

James Walker	Hardness Tester Calibration	Date: Sep 23, 2021	Rev: 4	Page: Page 1 of 1	Document No: QPD130 Approved by: Mark Ashbridge
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**REASON FOR UPDATE:** Removal of step 5 - 'Store the written calibration sheet', as step 4b covers this.

**ASSOCIATED DOCUMENTS:** N/A

## 1. PURPOSE

1.1 To provide a procedure for the calibration of a portable hardness block.

## 2. SCOPE

2.1 This document applies to all those involved with the a portable hardness block

## 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 hardness tester and block are both in good condition before sending for calibration.
2. Raise order, package the hardness tester and block and send to Trescal Limited.
3. Trescal Limited
  1. The reference test block is tested on a Vickers hardness test machine.
  2. A performance test is then carried out using the calibrated test block and an average reading is taken.
  3. Using equipment FC 158.
  4. Record the cert No., Job No., Hardness tester manufacturer, Serial No. Range, Units, Hardness tester serial number, Calibration date and Calibrators name.
  5. Add a calibrated sticker to the body of the hardness tester.
  6. Return hardness tester, block and calibration certificate to James Walker.
4. Upon return
  - a. Check the cal cert for acceptance, all errors +/-1%.
  - b. If < 1% book the certificate in to the calibration system.
  - c. If > 1% either
    - i. Apply a sticker to the front of the hardness tester giving its range and uncertainty,
    - ii. Destroy hardness tester and certificate.
    - iii. Repair hardness tester and recertify.
    - iv. Notify Quality about the hardness tester and proposed solution.