



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Cancellation
Certificate of Approval
No LM 6/9C/266

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

This is to certify that the approval for use as a legal measuring instrument
granted in respect of the

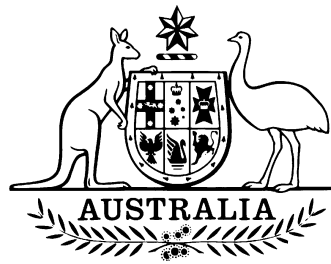
PAT Model SAW 10 A /II Weighing Instrument

submitted by Electronic Load Weighing Co of Australia Pty Ltd
 93 Cecil Avenue
 Castle Hill NSW 2154

has been cancelled in respect of new instruments as from 1 December 2012.

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

A handwritten signature in black ink, appearing to be 'M. J. ...', written over a horizontal line.



National Standards Commission

12 Lyonpark Road, North Ryde NSW

Certificate of Approval

No LM 6/9C/266

Issued under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use as a legal measuring instrument has been granted in respect of the

PAT Model SAW 10 A /II Weighing Instrument

submitted by Electronic Load Weighing Co of Australia Pty Ltd
93 Cecil Avenue
Castle Hill NSW 2154.

This Certificate does NOT grant approval for use for trade.

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.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 December 2005, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No LM 6/9C/266 and only by persons authorised by the submitter.

It is the submitter's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the Commission 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 the Commission's Document NSC P106.

The Commission reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

Special:

This Certificate relates to the suitability of the instrument as a class 4 non-automatic weighing instrument. Instruments complying with this approval and verified as complying with the requirements for a class 4 non-automatic weighing instrument may be used for determining the wheel loads of a vehicle for enforcement of legal limits for roads.

This approval shall NOT be used in conjunction with General Certificate of Approval No 6B/0.

Multiple instruments may be used with their indications being summed to provide the mass of an individual axle, an axle group or a total vehicle. When multiple instruments are used, caution should be exercised as the uncertainty of the values obtained by the summation of readings could exceed the maximum permissible errors for class 4 weighing instruments. Use of a single instrument is not permitted for any of these mass determinations.

DESCRIPTIVE ADVICE

Pattern: approved 24 November 2000

- A PAT model SAW 10 A /II self-indicating class 4 platform weighing instrument of 10 000 kg maximum capacity.

Technical Schedule No LM 6/9C/266 describes the pattern.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No LM 6/9C/266 dated 29 January 2001
Technical Schedule No LM 6/9C/266 dated 29 January 2001 (incl. Test Procedure)
Figures 1 and 2 dated 29 January 2001

Signed by a person authorised under Regulation 60 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.



TECHNICAL SCHEDULE No LM 6/9C/266

Pattern: PAT Model SAW 10 A /II Weighing Instrument.
Submittor: Electronic Load Weighing Co of Australia Pty Ltd
93 Cecil Avenue
Castle Hill NSW 2154.

1. Description of Pattern

A PAT model SAW 10 A /II self-indicating class 4 platform weighing instrument (Figure 1) of 10 000 kg maximum capacity with a verification scale interval of 20 kg. The instrument is approved for a maximum of 500 scale intervals.

1.1 Platform

The instrument is constructed of aluminium alloy and utilises strain gauge technology.

1.2 Indicator

The instrument has an integral electronic digital indicator.

1.3 Zero

Zero is automatically corrected to within $\pm 0.25e$ whenever power is applied and whenever the instrument comes to rest within $0.5e$ of zero.


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

1.4 Display Check

A display check is initiated whenever power is applied.

1.5 Markings

Instruments carry the following markings:

Manufacturer's mark, or name written in full	PAT GmbH
Name or mark of manufacturer's agent
Indication of accuracy class	
Pattern approval mark for the instrument	NSC No LM 6/9C/266
Model number	SAW 10 A /II
Maximum capacity	Max kg *
Minimum capacity	Min kg *
Verification scale interval	e = kg *
Serial number of the instrument

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

1.6 Sealing Provision

Provision is made for the calibration adjustments to be sealed by means of a destructive adhesive label over the calibration button cover, and by sealing the electronics access cover by either lead and wire or a destructive adhesive label (Figure 2).

1.7 Verification/Certification Provision

Provision is made for the application of a verification/certification mark.

TEST PROCEDURE

Instruments should be tested in conjunction with any relevant tests specified in the Uniform Test Procedures.

Maximum Permissible Errors at Verification/Certification

The maximum permissible errors for increasing and decreasing loads on initial verification/certification for loads, m , expressed in verification scale intervals, e , are:

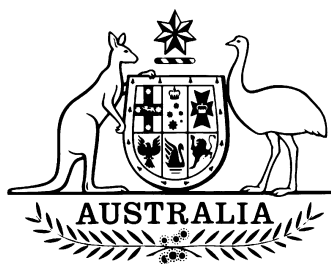
$\pm 0.5 e$ for loads $0 \leq m \leq 500$; and
 $\pm 1.0 e$ for loads $500 < m \leq 2\,000$.

- (a) Apply a test load of not less than half the capacity of the instrument to the load receptor at least three times to exercise the instrument.
- (b) Zero the instrument.
- (c) Apply an appropriate zero test using test loads of $0.25 e$ and $0.75 e$.
- (d) Apply an appropriate discrimination test.
- (e) Apply a repeatability test.
- (f) Where practical, apply an eccentricity test.
- (g) With the zero indication correct, apply test loads to the centre of the load receptor in not less than five approximately-equal steps increasing to the maximum capacity.

Ensure that the indications are within the maximum permissible error for the load applied.

Each test load is to be applied at least twice and, where test masses are used and the test load consists of more than one test mass, the test load is to be applied as one mass.

Ensure that after the load test, the zero indication is within $\pm 0.25 e$.



National Standards Commission

12 Lyonpark Road, North Ryde NSW

Notification of Change

Certificate of Approval No LM 6/9C/266

Change No 1

The following change is made to the approval documentation for the

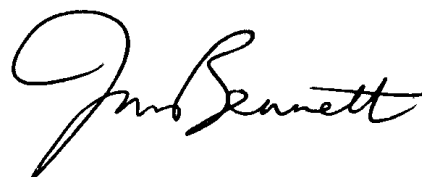
PAT Model SAW 10 A /II Weighing Instrument

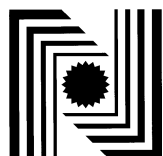
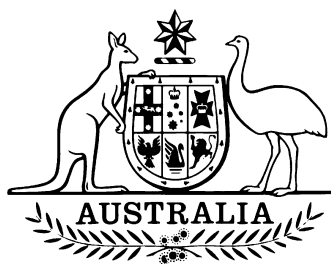
submitted by Electronic Load Weighing Co of Australia Pty Ltd
93 Cecil Avenue
Castle Hill NSW 2154.

In Technical Schedule No LM 6/9C/266 dated 29 January 2001, clause **1. Description of Pattern** should be amended by changing the reference to the verification scale interval to read:

“... of 20 **or 50** kg.”

Signed by a person authorised under Regulation 60 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.





National Standards Commission

12 Lyonpark Road, North Ryde NSW

Notification of Change

Certificate of Approval No LM 6/9C/266

Change No 2

The following change is made to the approval documentation for the

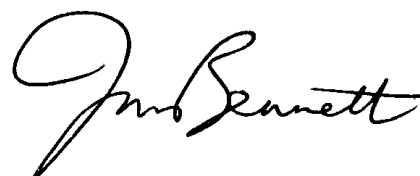
PAT Model SAW 10 A /II Weighing Instrument

submitted by Electronic Load Weighing Co of Australia Pty Ltd
93 Cecil Avenue
Castle Hill NSW 2154.

In Technical Schedule No LM 6/9C/266 dated 29 January 2001, the maximum permissible errors on initial verification/certification stated in the Test Procedure should be amended to read:

“ $\pm 0.5 e$ for loads $0 \leq m \leq 50$; and
 $\pm 1.0 e$ for loads $50 < m \leq 200$; and
 $\pm 1.5 e$ for loads $200 < m \leq 1\,000$.”

Signed by a person authorised under Regulation 60 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.





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Notification of Change
Certificate of Approval No LM 6/9C/266
Change No 3

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

The following change is made to the approval documentation for the

PAT Model SAW 10 A /II Weighing Instrument

submitted by Electronic Load Weighing Co of Australia Pty Ltd
93 Cecil Avenue
Castle Hill NSW 2154.

In Certificate of Approval No LM 6/9C/266 dated 29 January 2001, the Condition of Approval referring to the review of the approval should be amended to read:

“This approval becomes subject to review on 1 December 2011, and then every 5 years thereafter.”

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

A handwritten signature in black ink, appearing to be 'J. G. T.', is written over the signature line.

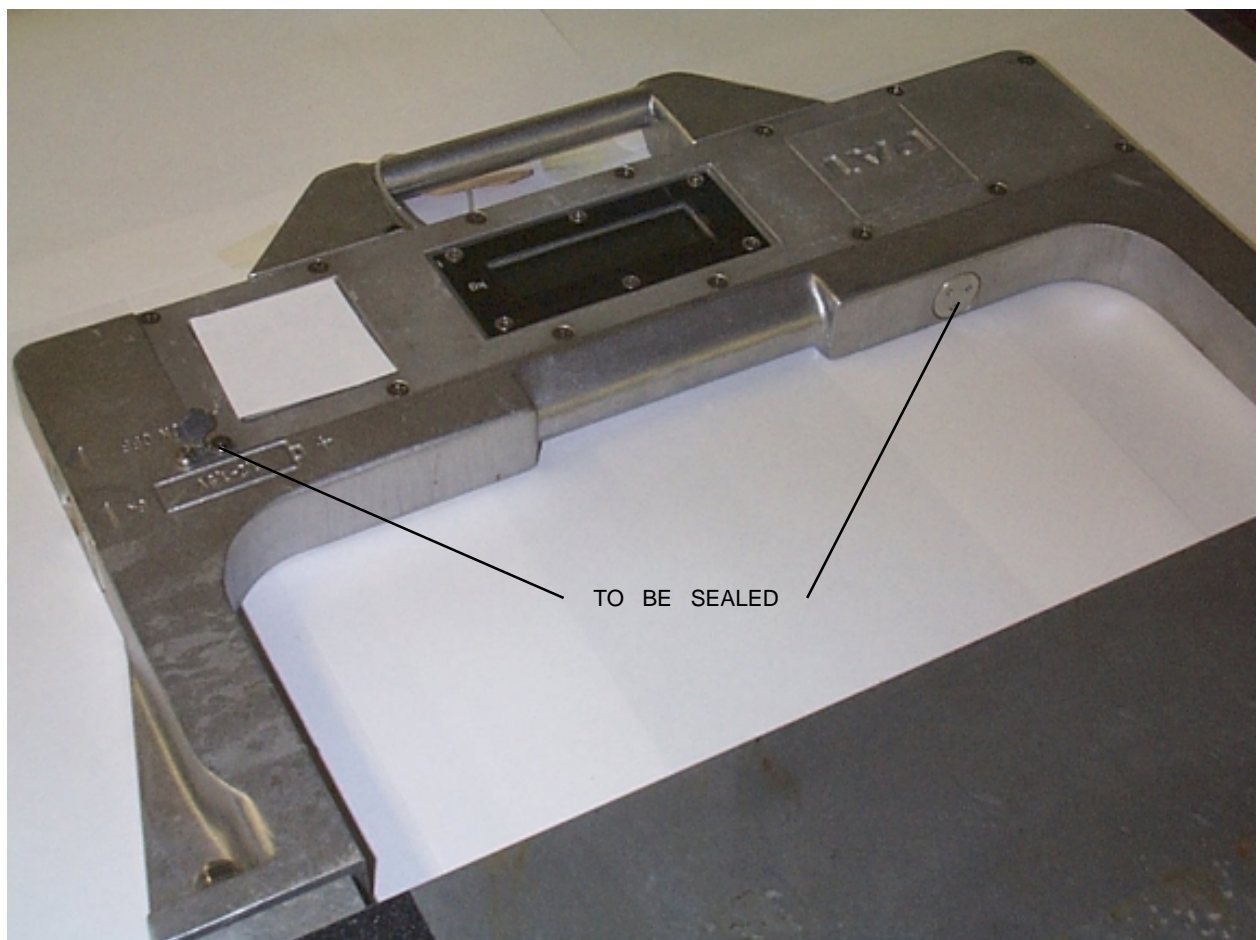
FIGURE LM 6/9C/266 - 1



PAT Model SAW 10 A /II Weighing Instrument

LM 6/9C/266
29 January 2001

FIGURE LM 6/9C/266 - 2



Showing Sealing