Australian Government
National Measurement Institute
Bradfield Road, West Lindfield NSW 2070

Notification of Change
Supplementary Certificate of Approval No S446
Change No 1

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

The following changes are made to the approval documentation for the

A & D Model LCM13T001 Load Cell

submitted by A & D Mercury Pty Ltd
(now A & D Australasia Pty Ltd)
32 Dew Street
Thebarton SA 5031.

A. In Supplementary Certificate of Approval No S446 dated 29 September 2006;

1. The Condition of Approval referring to the review of the approval should be amended to read:

   "This approval becomes subject to review on 1 October **2014**, and then every 5 years thereafter."

2. The FILING ADVICE should be amended by adding the following:

   "Notification of Change No 1 dated 1 February 2010"

B. In Supplementary Certificate of Approval No S446 and its Technical Schedule Variation No 1 both dated 29 September 2006, and in Technical Schedule No S446 dated 25 October 2004, the references to the name of the submittor should be amended to read:

   "A & D **Australasia** Pty Ltd"

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

Australian Government
National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Supplementary Certificate of Approval

No S446

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

A & D Model LCM13T001 Load Cell

submitted by A & D Mercury Pty Ltd
13 Dew Street
Thebarton SA 5031.

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 60, *Metrological Regulation for Load Cells*, dated July 2004.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 October 2009, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI S446' and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S446' in addition to the approval number of the instrument.

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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.

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

DESCRIPTIVE ADVICE

Pattern: approved 17 September 2004

- An A & D model LCM13T001 load cell of 1000 kg maximum capacity.

Variant: approved 17 September 2004

1. Certain other models and capacities as listed in Table 1.

Technical Schedule No S446 describes the pattern and variant 1.

Variant: approved 28 September 2006

2. Certain models and capacities of the LCM13K series as listed in Table 2.

Technical Schedule No S446 Variation No 1 describes variant 2.

FILING ADVICE

Supplementary Certificate of Approval No S446 dated 25 October 2004 is superseded by this Certificate, and may be destroyed. The documentation for this approval now comprises:

Supplementary Certificate of Approval No S446 dated 29 September 2006
Technical Schedule No S446 dated 25 October 2004 (incl. Table 1)
Technical Schedule No S446 Variation No 1 dated 29 September 2006
(incl. Notification of Change and Table 2)
Figures 1 and 2 dated 25 October 2004
Figure 3 dated 29 September 2006

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

TECHNICAL SCHEDULE No S446

Pattern: A & D Model LCM13T001 Load Cell

Submittor: A & D Mercury Pty Ltd
13 Dew Street
Thebarton SA 5031

1. Description of Pattern

An A & D model LCM13T001 load cell of 1000 kg maximum capacity (Figure 1 and Table 1) approved for use with up to 3000 verification intervals.

1.1 Method of Mounting

Mounting is to be in accordance with the manufacturer's instructions and as shown in Figure 2.

1.2 Markings

Each load cell is marked with the following:

Manufacturer's mark, or name written in full	A & D Company Limited
Model number	.....
Serial number	.....
Pattern approval mark	NMI S446
Maximum capacity E_{max}	..... kg

1.3 Table of Specifications

Specifications for the pattern are given in Table 1.

2. Description of Variant 1

Certain other models and capacities as listed in Table 1.

TABLE 1

Type: A & D LCM13T Series, in models LCM13T# where # is the value listed below:

Model LCM13T:		001	002	003	005
Maximum capacity, E_{max}	kg	1000	2000	3000	5000
Accuracy class		C	C	C	C
Maximum number of verification intervals		3000	3000	3000	3000
Minimum value of verification interval, v_{min}	kg	0.1	0.2	0.3	0.5
Minimum dead load output return value (DR)	kg	0.1	0.2	0.3	0.5
Output rating (nominal)	mV/V	2	2	2	2
Input impedance (nominal)	ohm	350	350	350	350
Supply voltage (AC or DC)	Max. V	15	15	15	15
Cable length (±0.1 m)	m	3	3	3	3
Number of leads (plus shield)		4	4	4	4

TECHNICAL SCHEDULE No S446

VARIATION No 1

Pattern: A & D Model LCM13T001 Load Cell

Submittor: A & D Mercury Pty Ltd
13 Dew Street
Thebarton SA 5031

1. Description of Variant 2

Certain models and capacities of the LCM13K series as listed in Table 2.

A typical LCM13K series load cell is shown in Figure 3.

NOTIFICATION OF CHANGE

In Table 1 issued as part of Technical Schedule No S446 dated 25 October 2004, the value of the Input Impedance for all models of the LCM13T series should be amended to now read '**380**' ohms.

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TABLE 2

Type: A & D LCM13K Series, in models LCM13K# where # is the value listed below:

Model LCM13K:		100	200	300	500
Maximum capacity, E_{max}	kg	100	200	300	500
Accuracy class		C	C	C	C
Maximum number of verification intervals		3000	3000	3000	3000
Minimum value of verification interval, v_{min}	kg	0.01	0.02	0.03	0.05
Minimum dead load output return value (DR)	kg	0.01	0.02	0.03	0.05
Output rating (nominal)	mV/V	2	2	2	2
Input impedance (nominal)	ohm	380	380	380	380
Supply voltage (AC or DC)	Max. V	15	15	15	15
Cable length (±0.1 m)	m	3	3	3	3
Number of leads (plus shield)		4	4	4	4

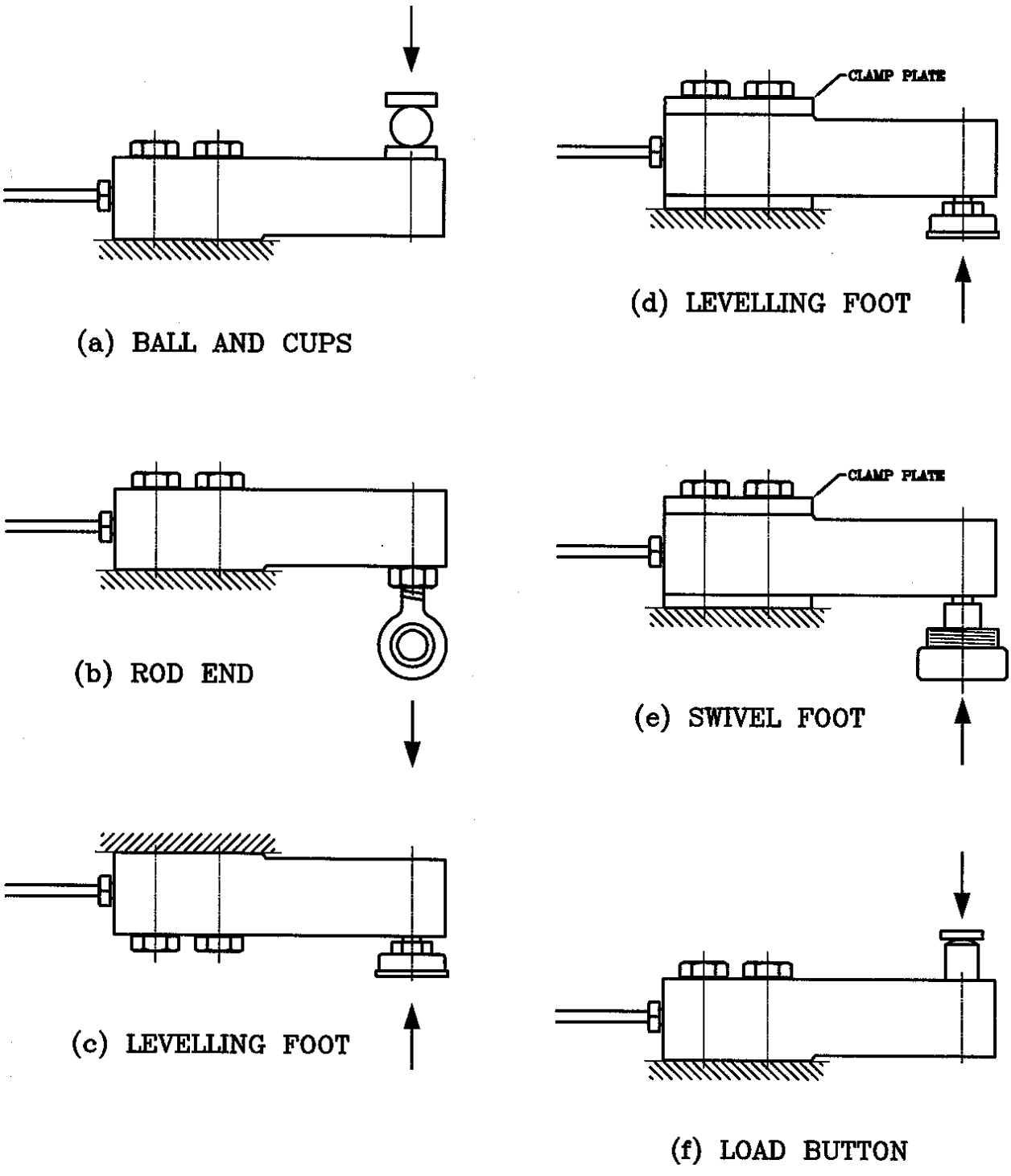
Approved Models and Specifications of The LCM13K Series

S446
25 October 2004

FIGURE S446 – 1

A & D Model LCM13T001 Load Cell

FIGURE S446 – 2



Mounting Methods

FIGURE S446 – 3

Typical A & D LCM13K Series Load Cell