8/10/85, amend 3. Load Test to read:  
"Test loads are to be applied 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 points of the ranges".

Signed

Executive Director

TABLE 1

Model	EB60	EC240	ECC600	ED600	EE1500	ED1500	EE3000	EGS3000	EGS6000
Maximum capacity (kg) - High range	60	240	600	600	1500	1500	3000	3000	6000
Medium range	30	150	300	300	600	600	1500	1500	3000
Low range	15	60	150	150	300	300	600	600	1500
Minimum capacity (kg)	0.1	0.4	1	1	2	2	4	4	10
Verification scale interval (kg)									
- High range	0.02	0.10	0.2	0.2	0.5	0.5	1.0	1	2.0
Medium range	0.01	0.05	0.1	0.1	0.2	0.2	0.5	0.5	1.0
Low range	0.005	0.02	0.05	0.05	0.1	0.1	0.2	0.2	0.5
Level indicator required?	Yes	Yes	Yes	No	No	No	No	No	No

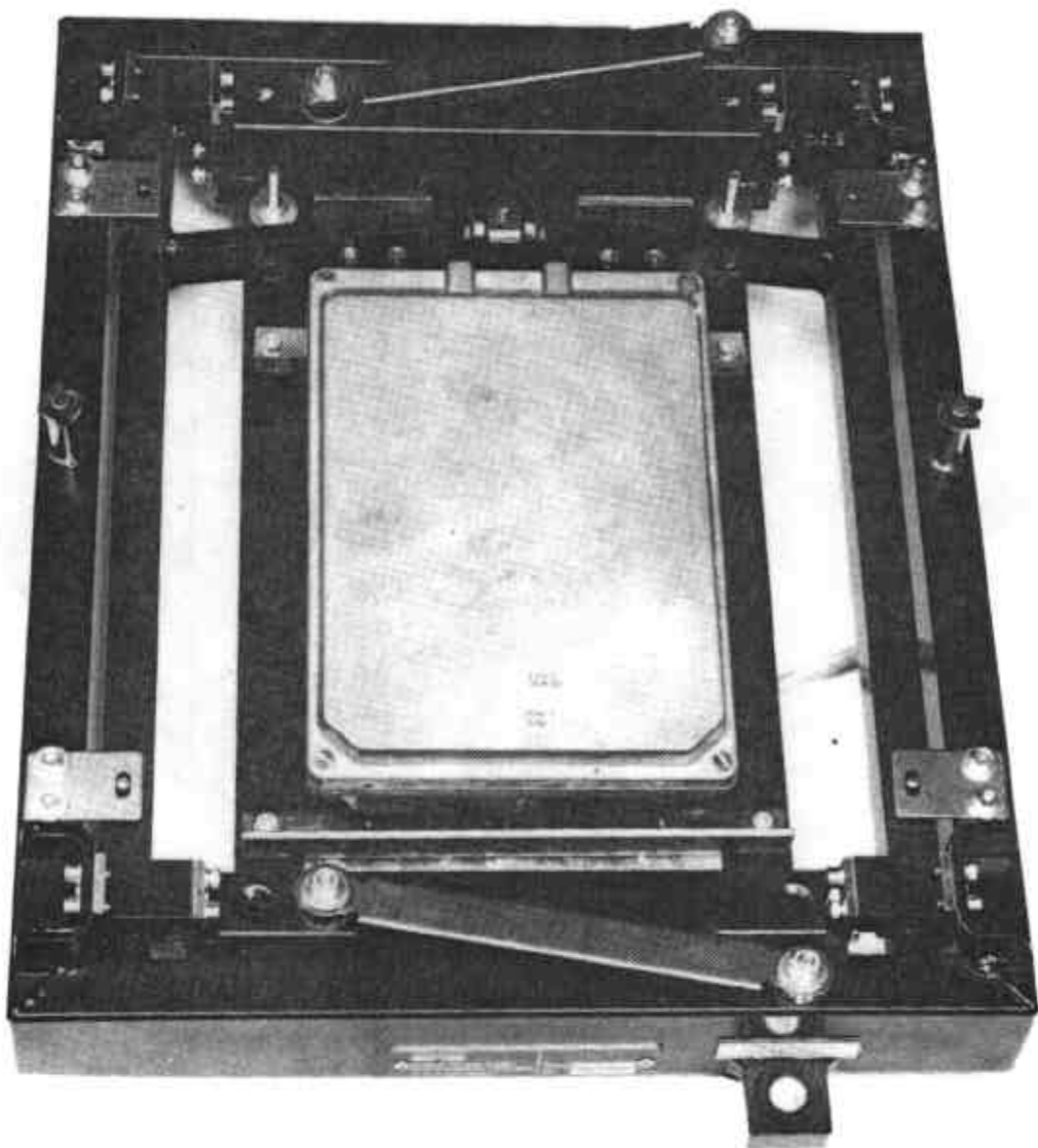
Note:

ECC platforms are 800 mm x 1000 mm;  
 ED platforms are 1000 mm x 1250 mm;  
 EE platforms are 1250 mm x 1500 mm; and  
 EGS platforms are 1500 mm x 2000 mm.

Approved Basework Models and Capacities

6/9C/92  
8/10/85

FIGURE 6/9C/92 - 1



Sauter EB60 Basework

FIGURE 6/9C/92 - 2



Sauter ED2100 Indicator