

CERTIFICATE OF CALIBRATION

ISSUED BY: PROCTER & CHESTER (MEASUREMENTS) LTD
DATE OF RECEIPT: 01/01/2026
DATE OF CALIBRATION: 02/01/2026
DATE OF ISSUE: 03/01/2026
CERTIFICATE NO.: PCM-012345



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Approved Signatory

APPROVED

J. Chester
 M. Dadson

ISSUED TO: {Company Name}
{Address}

DESCRIPTION: Load cell SN. 12345
Display/Amplifier N/A
Asset N/A

CONDITION OF INSTRUMENT	YES / NO
Reported results lie within the stated limits on receipt	Y
The instrument was adjusted	N
The instrument was repaired	N
Reported results lie within the stated limits on despatch	Y

DECISION RULE

The decision rule employed: Non-linearity and UoM combined not to be greater than $\pm 1\%$.

METHOD

The above load cell has been calibrated to PCM working standard WI.06-1 BS 8422:2003, using reference load cell verification equipment calibrated to BS EN ISO 376:2011, WI.21 and WI.24. Procedures contribute to ensure validity of results according to QP.01 Technical Records. Calibration carried out at PCM's location as shown below.

TEST EQUIPMENT USED

Asset No.	Description	Cert. No.	Expiry Date
TE123	100kN Tension & Compression Load Cell	012 345678F	01/01/2028
TE456	ML38 Amplifier	TE012-34-5	01/01/2028

Loading Frame AR431 combined Uncertainty of Measurement (UoM) 0.33%FS.

(In accordance with UKAS publication M3003 – The Expression of Uncertainty and Confidence in Measurement using type B evaluation).

The results contained within this certificate relate only to the items listed above.

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CALIBRATION CERTIFICATE

CERTIFICATE NO.

PCM-012345

UKAS ACCREDITED CALIBRATION LABORATORY No. 10628

LOADING MODE	COMPRESSION	CALIBRATION TYPE	BS 8422:2003 SUPPLEMENTARY B	JOB REF No.	38169
LAB TEMP (°C)	22.2	NON-LINEARITY %FS	-0.485	RESPONSE UNITS	mV/V
TEMP - (°C) START	22.1	HYSTERESIS %FS	-1.227		
TEMP - (°C) END	22.2	UNCERTAINTY OF MEASUREMENT %FS	±0.33%	CALIBRATION DATE	31/08/2022

FORCE APPLIED tf	% OF LOAD	RUN 1		RUN 2		RUN 3		MEAN		STD DEV	HYSTERESIS %FS
		INCREASING	DECREASING	INCREASING	DECREASING	INCREASING	DECREASING	INCREASING	DECREASING		
0.0	0	0.0012	0.0012	0.0012	0.0012	0.0012	0.0011	0.0012	0.0012	0.000	0.001
1.3	20	0.1885	0.1901	0.1886	0.1901	0.1885	0.1901	0.1885	0.1901	0.000	-0.172
2.6	40	0.3663	0.3749	0.3662	0.3749	0.3662	0.3750	0.3663	0.3749	0.000	-0.958
4.0	60	0.5451	0.5562	0.5451	0.5563	0.5450	0.5561	0.5451	0.5562	0.000	-1.227
5.3	80	0.7262	0.7301	0.7260	0.7299	0.7262	0.7299	0.7261	0.7300	0.000	-0.425
6.6	100	0.9081		0.9079		0.9078		0.9079		0.000	0.000
0.0	0	0.0012		0.0012		0.0011		0.0012		0.000	0.000

SPAN RESPONSE (SET A)	POLYNOMIAL RESPONSE (SET B)	Δ RESPONSE (B - A)	NON-LINEARITY % FS
0.0000	0.0000	0.0000	0.000
0.1874	0.1830	-0.0044	-0.485
0.3651	0.3650	-0.0001	-0.009
0.5439	0.5461	0.0022	0.239
0.7249	0.7262	0.0013	0.139
0.9068	0.9054	-0.0014	-0.154

2ND ORDER REGRESSION BEST FIT	$m_1 =$	-2.741E-04
$y = m_1x^2 + m_2x + c$ FORCED THROUGH ZERO	$m_2 =$	1.390E-01
	$c =$	0.000E+00

FORCE AS A FUNCTION OF MEASURED VALUES	$m_1 =$	1.0626E-01
$F = m_1x^2 + m_2x + c$ (POLYNOMIAL CALIBRATION COEFFICIENTS)	$m_2 =$	7.1934E+00
	$c =$	0.0000E+00

REFERENCE INSTRUMENTATION CALIBRATED IN kN - CONVERSION FACTOR USED

0.1019716

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor $k = 2$, providing a coverage probability of around 95%.

The uncertainty evaluation has been carried out in accordance with UKAS requirements.

Non-linearity calculated in accordance with BS 8422:2003 ANNEX A - Response in terms of force

AUTHORISED BY:

APPROVED



THIS CERTIFICATE MAY NOT BE REPRODUCED OTHER THAN IN FULL, EXCEPT WITH THE PRIOR WRITTEN APPROVAL OF THE ISSUING LABORATORY.

QF.03-1 ISS.4