

DAVID L. ELLIS COMPANY, INC.

310 Old High Street, P.O. Box 592, Acton, MA 01720

Fax: 978-897-0844 Voice: 978-897-1795 sales@hardness-testblocks.com www.hardness-testblocks.com

Certificate of Calibration and Conformance for Rockwell Test Block

SAMPLE ONLY

55.43	HRC
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Serial Number 6197

Date Cal 12/23/13

Temp Deg C 21

HUMID % 42

Note 1- Uncertainty of secondary
standardizing machine that
calibrated this testblock.

Note 2- Uncertainty of this
calibrated secondary testblock.

Use this value for On-Site Unc.
during indirect verification.

K=2

NIST Test Speed

Dwell Minor Load / 3 sec

Dwell Major Load / 5 sec

Dwell Recovery / 4 sec

Force KGF

150

Force N

1471.05

Indenter type-

Diamond

Method

ASTM E18-12

Block Certificate No.

6197

Operator LKM

Unc tester (1)

0.32 HRC

Unc Block (2)

0.33 HRC

Reading 1

55.32 HRC

Reading 2

55.31 HRC

Reading 3

55.45 HRC

Reading 4

55.43 HRC

Reading 5

55.46 HRC

Reading 6

55.62 HRC

Average

55.43

Std. Dev.

0.11

Min

55.31

Max

55.62

Repeatability

0.31

Tolerance. +/-

1.0 HRC

The above calibration was verified with the following equipment, which is traceable to NIST, PTB, IMGC or NPL.

United Tru-Blue II Standardizing Machines

Serial Number: 281620, 211220

Star Industrial Tools UKAS

Star #ST11864

The standardized test blocks are calibrated in accordance with ASTM E18 Annex A4 using NIST Rockwell standard reference materials (SRM) 2810, 2811 and 2812. All other Rockwell scales are traceable to Ellis hardness levels through laboratory standardizing machines and PTB, IMGC or NPL. The standardizing machines are directly verified according to ASTM E18 using devices that are traceable to NIST either directly or through a NVLAP approved laboratory.

Expanded uncertainty uses coverage factor K=2, providing a confidence level of approximately 95%

This test report is not to be used to claim product endorsement by the David L. Ellis Company Inc., NVLAP or any government agency.

This block is calibrated according to A.S.T.M. E-18 standards, ANSI (NCSL) Z540-1, (ISO) 10012, ISO/IEC 17025 and MIL-STD 45662A by David L Ellis Co., Inc. and NVLAP Lab Code: 200127-0 CALIBRATION LABORATORIES

Representative

This certificate may not be reproduced except in full

Lab Code:200127-0
Calibration Laboratories