James Walker		Date:	Rev:	Page:	Document No: QPD131
	Digital Force Gauge	Aug 25, 2020 Reaffirmed 2023	3	Page 1 of 1	Approved by:
	Calibration				Test Room Manager

REASON FOR UPDATE: Change of process owner.

ASSOCIATED DOCUMENTS: N/A

1. PURPOSE

1.1 To provide a procedure for the calibration of a Digital force gauge.

2. SCOPE

2.1 This document applies to all those involved with the calibration of a Digital force gauge

3. RESPONSIBILITY

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

4. PROCEDURE

- B. Transfer Standard: Calibrated externally by Trescal Limited
- C. Calibration Process:
- 1. Make sure the digital force gauge is in good condition before sending for calibration.
- 2. Raise order, package the digital force gauge and send to Trescal Limited.
- 3. Trescal Limited:
 - I. The force gauge is measured for accuracy of scale by using deadweights.
 - **II.** A set of known forces are applied and the readings from the gauge are recorded and the uncertainty in terms of force is determined.
 - III. Using equipment FC 46.
 - **IV.** Record the cert No., Job No., Digital Force gauge manufacturer, Serial No. Range, Units, Digital Force gauge serial number, Calibration date and Calibrators name.
 - **V.** Add a calibrated sticker to the body of the digital force gauge.
 - VI. Return digital force gauge and calibration certificate to James Walker.
- 4. Upon return
 - a. Check the calibration cert for acceptance, all errors < 5%.
 - b. If < 5% book the certificate in to the calibration system.
 - c. If > 5% either
 - i. apply a sticker to the front of the digital force gauge giving its range and uncertainty,
 - ii. Destroy the digital force gauge and certificate.
 - iii. Repair digital force gauge and recertify.
 - iv. Notify Quality about the digital force gauge and proposed solution.
- 5. Store the written calibration sheet.