



Australian Government  
Department of Industry,  
Innovation and Science

## National Measurement Institute

# Supplementary Certificate of Approval

## NMI S345

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.

Artech Model 80210-125K Load Cell

submitted by Kanawha Scales & Systems Inc.  
111 Jacobson Drive  
Poca West Virginia 25159  
USA.

**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.

This approval becomes subject to review on **1/06/22**, and then every 5 years thereafter.

### DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern approved – interim certificate issued	25/07/97
1	Pattern approved – certificate issued	8/12/04
2	Pattern reviewed – notification of change issued	8/12/04
3	Variant 1 approved & updated (address) – notification of change issued	23/04/10
4	Pattern and variant 1 <b>reviewed</b> & updated (address) - certificate issued	1/05/17

## CONDITIONS OF APPROVAL

### General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI (or NSC) S345' and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI (or NSC) S345' in addition to the approval number of the instrument, 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.

The values of the performance criteria (maximum number of scale intervals etc.) applicable to an instrument incorporating the pattern approved herein shall be within the limits specified herein and in any approval documentation for the other components.

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 S345

**1. Description of Pattern** **approved on 25/07/97**

An Artech model 80210-125K load cell of 56 700 kg maximum capacity (Figure 1 and Table 1) approved for use with up to 3 000 verification scale 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	
Model number	.....
Maximum capacity, $E_{max}$	..... kg
Serial number	.....
Pattern approval number	NMI (or NSC) No S345

**1.3 Table of Specifications**

Specifications for the pattern are given in Table 1.

TABLE 1

Type:	Artech 80210-125K
Maximum capacity:	56 700 kg
Maximum number of verification scale intervals:	3000
Minimum value of verification scale interval:	2.04 kg
Minimum dead load output return (DR):	6.5 kg
Minimum dead load:	6 000 kg
Output rating (nominal):	3.0 mV/V
Input impedance (nominal):	700 ohm
Supply voltage (AC or DC):	10 to 15 V
Cable length ( $\pm 0.1$ m):	18.3 m
Number of leads (plus shield):	4

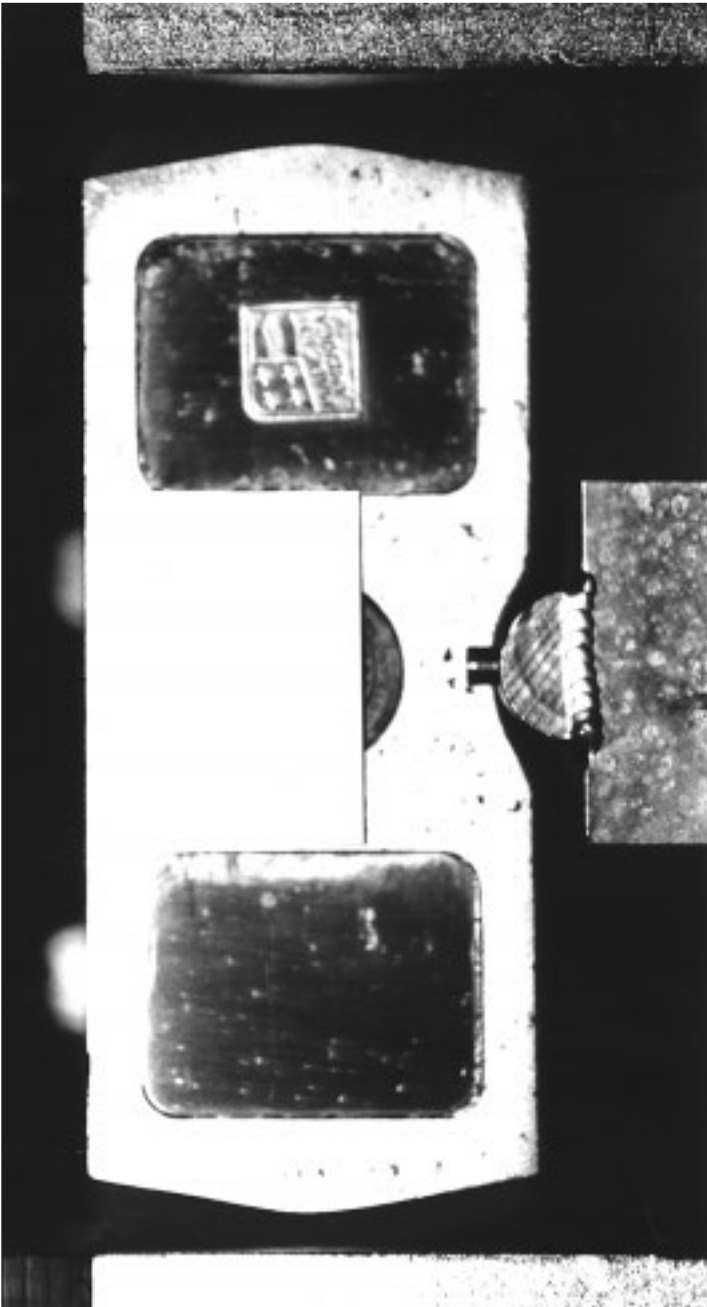
**2. Description of Variant 1** **approved on 23/04/10**

An Artech model 80210-50K load cell of 22 700 kg maximum capacity, approved for use with up to 2500 verification scale intervals and having specifications as indicated in Table 2.

TABLE 2

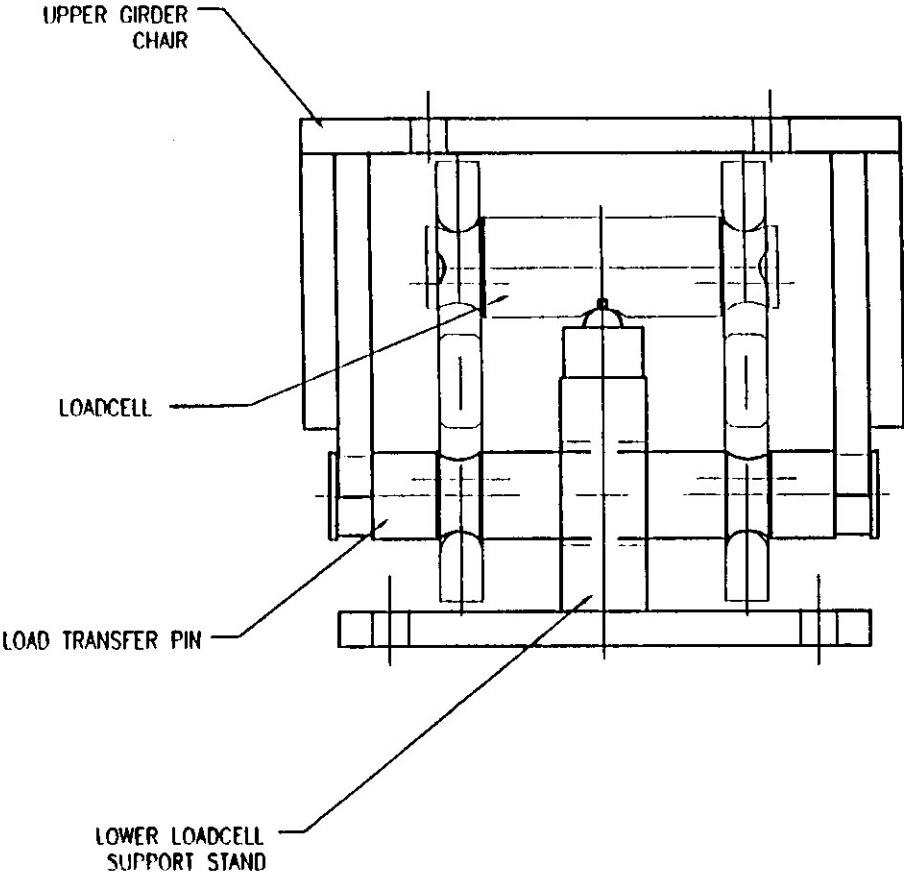
Type:	Artech 80210-50K
Maximum capacity:	22 700 kg
Maximum number of verification scale intervals:	2500
Minimum value of verification scale interval:	0.817 kg
Minimum dead load output return (DR):	2.6 kg
Minimum dead load:	2400 kg
Output rating (nominal):	3.0 mV/V
Input impedance (nominal):	700 ohm
Supply voltage (AC or DC):	10 to 15 V
Cable length ( $\pm 0.1$ m):	18.3 m
Number of leads (plus shield):	4

FIGURE S345 – 1



Artech model 80210-125K load cell

FIGURE S345 – 2



Mounting Arrangement

~ End of Document ~