

# NATIONAL STANDARDS COMMISSION

# WEIGHTS & MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

## **REGULATION 9**



# CERTIFICATE OF APPROVAL No 6/1/1

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

Griffin and George Minor Beam Balance

submitted by N.G. Brown & Associates Pty Ltd, 7 Albert Street, Richmond, Victoria, 3121

are suitable for use for trade.

The approval of the pattern is subject to review on or after 1/8/86.

All instruments purporting to comply with this approval shall be marked NSC No 6/1/1.

Relevant drawings and specifications are lodged with the Commission.

Signed

Executive Director

#### Descriptive Advice

Pattern: approved 19/10/81

A non-self-indicating beam balance of 200 g capacity by 0.01 g scale intervals.

Variant: approved 19/10/81

With 1000 CM capacity by 0.05 CM scale intervals.

Technical Schedule No 6/1/1 dated 16/11/81 describes the pattern and variant 1.



# NATIONAL STANDARDS COMMISSION

## TECHNICAL SCHEDULE No 6/1/1

Pattern:

Griffin and George Minor Beam Balance

Submittor:

N.G. Brown and Associates Pty Ltd,

7 Albert Street,

Richmond, Victoria, 3121

### Description of Pattern

#### <u>1.1</u>

The pattern is an ungraduated, non-self-indicating equal-arm beam weighing instrument of 200 g capacity with an assigned verification scale interval of 0.01 g (Figure 1). The load receptors and hangers are not interchangeable and are marked left and right.

#### 1.2 Levelling

The instrument is provided with a level indicator and three levelling feet, two of which are adjustable. Adjacent to the level indicator is a notice advising that the instrument must be level when in use.

#### 1.3 Marking

The nameplate is marked with the following data:

Manufacturer's name
NSC approval number
Accuracy class in the form:
Maximum capacity in the form:
Minimum capacity in the form:
Verification scale interval in
the form:

NSC No 6/1/1 II Max 200 g Min 0,5 g

e = 0.01 g

The instrument is also marked NOT FOR RETAIL COUNTER USE.

#### Description of Variant

#### 2.1 Variant 1

With maximum capacity of 1000 CM, and an assigned verification scale interval of 0.05 CM. The balance is unchanged except for the markings below.

#### 2.1.1 Markings

As for the pattern, with the following exceptions:

Maximum Capacity Minimum Capacity Verification Scale Interval Max = 1000 CM Min = 2.5 CM e = 0.05 CM

# TEST PROCEDURE No 6/1/1

## 1. Accuracy Requirements

The maximum permissible errors are:

±0.5e for loads between 0 and 5000e ±1e for loads between 5001e and 20 000e

#### 2. Sensitivity

A mass equal to the absolute value of the maximum permissible error at the load considered, placed on the instrument at equilibrium, loaded or unloaded, should cause a permanent displacement of the index of at least 1 mm. This test should be done in conjunction with 4. below for at least zero and full load.

## Level Sensitivity

When the instrument is tilted so that the end of the plum bob moves 2 mm, the tilt should not be more than 1 in 500, and when zero is reset in the tilted position the instrument should satisfy the above accuracy requirements.

#### 4. Load Test

Test loads are to be applied to the instrument in not less than 5 approximately equal steps with the first equal to the minimum capacity, increasing to maximum capacity, followed by decreasing loads of not less than 5 approximately equal steps.



Griffin and George Minor Beam Balance