



**Australian Government**  

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**National Measurement  
Institute**

12 Lyonpark Road, North Ryde NSW 2113

**Cancellation  
Certificate of  
Approval No 6/9C/262**

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

This is to certify that the approval for use for trade granted in respect of the

ALU-CUT Model T-Bar 2,000 Weighing Instrument

submitted by Comalco Aluminium (Bell Bay) Limited  
Bell Bay Road  
Bell Bay TAS 7253

has been cancelled in respect of new instruments as from 1 July 2005.

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 a faint, circular official stamp.



# National Standards Commission

## Certificate of Approval

**No 6/9C/262**

Issued under Regulation 63  
of the  
National Measurement Regulations 1999

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

ALU-CUT Model T-Bar 2,000 Weighing Instrument

submitted by Comalco Aluminium (Bell Bay) Limited  
Bell Bay Road  
Bell Bay TAS 7253.

**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 September 2004, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 6/9C/262 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 106.

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

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

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

The values of the performance criteria (maximum number of scale intervals etc.) applicable to the instrument shall be within the limits specified herein and in any approval documentation for the components where they are approved separately.

## DESCRIPTIVE ADVICE

**Pattern:** provisionally approved 18 August 1999  
approved 24 November 1999

- An ALU-CUT model T-Bar 2,000 weighing instrument of 2 000 kg maximum capacity.

**Variant:** provisionally approved 18 August 1999  
approved 24 November 1999

1. An ALU-CUT model Spotter 20,000 weighing instrument of 20 000 kg maximum capacity.

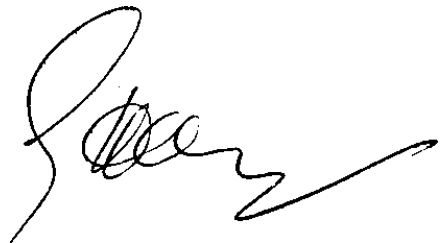
Technical Schedule No 6/9C/262 describes the pattern and variant 1.

### FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/9C/262 dated 3 March 2000  
Technical Schedule No 6/9C/262 dated 3 March 2000 (incl. Test  
Procedure)  
Figures 1 to 6 dated 3 March 2000

Signed and sealed by a person authorised under  
Regulation 63 of the National Measurement  
Regulations 1999 to exercise the powers and  
functions of the Commission under this Regulation.

A handwritten signature in black ink, consisting of a large, stylized 'J' followed by a series of loops and a long, sweeping horizontal stroke.

## TECHNICAL SCHEDULE No 6/9C/262

**Pattern:** ALU-CUT Model T-Bar 2,000 Weighing Instrument.

**Submitter:** Comalco Aluminium (Bell Bay) Limited  
Bell Bay Road  
Bell Bay TAS 7253

### 1. Description of Pattern

An ALU-CUT International model T-Bar 2,000 self-indicating weighing instrument (Figure 1) of 2000 kg maximum capacity and approved for use with a verification scale interval of 2 kg.

#### 1.1 Basework

The model T-Bar 2,000 consists of a frame mounted on a column suspended from overhead tracks (Figure 2). The frame is fitted with lifting tines and is raised or lowered under computer control for the lifting and weighing of aluminium billets. Four load cells are mounted to the frame, directly supporting the lifting tines (Figure 3).

#### 1.2 Load Cells

Four Precision Transducers model LS1000 load cells of 1000 kg capacity are used.

The load cells are also described in the approval documentation of NSC approval No S224A.

#### 1.3 Indicator

A Mettler Toledo model Panther digital indicator is used.

The indicator is also described in the approval documentation of NSC approval No S353.

#### 1.4 Verification/Certification Provision

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

In addition suitable provision must be made for the application of suitable verified masses to the instrument as required for verification and certification purposes.

#### 1.5 Sealing Provision

Provision is made for the calibration adjustments in the indicator to be sealed as described in the approval documentation for the indicator used.

## 1.6 Markings

Instruments are marked with the following:

Manufacturer's mark, or name written in full	ALU-CUT Int.
Indication of accuracy class	Ⓜ
Maximum capacity	<i>Max</i> ..... kg *
Minimum capacity	<i>Min</i> ..... kg *
Verification scale interval	<i>e</i> = ..... kg *
Serial number of the instrument	.....
Pattern approval mark for the instrument	NSC No 6/9C/262
Pattern approval mark for the indicator	NSC No S....
Pattern approval mark for the load cells	NSC No S....

\* These markings shall also be repeated adjacent to each reading face, if they are not already located there.

## 2. Description of Variant 1

An ALU-CUT International model Spotter 20,000 self-indicating weighing instrument (Figures 4 to 6) of 20 000 kg maximum capacity and approved for use with a verification scale interval of 10 kg.

The model Spotter 20,000 basework has the four load cells directly supporting a moveable lifting platform. The basework can be driven along rails mounted on the floor.

Four Avery Berkel model 8708 load cells of 7000 kg capacity are used. The load cells are also described in the approval documentation of NSC approval No S176B.

### TEST PROCEDURE

Instruments should be tested in conjunction with any tests specified in the approval documentation for the indicator used, and in accordance with any relevant tests specified in the Inspector's Handbook.

### 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:

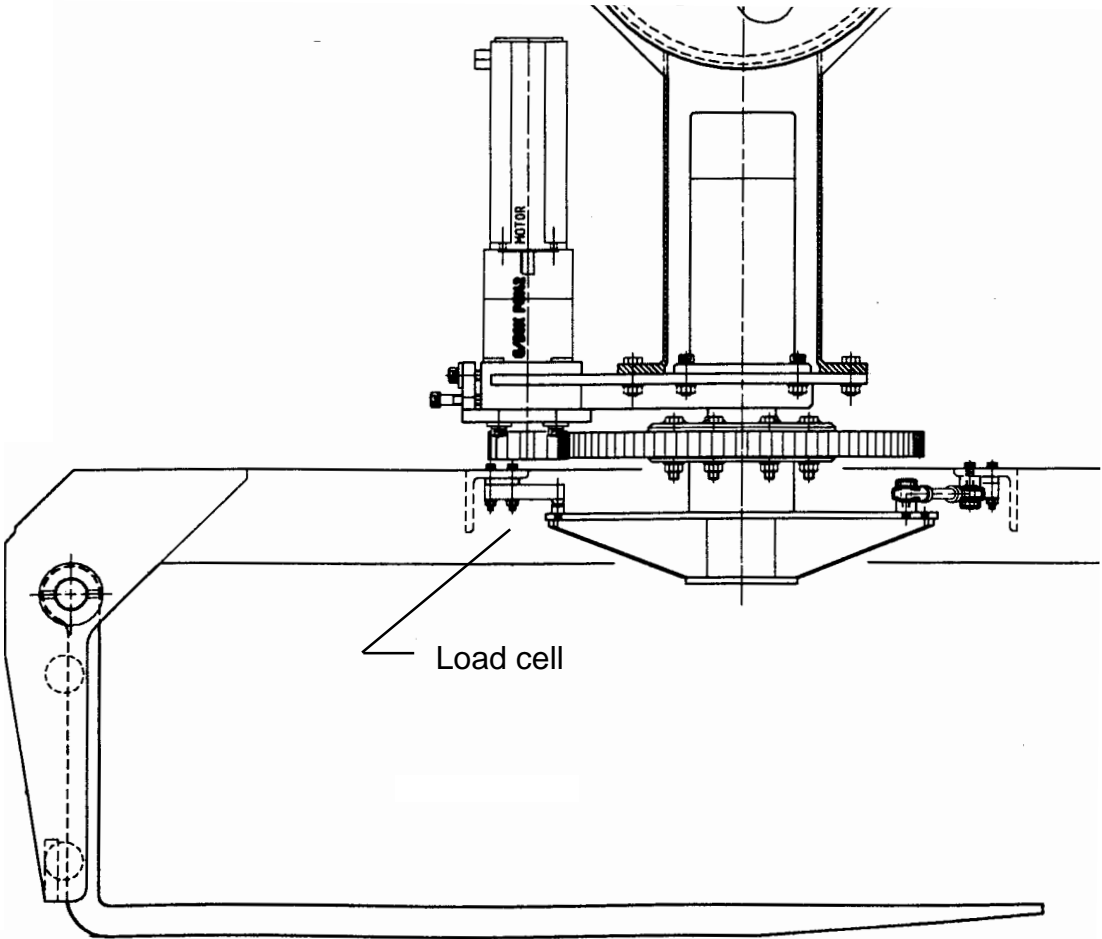
- $\pm 0.5e$  for loads  $0 \leq m \leq 500$ ; and
- $\pm 1.0e$  for loads  $500 < m \leq 2\,000$ .

FIGURE 6/9C/262 - 1



ALU-CUT Model T-Bar 2,000

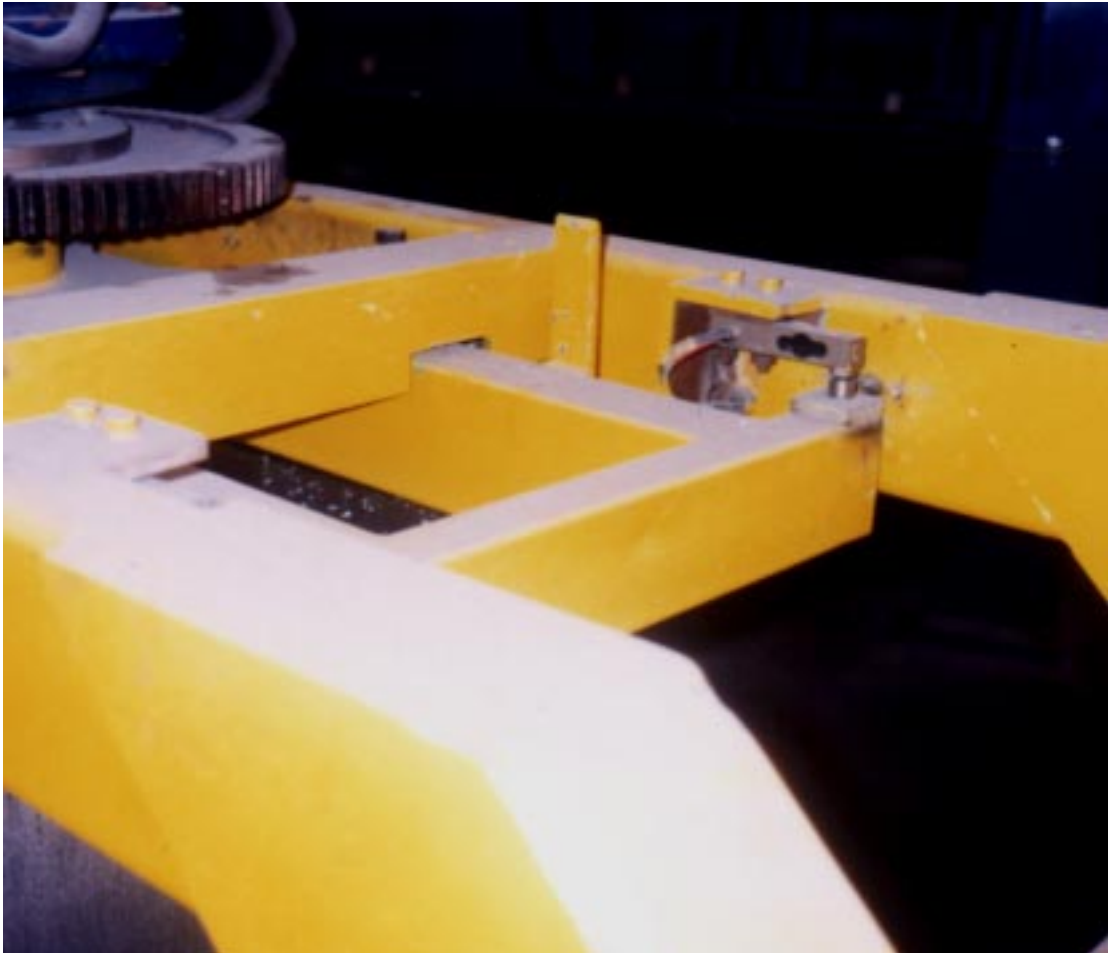
FIGURE 6/9C/262 - 2



ALU-CUT Model T-Bar 2,000

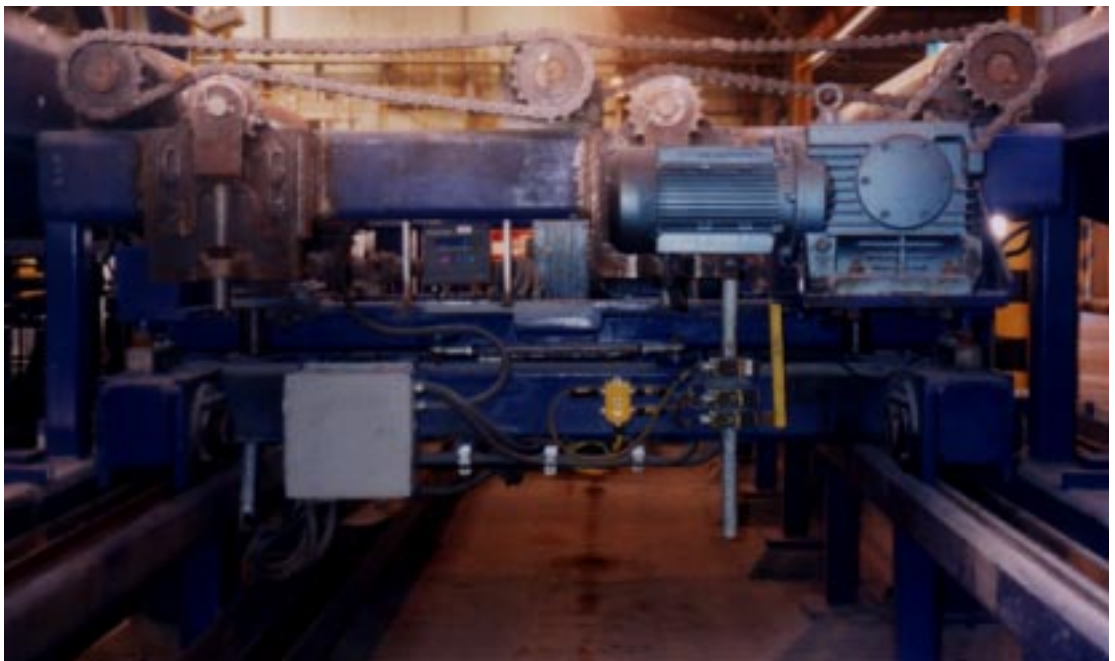


FIGURE 6/9C/262 - 3



ALU-CUT Model T-Bar - Load Cell Mounting

FIGURE 6/9C/262 - 4



ALU-CUT Model Spotter 20,000

FIGURE 6/9C/262 - 5

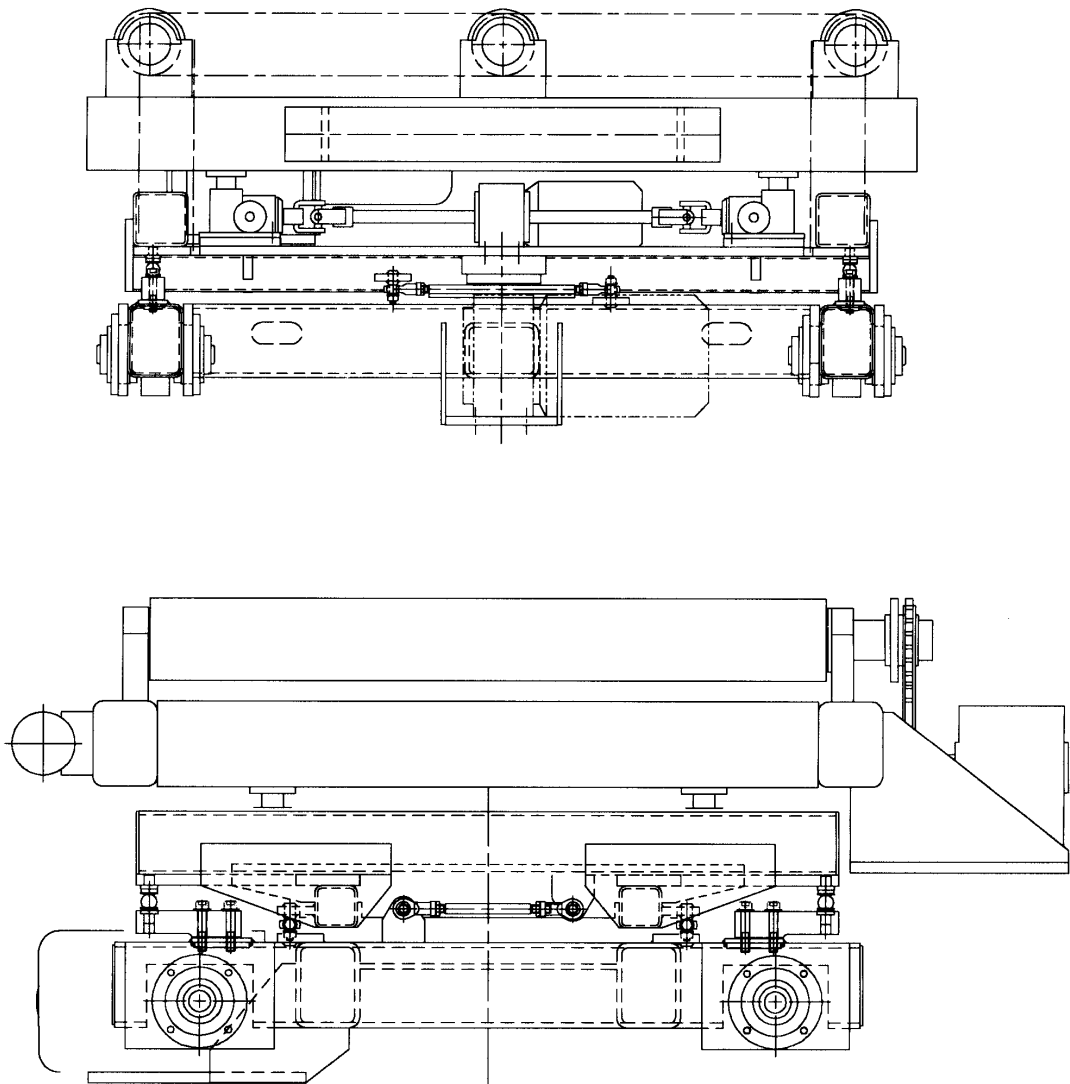


FIGURE 6/9C/262 - 6



ALU-CUT Model Spotter 20,000 - Load Cell Mounting