

# Brinell hardness reference blocks

Brinell reference indentation reading blocks



## BRINELL REFERENCE BLOCKS

Foundrax are the only specialist in Brinell hardness testing in Europe and have been accredited for the manufacture of hardness reference blocks for longer than any other UK manufacturer

## THE BEST TO USE

Foundrax Brinell Reference blocks conform fully to ISO 6506-3:2005 and ASTM E10-10 and are complete with Reference Indentation as per ISO 6506-3 8.3

All blocks feature mirror finish for clear and easy indentation measurement.

SCALE	F/D <sup>2</sup> RATIO	AVAILABLE HARDNESS RANGES
HBW10/3000 HBW5/750 HBW2.5/187.5	30	<b>140-169</b> 170-199 <b>200-229 230-269 270-299 300-329 330-369</b> 370-399 <b>400-499 500-600</b>
HBW10/1500	15	<b>60-89A 90-190A</b> 110-150A <b>140-169</b> 170-199 <b>200-229 230-269</b> 270-299
HBW10/1000 HBW5/250	10	<b>60-89A 90-109A</b> 110-150A <b>140-169</b>
HBW10/500	5	60-89A 90-100A

#### NOTES:

- \* All blocks certified to ISO 6506-3 and ASTM E10-10
- \* All blocks supplied with official UKAS certificate of calibration unless requested otherwise
- \* All blocks offer 173cm<sup>2</sup> surface area
- \* All blocks in steel except where marked A (aluminium)
- \* Standard hardness ranges are marked in **bold**, ranges in grey not available at present
- \* Advise hardness range & hardness scale required

## **BRINELL REFERENCE INDENTATION READING BLOCKS**

### STANDARDISED BRINELL INDENTATIONS:

- •Make the Brinell test more meaningful and accurate
- •Can be used to train operators to measure Brinell indentations correctly
- •Enable the monitoring of operators
- •Resolve arguments
- •Discover an operator's systematic reading errors
- •Can be used to Indirectly Verify Brinell microscopes.

These are steel blocks containing 5 Reference Indentations made with a 10mm ball in the range 2.40 - 6.00mm and 5 Reference Indentions made with a 5mm ball in the range 1.20 - 3.00mm. These measuring ranges cover all Brinell scales using 10mm and 5mm Brinell balls.

## DO YOU KNOW THAT WE OFFER UKAS CERTIFIED ROCKWELL REFERENCE BLOCKS AS WELL?

Foundrax Rockwell hardness reference blocks are available in a range of hardness values according to stock and feature low uncertainty of measurement and high quality finish for ease of use.

Foundrax Rockwell Reference blocks conform fully to ISO 6508-3 and ASTM E18

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## FOUNDRAX

# BRINELL REFERENCE INDENTATION READING BLOCKS

Traditionally the weakness of the Brinell test has been in the measurement of Brinell indentations.

Foundrax have overcome this completely with the BRINtronic fully automatic Brinell microscope, alternatively if the user is still employing a manual Brinell microscope then Foundrax have minimised the problem by use of Foundrax Brinell Reference Indentation Reading Blocks.

of the measurement depends on a subjective judgement of where the edge of the indentation is and different operators may get different answers. The measurements of the indentations on Foundrax Reference Indentation Reading Blocks are made in a traceable standardising machine so are correct by definition and represent the standard of measurement to which operators should aspire.

Foundrax Reference Indentation Reading blocks are supplied in protective boxes with official UKAS certificates of calibration.

## USING FOUNDRAX BRINELL REFERENCE INDENTATION READING BLOCKS

By measuring each indentation it is possible to determine what systematic error each operator has, and if necessary, to train them to measure correctly and to tighter limits than they have been used to. The mean diameters of the Reference Indentations are given on the Certificate and not on the Block so it can then be seen whether their measurements are correct, consistent or inconsistent etc.

When disputes over Brinell hardness arise it is possible to find which party is making the truer measurements.

Foundrax Brinell Reference Indentation Reading Blocks may also be used for the Indirect Verification of Brinell