

Australian Government

National Measurement Institute Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

No 6/4D/367

Issued by the Chief Metrologist under Regulation 60 of the National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the instruments herein described.

Ohaus Model Aviator A71P15TN Weighing Instrument

submitted by	Ohaus Corporation		
-	Unit 3, 220 Turne		
	Port Melbourne	VIC	3207

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

This approval has been granted with reference to document NMI R 76, *Non-automatic weighing instruments, Parts 1 and 2*, dated July 2004.

This approval becomes subject to review on 1/05/18, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 to 3 approved – interim certificate issued	8/04/13
1	Pattern & variants 1 to 3 approved – certificate issued	14/06/13

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/4D/367' and only by persons authorised by the submittor.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with document NMI P 106.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0B.

Signed by a person authorised by the Chief Metrologist to exercise their powers under Regulation 60 of the *National Measurement Regulations 1999*.

Dr A Rawlinson

TECHNICAL SCHEDULE No 6/4D/367

1. Description of Pattern

approved on 8/04/13

An Ohaus model Aviator A71P15TN class ID single interval self-indicating pricecomputing non-automatic weighing instrument (Table 1 and Figure 1) of 15 kg maximum capacity with a verification scale interval of 0.005 kg.

The instrument has an operator keyboard and display integrated into the instrument body, and a column-mounted customer display. Both displays are used for the presentation of weight, unit price and price information, zero and net indications.

Instruments display unit price to \$9999.99/kg, total price to \$99999.99, and have a product look up (PLU) facility.

Power for the model A71P15TN instrument may be supplied by:

- an AC/DC mains adaptor; or
- 6 × 1.2 V D size NiMH batteries.
- Note: The AC/DC mains adaptor supplied for the instrument was a PHIHONG Switching Power Supply model PSM11R-120 AC/DC mains adaptor (12 V DC, 0.84 A) – the submittor should be consulted regarding the acceptability of alternative power supply units.

Instruments may be fitted with output sockets (output interfacing capability) for the connection of auxiliary and/or peripheral devices.

Instruments may have either a flat plate (Figure 1a) or a deep plate (Figure 1b) or a plate and scoop (Figure 1c) load receptor.

1.1 Zero

A zero-tracking device may be fitted.

The initial zero-setting device of the pattern has a nominal range of not more than 20% of the maximum capacity of the instrument.

The instrument has a semi-automatic zero-setting device with a nominal range of not more than 4% of the maximum capacity of the instrument.

1.2 Tare

A semi-automatic and/or non-automatic keyboard-entered pre-set subtractive tare device, each of up to 9.995 kg, may be fitted.

A separate display of tare values is provided.

1.3 Display Check

A display check is initiated whenever power is applied.

1.4 Levelling

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

1.5 Interfaces

Instruments may be fitted with interfaces for the connection of auxiliary and/or peripheral devices. Any interfaces shall comply with clause 5.3.6 of document NMI R76 (the basic intent of which is that it shall not be possible to alter weighing results via the interfaces).

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Instruments may be fitted with an RS232 serial data interface and/or USB communication.

1.6 Software

The legally relevant component of the software, designated as number 72235999 (only the last seven digits of the software number are displayed) and non-legally relevant software is displayed as shown in Figure 2.

The software version and number can be seen in the switch-on display sequence (when the power is first applied to the instrument).

1.7 Verification Provision

Provision is made for the application of a verification mark.

1.8 Sealing Provision

Provision is made for access to the calibration switch to be sealed by means of a destructible label placed over the securing screw on the cover plate underneath the load receptor as shown in Figure 3.

1.9 Descriptive Markings and Notices

Instruments are marked with the following data, together in one location, in the form shown at right:

Manufacturer's mark, or name written in full Indication of accuracy class	Ohaus Corporation
Pattern approval number for the instrument	NMI 6/4D/367
Maximum capacity	<i>Max</i> g or kg #
Minimum capacity	<i>Min</i> g or kg #
Verification scale interval	e = g or kg #
Maximum subtractive tare	<i>T</i> = g or kg
Serial number of the instrument	

These markings are also shown near the display of the result if they are not already located there.

2. Description of Variant 1

Certain other models/capacities of the Ohaus model Aviator 7000 instruments as listed in Table 1 below.

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3. Description of Variant 2

The pattern and variant 1 with the customer display mounted within the main instrument housing rather than on a column (Table 1 and Figure 4). May also be known as 'Compact' models.

4. Description of Variant 3

The Ohaus model A51P15L which is similar to the pattern and variant 2 but without the pre-set tare device (Figure 5).

The instrument operates from an AC/DC mains adaptor and/or an internal rechargeable 6V battery.

The legally relevant component of the software is designated as number 72235999 (only the last seven digits of the software number are displayed)

TABLE 1

Approved models of the Aviator A71 series (the pattern is shown in **bold**).

Model	Maximum Capacity (<i>Max</i>)	Minimum Capacity (<i>Min</i>)	Verification Scale Interval <i>(e)</i>	Maximum Subtractive Tare Capacity (T =)
A71P3N	3 kg	20 g	0.001 kg	3.000 kg
A71P6N	6 kg	40 g	0.002 kg	6.000 kg
A71P15N	15 kg	100 g	0.005 kg	9.995 kg
A71P30N	30 kg	200 g	0.01 kg	9.99 kg

TEST PROCEDURE No 6/4D/367

Instruments shall be tested in accordance with any relevant tests specified in the National Instrument Test Procedures.

The instrument shall not be adjusted to anything other than as close as practical to zero error, even when these values are within the maximum permissible errors.

Maximum Permissible Errors

The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

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FIGURE 6/4D/367 - 1



(a) With flat plate load receptor



(a) Deep plate load receptor



(a) Flat plate and scoop load receptor

Ohaus Model Aviator A71P15TN Weighing Instrument – The Pattern



FIGURE 6/4D/367 - 2

Display of Legally Relevant Software Version Number (bottom line)

FIGURE 6/4D/367 - 3



Showing Sealing Provision

FIGURE 6/4D/367-4



Ohaus Aviator 7000 Series Compact Version - Variant 2

FIGURE 6/4D/367 - 5



Ohaus Model Aviator A51P15L Weighing Instrument – Variant 3

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