

CERTIFICATE OF CALIBRATION

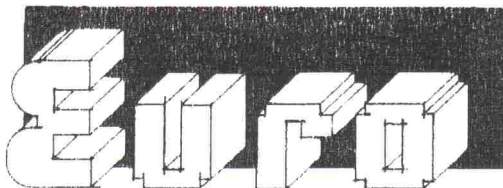
ISSUED BY EURO PRODUCTS CALIBRATION LABORATORY
DATE OF ISSUE June 10, 2008 SERIAL NUMBER 002241



I 087

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APPROVED SIGNATORY

D. Perkins
T. Chandler
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Client:

Padrão Impacta

Description: Vickers Reference Hardness Tester Block

Block Serial Number: 5804

Date of Calibration: June 10, 2008

Calibration Details: The above Reference Hardness Block has been examined in the EURO PRODUCTS calibration laboratory and was found to comply with the requirements of BS EN ISO 6508-3 1999 clause 3 and ASTM E 18:2000 clause 16. The above Reference Hardness Block value was calibrated on a standardising machine complying with the requirements of BS EN ISO 6508-3 and ASTM E 18:2000, having hardness scales traceable to the UK National Scales as defined by IMGC: the machine was also indirectly verified in the Vickers with reference blocks calibrated by NIST.

Validade Mês ____ / Ano ____

Impacta Instrumentos
Padrão: I 087

Validade: Indeterminado

Results: The above reference Hardness Block was found to comply with the requirements of BS EN ISO 6508-3 clause 7 and ASTM E 18:2000 clause 20 and the hardness values obtained are given below:

Mean Hardness Value:	HV1 224.0	Uniformity of Hardness: 0.4 units
Maximum Value : Test 1:	HV1 229.0	Test 2: HV1 224.0
Minimum Value : Test 3:	HV1 224.0	Test 4: HV1 219.0

Calibration made at: 23°C ± 2
Reference Hardness Block Thickness: 15.13mm

Uncertainty of Measurement: ± 10 HV1

Approved Signatory:

Validity: This Hardness Reference Block is only valid for the scale for which it was calibrated. It is recommended that the duration of the calibration validity should be limited to 5 years. The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

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