

James Walker	Title: Master Pressure Gauge External Calibration Procedure	Date: Jan 11, 2023	Rev: 5	Page: Page 1 of 2	Document No: QPD114 Approved by: Test Room Manager
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REASON FOR UPDATE: Step 4.15 and 4.19 error redefined as $\pm 1\%$ of the full scale.

ASSOCIATED DOCUMENTS: Calibration Certificate

1. PURPOSE

- 1.1 To provide a procedure for the organisation of calibration of the master pressure gauges by an external company.

2. SCOPE

- 2.1 This document applies to all those involved with the organisation of calibration of the master pressure gauges by an external company.

3. RESPONSIBILITY

- 3.1 The Test Room Manager is responsible for updating and communicating the details within this procedure.

4. PROCEDURE

Transfer Standard: - Calibrated externally by a UKAS accredited laboratory to UKAS standards where possible, otherwise calibrated externally by a laboratory with measurements traceable back to National Standards.

- 4.1 Organising the calibration should begin around 30 days before the expiry date as the whole process could potentially take several weeks to complete.
- 4.2 Contact suitable external companies stating the pressure range of the gauge and ensuring the calibration will cover this range with suitable intervals.
- 4.3 Obtain a suitable quotation from an external company, then follow the internal process for raising a purchase order.
- 4.4 After authorisation, contact the external company to let them know you intend to send the items to them, and perform any special instructions provided by them, e.g. return numbers to include in the package.
- 4.5 Check there is no damage to the gauge.
- 4.6 Locate the 'Dispatch Request Form' in the Logistics section of LionShare, and fill in the required details including approval from the Test Room Manager.
- 4.7 Print off the form.
- 4.8 Take the items and the form to the Logistics department and inform a relevant member of the department to initialise the delivery procedure.
- 4.9 Upon return after calibration, check the package includes the gauge and calibration certificate(s).
- 4.10 If the gauge appears damaged then quarantine immediately and follow up with an investigation.
- 4.11 If the gauge is physically OK, check the calibration certificate for acceptance.

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- 4.15** If all the measured value errors are less than $\pm 1\%$ of the full scale, accept into the calibration system.
- 4.16** Remove the old colour code date sticker and apply a new one to the gauge.
- 4.17** Check the external company's calibration sticker is clear, readable and has the correct dates and the calibrator's signature/initials.
- 4.18** Update the calibration spreadsheet and save a scanned copy of the certificate(s) into the relevant folder.
- 4.19** If any of the measured value errors are greater than $\pm 1\%$ of the full scale, quarantine the items and certificate(s).
- 4.20** Update the calibration spreadsheet to reflect the quarantine situation.
- 4.21** Seek technical assistance on how to proceed from the following:
- Organise the repair and re-certification of the gauge.
 - Apply a sticker to the gauge stating its useable range if required.
 - Dispose of the items and replace with new ensuring steps 4.15 to 4.21 are followed.
- 4.22** Ensure the following items are documented on the certificate(s):
- Certificate Number
 - Reference/Job Number if different from Certificate Number
 - Relevant Dates
 - Serial Number and Range
 - Test Conditions
 - Results
 - Calibrators Name