



6/9C/205  
24/8/87

NATIONAL STANDARDS COMMISSION  
NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/9C/205

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

Yamato Model DP-6000 Platform Weighing Instrument

submitted by Yamato Scale (Australia) Pty Ltd  
16 Gertrude Street  
Arncliffe NSW 2203.

Conditions of Approval

This approval is subject to review on or after 1/5/92.  
This approval expires in respect of new instruments on 1/5/93.

Instruments purporting to comply with this approval shall be marked NSC No 6/9C/205.

This approval may be withdrawn if instruments are constructed other than as described in the drawings and specifications lodged with the Commission.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificates Nos S1/0 and/or S2/0, as appropriate.

The maximum number of scale intervals applicable to the instrument shall be no greater than the number of verification scale intervals approved for the basework, or the load cell, or the indicator, whichever is the smallest.

The load cells used shall be subject to regular certification by the Commission.

Signed

Executive Director

Descriptive Advice

Pattern: approved 24/4/87

- Yamato model DP-6000 platform weighing instrument of 150 kg capacity with a verification scale interval of 0.05 kg.

Variant: approved 24/4/87

1. Of 60 kg capacity with a verification scale interval of 0.02 kg.

Technical Schedule No 6/9C/205 describes the pattern and variant.

Filing Advice

The documentation for this approval comprises:

Certificate of Approval No 6/9C/205 dated 24/8/87  
Technical Schedule No 6/9C/205 dated 24/8/87  
Test Procedure No 6/9C/205 dated 24/8/87  
Figures 1 and 2 dated 24/8/87



# NATIONAL STANDARDS COMMISSION

## TECHNICAL SCHEDULE No 6/9C/205

Pattern: Yamato Model DP-6000 Platform Weighing Instrument

Submittor: Yamato Scale (Australia) Pty Ltd  
16 Gertrude Street  
Arncliffe NSW 2203

### 1. Description of Pattern

A platform weighing instrument (Figure 1) of 150 kg capacity with a verification scale interval of 0.05 kg and approved for use with a maximum of 3000 verification scale intervals.

#### 1.1 Basework

The model DP-6000 basework uses a Yamato model UH62-250-C3 load cell of 250 kg capacity (Figure 2). The basework is provided with adjustable feet and adjacent to the level indicator is a notice advising that the instrument must be level when in use.

#### 1.2 Indicator

A Yamato model EDI-303 digital indicator, as described in the documentation of NSC approval No S229, is used. The instrument may be fitted with an output socket for the connection of an auxiliary or a peripheral device.

##### 1.2.1 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  $\pm 0.25e$ .

##### 1.2.2 Display Check

A display check is initiated whenever power is applied to the instrument.

##### 1.2.3 Tare

A semi-automatic subtractive taring device of up to maximum capacity may be fitted.

##### 1.2.4 Gross/Net Control

Operation of the Gross/Net control selects the display of either gross or net mass.

1.3 Markings

Instruments are marked with the following data, together in one location:

Manufacturer's name or mark	
Approval number	NSC No 6/9C/205
Serial number	
Accuracy class	(III)
Maximum capacity	Max ..... kg *
Minimum capacity	Min ..... kg *
Verification scale interval	e = d = .... kg *
Maximum subtractive tare	T = - ..... kg
Load cell approval number	)
Headwork approval number	) where
Basework approval number	) appropriate

In addition, instruments shall be marked NOT FOR RETAIL COUNTER USE and INSTRUMENT MUST BE LEVEL WHEN IN USE (or similar wording).

\* These markings are repeated adjacent to each reading face, if not already in that vicinity.

1.4 Verification Mark

Provision is made for a verification mark to be applied.

2. Description of Variant 1

Of 60 kg capacity with a verification scale interval of 0.02 kg, using a Yamato model UH61-100-C3 load cell of 100 kg capacity.



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## TEST PROCEDURE No 6/9C/205

All load applications 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

Check by means of Document 104, that when the zero light is lit, zero is set to within  $\pm 0.25e$ .

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. The device shall be capable of both negative and positive adjustments of at least one-quarter of the zero adjustment range. With zero balance indicated apply a load of, say, 3.5% of maximum capacity and press the zero button; the instrument should not rezero.

### 3. Range of Indication

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.

Below zero the indication should blank, show non-numerical characters, or show a mass preceded by a minus sign.

### 4. Load Test

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.

### 5. Tare Test

The semi-automatic taring device (where fitted) shall be able to reset the mass indicator to zero within  $\pm 0.25e$  at any load within its capacity; this may be checked as described for Zero Test.

A tare shall not be able to be acquired above the maximum tare range marked on the instrument.

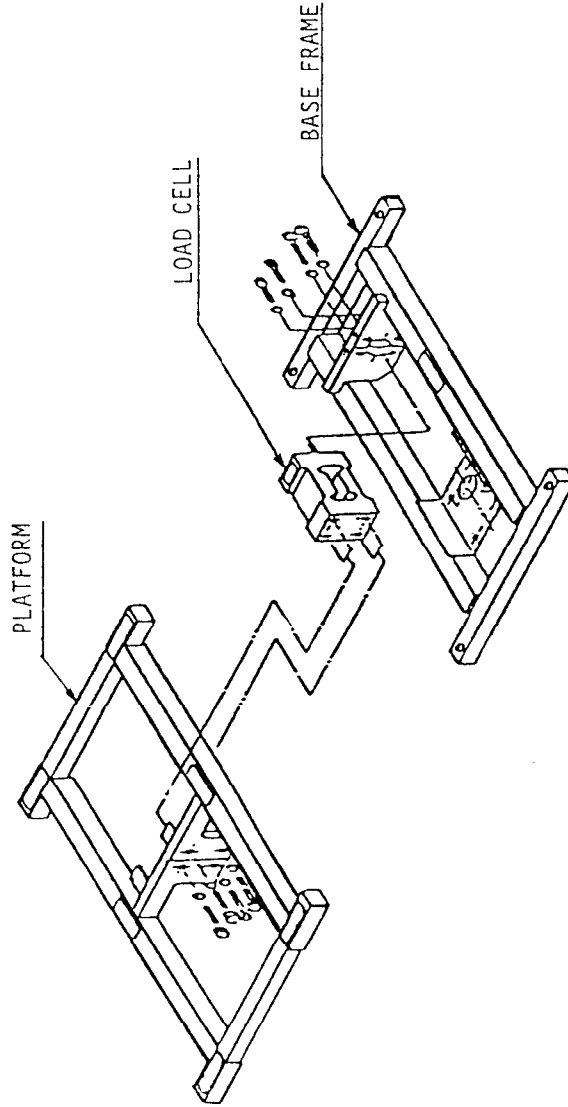
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FIGURE 6/9C/205 - 1



Yamato Model DP-6000

FIGURE 6/9C/205 - 2



Schematic Showing Load Cell Mounting