CERTIFICATE OF CALIBRATION

ISSUED BY EURO PRODUCTS CALIBRATION LABORATORY DATE OF ISSUE 23.July.97 SERIAL NUMBER 23743



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PAGE 1 OF 1 PAGES

APPROVED SIGNATORY

D. Perkins

T. Chandler

C. Perkins

Name and Address of Customer: Fortel Ind E Com Ltda

Hardness Test block Identity: EP9716281

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 : 760.3 HV20

Maximum hardness value: 764.5 HV20

Minimum hardness value: 755.6 HV20

Magnification used : x 250

Assigned Block Value : 760.0 HV20 Thickness of Block : 14.7 mm

Identified Indent: 0.2218/0.2204 Av. = 0.2211 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%

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