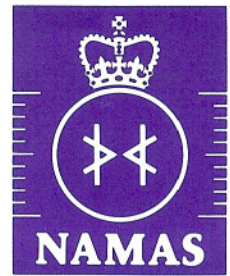


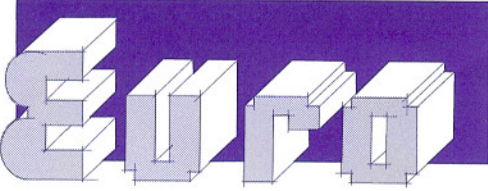
CERTIFICATE OF CALIBRATION

ISSUED BY EURO PRODUCTS CALIBRATION LABORATORY
DATE OF ISSUE 23.July.97 SERIAL NUMBER 23774



CALIBRATION
No. 0441

EURO PRODUCTS LIMITED



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Hall Drive,
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APPROVED SIGNATORY

D. Perkins
T. Chandler
C. Perkins

Name and Address of Customer : Fortel Ind E Com Ltda

Hardness Test block Identity : EP9716284

Date of Calibration : 23.July.97

The above Hardness Test Block has been examined in the EURO PRODUCTS calibration laboratory and found to comply with the requirements of BS 427:1990:Clause 18, ASTM E92-1992:Clause 20 and ISO 640:1984:Clause 3. The above Hardness Test Block has been calibrated on a standardising machine complying to the requirements of British Standard 427: 1990, ASTM E92: 1992 and ISO 640: 1984, having hardness scales traceable to the UK National Scales defined by IMGC. The calibration made in accordance with BS427:1990:Clause 19, ASTM E92:1992:Clause 25 and ISO 640:1984: Clause 7 gave the following values.

MEAN HARDNESS VALUE : 152.6 HV20
Maximum hardness value: 154.7 HV20
Minimum hardness value: 150.5 HV20
Magnification used : x 250

Assigned Block Value : 152.6 HV20
Thickness of Block : 15.3 mm
Identified Indent: 0.4959/0.4935 Av.= 0.4947 mm

Calibration made at : 21 °C

Uncertainty of measurement : + or - 1.5% HV
+ or - 0.0005 mm

Approved Signatory.

The uncertainties are for a confidence probability of not less than 95%

This certificate is issued in accordance with the requirements of the United Kingdom Accreditation Service as specified in the NAMAS Accreditation Standard and NAMAS Regulations. It provides traceability of measurement to recognised national standards, and to the units of measurement realised at the National Physical Laboratory or other recognised national standards laboratories. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.