# Certificate of Accreditation

UKAS United Kingdom Accreditation Service

## NDT Global Services Limited

Calibration Laboratory No. 8957

**Is accredited in accordance with International Standard ISO/IEC 17025:2017 – General Requirements for the competence of testing and calibration laboratories.**

This accreditation demonstrates technical competence for a defined scope specified in the schedule to this certificate, and the operation of a management system (refer joint ISO-ILAC-IAF Communiqué dated April 2017). The schedule to this certificate is an essential accreditation document and from time to time may be revised and reissued.

The most recent issue of the schedule of accreditation, which bears the same accreditation number as this certificate, is available from www.ukas.com.

This accreditation is subject to continuing conformity with United Kingdom Accreditation Service requirements.

**Matt Gantley,** *Chief Executive Officer*
United Kingdom Accreditation Service

Initial Accreditation: 28 April 2017
Certificate Issued: 25 January 2021

ilac-MRA UKAS United Kingdom Accreditation Service

*Scan QR Code to verify*

UKAS is appointed as the sole national accreditation body for the UK by The Accreditation Regulations 2009 (SI No 3155/2009) and operates under a Memorandum of Understanding (MoU) with the Department for Business, Energy and Industrial Strategy (BEIS).

# Schedule of Accreditation

**issued by**

# United Kingdom Accreditation Service

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

**8957**

**Accredited to ISO/IEC 17025:2017**

## NDT Global Services Limited

**Issue No:** 010 **Issue date:** 11 February 2025


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**Calibration performed at the above address only**

Calibration and Measurement Capability (CMC)

| Measured Quantity Instrument or Gauge | Range | Expanded Measurement Uncertainty ($k = 2$) ) | Remarks |
|---|---|---|---|
| ELECTRICAL VERIFICATION of ULTRASONIC FLAW DETECTION EQUIPMENT | As BS EN ISO 22232-1:2020 Group 2 tests and including the following calibrations and quantities: | | |
| | Pulser Voltage | 5.0 % | |
| | Pulser Risetime | 4.0 % | |
| | Pulse duration | 4.1 % | For instruments designed to comply with BS EN 12668-1:2010, the pulse width is determined at 10 % of the pulse height, otherwise the 50 % points are used. |
| | Frequency response<br>*0.2 MHz to 30 MHz* | 2.0 % at -3 dB point | For instruments designed to comply with BS EN 12668-1:2010, the centre frequency $f_0$ is calculated using $f_0 = \sqrt{(f_u \times f_l)}$, otherwise the expression $f_0 = (f_u + f_l)/2$ is used. |
| | Equivalent input noise | 7.0 % of screen height | Using Method B as described in Section 9.4.3.3 of BS EN ISO 22232-1:2020. |
| | Calibrated attenuator, *0 dB to 70 dB* | 0.54 dB to 0.90 dB | |
| | Vertical Linearity | 1.1 % of screen height | |
| CALIBRATION OF ULTRASONIC TEST BLOCKS | | | |
| Linear dimensions | 0 mm to 25 mm | 5.0 µm | Using micrometer |
| | 25 mm to 50 mm | 5.0 µm | Using micrometer |
| | 0 mm to 200 mm | 40 µm | Using digital caliper |
| | 0 mm to 300 mm | 31 µm | Using height gauge |
| Hole diameter | 0.22 mm to 7.7 mm | 25 µm | Using pin gauges |
| | 7.7 mm to 100 mm | 40 µm | Using digital caliper |
| Hole centre to plate edge | Hole diameter to 300 mm | 37 µm | Using height gauge |
| | Hole diameter 200 mm | 44 µm | Using digital caliper |

| Measured Quantity Instrument or Gauge | Range | Expanded Measurement Uncertainty ($k = 2$) ) | Remarks |
|---|---|---|---|
| CALIBRATION OF ULTRASONIC TEST BLOCKS (continued) | | | |
| Hole depth | 0 mm to 50 mm<br>0 mm to 50 mm | 44 µm<br>38 µm | Using digital caliper<br>Using pin and height gauge |
| Slot width | 8 mm to 50 mm<br>0.22 mm to 30 mm | 41 µm<br>35 µm | Using digital caliper<br>Using height gauge |
| Slot depth | 0 mm to 200 mm<br>0 mm to 10 mm | 39 µm<br>27 µm | Using digital caliper<br>Using height gauge and dial indicator |
| Determination of slot centre line | 1 mm to 300 mm | 36 µm | Using height gauge |
| END | | | |

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## 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: $Q[a, b] = [a^2 + b^2]^{1/2}$