


# Schedule of Accreditation

issued by

## United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

 <b>0790</b> <b>Accredited to ISO/IEC 17025:2017</b>	<b>Phoenix Materials Testing Ltd</b> <b>Issue No: 023 Issue date: 23 August 2021</b>	
	<b>Unit E2</b> The Wallows Industrial Estate Fens Pool Avenue Brierley Hill West Midlands DY5 1QA	<b>Contact: Stuart Smith</b> Tel: +44 (0)1384 480 545 E-Mail: <a href="mailto:info@phoenix-mt.co.uk">info@phoenix-mt.co.uk</a> Website: <a href="http://www.phoenix-mt.co.uk">www.phoenix-mt.co.uk</a>

**Calibration performed by the Organisation at the locations specified below**

### Locations covered by the organisation and their relevant activities

#### Site activities performed away from the locations listed above:

Location details	Activity	Location code
Customers' sites or premises  The customer's sites or premises must be suitable for the nature of the particular calibrations undertaken and will be subject of contract review arrangements between the laboratory and the customer	Force	S
At permanent laboratory Unit E2 The Wallows Ind. Estate Fens Pool Avenue Brierley Hill West Midlands DY5 1QA	Force	P



0790  
Accredited to  
ISO/IEC 17025:2017

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

**Phoenix Materials Testing Ltd**  
**Issue No: 023 Issue date: 23 August 2021**

Calibration performed by the Organisation at the locations specified

Calibration and Measurement Capability (CMC)

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ( $k = 2$ )	Remarks	Location Code
FORCE UNIVERSAL MATERIALS TESTING MACHINES				S
Verification and calibration of the force measuring system by force proving instruments in tension	0.1 kN to 500 kN for Class 0.5, 1, 2 and 3 machines to BS EN ISO 7500-1:2018	0.24 %		
	0.05 kN to 2 MN for Class 1, 2 and 3 machines to BS EN ISO 7500-1:2018	0.32 %		
Verification and calibration of the force measuring system by force proving instruments in tension	From 5.36 kN up to 2 000 kN to ASTM E4-20	0.32 %		
Verification and calibration of the force measuring system by force proving instruments in compression	0.1 kN to 500 kN for Class 0.5, 1, 2 and 3 machines to BS EN ISO 7500-1:2018	0.24 %		
	0.05 kN to 2 MN for Class 1, 2 and 3 machines to BS EN ISO 7500-1:2018	0.32 %		
Verification and calibration of the force measuring system by force proving instruments in compression	From 8.63 kN up to 2 000 kN to ASTM E4-20	0.32 %		
Verification and calibration of the force measuring system by calibrated masses in tension	0.05 N to 270 N for Class 0.5, 1, 2 and 3 machines to BS EN ISO 7500-1:2018	0.10 %		
Verification and calibration of the force measuring system by calibrated masses in compression	0.05 N to 270 N for Class 0.5, 1, 2 and 3 machines to BS EN ISO 7500-1:2018	0.10 %		
Calibration of force measuring devices (e.g. strain gauged load cells and load measuring rings) but excluding proving devices in tension	0.05 N to 270 N using calibrated masses to ASTM E4-20 Annex A1	0.10 %		P / S
	0.02 kN to 1400 kN using calibrated reference devices to ASTM E4-20 Annex A1	0.32 %		



0790  
Accredited to  
ISO/IEC 17025:2017

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

**Phoenix Materials Testing Ltd**  
Issue No: 023 Issue date: 23 August 2021

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ( $k = 2$ )	Remarks	Location Code
Calibration of force measuring devices (e.g. strain gauged load cells and load measuring rings) but excluding proving devices in compression	0.05 N to 270 N using calibrated masses to ASTM E4-20 Annex A1	0.10 %		P / S
CREEP TESTING MACHINES	0.02 kN to 1400 kN using calibrated reference devices to ASTM E4-20 Annex A1	0.32 %		S
Verification of the applied load using force proving instruments	0.1 kN to 500 kN for Class 0.5, 1.0 and 2.0 machines to BS EN ISO 7500-2:2006	0.24 %		S
	0.05 kN to 500 kN for Class 1, 2 and 3 machines to BS EN ISO 7500-2:2006	0.32 %		
CREEP TESTING MACHINES (cont'd)				S
Verification of the applied load using masses	0.05 N to 270 N for Class 0.5, 1.0 and 2.0 machines to BS EN ISO 7500-2:2006	0.10 %		
LENGTH				S
Extensometers	As BS EN ISO 9513:2012 for the following classes and gauge lengths:  Class 0.5 from 10 mm Class 1 from 5 mm Class 2 from 5 mm  Displacements 0.02 mm to 5 mm	3.0 $\mu\text{m}$ )		
	As ASTM:E83-16 for the following classes and gauge lengths:  B-1 from 20 mm B-2 from 10mm C from 5 mm  Displacements 0.02 mm to 5 mm	3.0 $\mu\text{m}$		
Cross head and actuator displacement	0.02 mm to 50 mm 50 mm to 100 mm	0.054 mm 0.064 mm		S
END				



0790

Accredited to  
ISO/IEC 17025:2017

## Schedule of Accreditation

issued by

### United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

### Phoenix Materials Testing Ltd

Issue No: 023 Issue date: 23 August 2021

Calibration performed by the Organisation at the locations specified

## Appendix - Calibration and Measurement Capabilities

### Introduction

The definitive statement of the accreditation status of a calibration laboratory is the Accreditation Certificate and the associated Schedule of Accreditation. This Schedule of Accreditation is a critical document, as it defines the measurement capabilities, ranges and boundaries of the calibration activities for which the organisation holds accreditation.

### Calibration and Measurement Capabilities (CMCs)

The capabilities provided by accredited calibration laboratories are described by the Calibration and Measurement Capability (CMC), which expresses the lowest measurement uncertainty that can be achieved during a calibration. If a particular device under calibration itself contributes significantly to the uncertainty (for example, if it has limited resolution or exhibits significant non-repeatability) then the uncertainty quoted on a calibration certificate will be increased to account for such factors.

The CMC is normally used to describe the uncertainty that appears in an accredited calibration laboratory's schedule of accreditation and is the uncertainty for which the laboratory has been accredited using the procedure that was the subject of assessment. The measurement uncertainty is calculated according to the procedures given in the GUM and is normally stated as an expanded uncertainty at a coverage probability of 95 %, which usually requires the use of a coverage factor of  $k = 2$ . An accredited laboratory is not permitted to quote an uncertainty that is smaller than the published measurement uncertainty in certificates issued under its accreditation.

### Expression of CMCs - symbols and units

It should be noted that the percentage symbol (%) represents the number 0.01. In cases where the measurement uncertainty is stated as a percentage, this is to be interpreted as meaning percentage of the measurand. Thus, for example, a measurement uncertainty of 1.5 % means  $1.5 \times 0.01 \times q$ , where  $q$  is the quantity value.

The notation  $Q[a, b]$  stands for the root-sum-square of the terms between brackets:  $Q[a, b] = [a^2 + b^2]^{1/2}$