

PE 033

# CERTIFICATE OF CALIBRATION

ISSUED BY **C. V. INSTRUMENTS LTD**  
DATE OF ISSUE 3 May 1996 SERIAL NUMBER 02102



**NAMAS**  
CALIBRATION  
No. 0471



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APPROVED SIGNATORY

F. Brotherton

**Please Note This Is A Copy. The Original Was Issued on May 18, 1995**

|                                    |   |
|------------------------------------|---|
| Name of Client:                    | Metaltest Ind Com Imp e Exp   |
| Address of Client:                 | Rue Francesco Mosto, Nr 55 Perus,<br>05120-050 Sao Paulo<br>Brazil                      |
| Hardness Test Block:<br>& Identity | C V Instruments Ltd<br><b>367.0 HBS 10/3000 Hardness Test Block</b><br>Serial No: 05963 |

Date of Calibration: 16 May. 1995

Calibration Procedure: The above Hardness Test Block has been examined in the calibration laboratory of C V Instruments Ltd and found to comply with the requirements of British Standard 240:1986:Clause 16.

The above Hardness Test Block has been calibrated on a standardizing machine complying to the requirements of British Standard 240:1986 and having hardness scales traceable to the UK National Hardness Scales defined by IMGC. The calibration of the Hardness Test Block showed that it complied with BS 240: 1986: Clause 17 and gave the following values:

Measurement Results:

|                         |                          |
|-------------------------|--------------------------|
| Mean Hardness Value:    | <b>367.0 HBS 10/3000</b> |
| Maximum Hardness Value: | 367.6 HBS 10/3000        |
| Minimum Hardness Value: | 366.0 HBS 10/3000        |
| Thickness of Block:     | 16.72 mm                 |

Identified Indentation Measures: 3.183mm & 3.188mm = Average **3.186mm**

Calibration Temperature: 20 +/- 5 degree's C

Uncertainty of Measurement: +/- 2.0 %

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

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