



CERTIFIED CALIBRATION ACCORDING TO DIN EN ISO / OPTIONAL CALIBRATION ACCORDING TO ASTM

## PREMIUM HARDNESS TEST BLOCKS

## CUSTOMIZED SOLUTIONS – WITH COMPETENCE AND PASSION

# QATM – MATERIALOGRAPHY & HARDNESS TESTING

Whatever you need for quality testing and material analysis, QATM has it all: As a manufacturer of high-quality machines for materialography (metallography) and hardness testing, we offer the most comprehensive solutions for your needs. We not only supply a wide range of instruments but also accessories, consumables, complete laboratories and tailor-made special-purpose solutions.

Our innovative cut-off machines, mounting presses, grinders, polishers/electrolytic etchers, as well as hardness testers and analysis systems provide maximum reliability and flexibility. By using the most advanced manufacturing technologies and producing our own components in-house, we are in a position to meet individual customer requirements.

Our R&D departments for hard- and software work in close cooperation with our customers to ensure continuous optimization of our products. Customers all over the world appreciate QATM's extensive sales and service network as well as the direct communication with our experts. The comprehensive expertise and creativity of our qualified staff are the basis for the consistent high quality of our solutions.





## PREMIUM QUALITY



MADE IN GERMANY

## MADE IN GERMANY

Our hardness test blocks are manufactured by selected steel and aluminium producers with excellent experience in the production of homogeneous material.



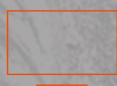
## LARGE ANGULAR TEST SURFACE

The shape enables periodic testing to be automated. This is a decisive benefit compared with circular hardness test blocks.



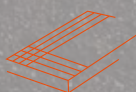
## VALUE DEVIATION ENGRAVED

The permissible value deviation is engraved on each hardness test block. This saves time and money in everyday testing.



## SOFTWARE

You benefit from free access to our comprehensive range of software for the documentation of hardness tests.



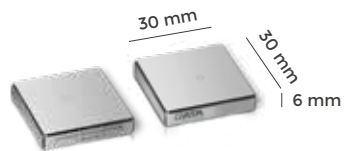
## OPTIONS

On request, grid lines can be engraved and multiple calibrations can be provided.



## CERTIFIED CALIBRATION

All hardness test blocks are calibrated in our accredited laboratory according to the latest ISO and optional to ASTM standards.



## VICKERS MIKRO

DIN EN ISO 6507-3, ASTM E92\*

|                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|
| <b>HV 0,01</b>  | 200 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
| <b>HV 0,015</b> | 200 | 250 |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
| <b>HV 0,02</b>  | 200 | 250 | 300 | 350 |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
| <b>HV 0,025</b> | 200 | 250 | 300 | 350 | 400 | 450 |     |     |     |     |     |     |     |     |     |  |  |  |  |
| <b>HV 0,05</b>  | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |  |  |  |  |
| <b>HV 0,1</b>   | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |  |  |  |  |
| <b>HV 0,2</b>   | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |  |  |  |  |
| <b>HV 0,3</b>   | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |  |  |  |  |
| <b>HV 0,5</b>   | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |  |  |  |  |
| <b>HV 1</b>     | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |  |  |  |  |
| <b>HV 2</b>     | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |  |  |  |  |

Material: Steel

Possible deviation from the ordered hardness value:  $\pm 25\text{HV}$

\*ASTM certification optionally available at extra charge

## VICKERS MAKRO

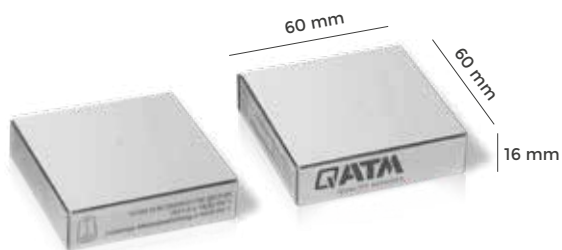
DIN EN ISO 6507-3, ASTM E92\*

|               |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|---------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <b>HV 1</b>   | 80 | 110 | 130 | 170 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |
| <b>HV 2</b>   | 80 | 110 | 130 | 170 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |
| <b>HV 3</b>   | 80 | 110 | 130 | 170 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |
| <b>HV 5</b>   | 80 | 110 | 130 | 170 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |
| <b>HV 10</b>  | 80 | 110 | 130 | 170 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |
| <b>HV 20</b>  | 80 | 110 | 130 | 170 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |
| <b>HV 30</b>  | 80 | 110 | 130 | 170 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |
| <b>HV 50</b>  | 80 | 110 | 130 | 170 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |
| <b>HV 100</b> | 80 | 110 | 130 | 170 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |

Material: Aluminium or steel

Possible deviation from the ordered hardness value:  $\pm 25\text{HV}$

\*ASTM certification optionally available at extra charge



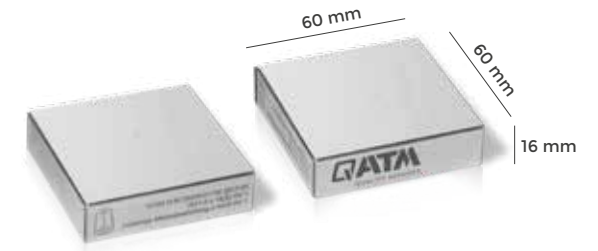
# ROCKWELL

## DIN EN ISO 6508-3, ASTM E18\*

|              |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|--------------|----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| <b>HRA</b>   | 29 | 40  | 45 | 53 | 57 | 60 | 62 | 66 | 69 | 71 | 73 | 75 | 77 | 79 | 80 | 81 | 82 | 83 | 84 | 85 |    |    |
| <b>HRB</b>   | 32 | 60  | 72 | 86 | 94 | 98 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| <b>HRC</b>   |    |     |    |    | 15 | 19 | 24 | 31 | 37 | 41 | 46 | 49 | 52 | 55 | 58 | 60 | 62 | 63 | 64 | 65 | 66 | 68 |
| <b>HRD</b>   |    |     | 45 | 59 | 65 | 69 | 72 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| <b>HRE</b>   | 88 | 100 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| <b>HRF</b>   | 77 | 92  | 98 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| <b>HR15N</b> |    |     |    |    |    |    | 70 | 75 | 78 | 81 | 83 | 85 | 86 | 88 | 89 | 90 | 91 | 92 |    |    |    | 93 |
| <b>HR30N</b> |    |     |    |    |    |    | 43 | 50 | 56 | 60 | 64 | 67 | 70 | 73 | 75 | 77 | 79 | 80 | 81 |    | 82 | 83 |
| <b>HR45N</b> |    |     |    |    |    |    | 23 | 31 | 39 | 44 | 49 | 54 | 57 | 60 | 63 | 66 | 68 | 69 | 71 | 72 | 73 | 74 |
| <b>HR15T</b> | 72 | 80  | 84 | 88 | 90 | 91 | 92 | 94 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| <b>HR30T</b> | 40 | 57  | 64 | 73 | 77 | 80 | 82 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| <b>HR45T</b> |    | 34  | 45 | 59 | 65 | 69 | 72 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

Material: Aluminium or steel

\*ASTM certification optionally available at extra charge



# BRINELL

## DIN EN ISO 6506-3, ASTM E10\*

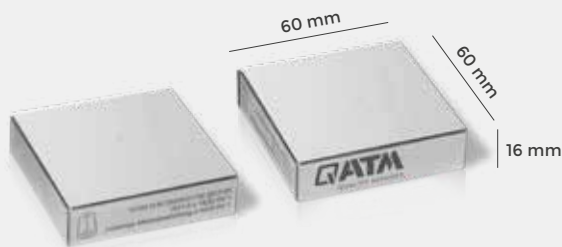
|                      |    |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |  |  |  |  |
|----------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|--|--|--|--|
| <b>HBW 10 / 500</b>  | 80 |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |  |  |  |  |
| <b>HBW 10 / 1000</b> | 80 | 110 | 130 | 170 | 200 |     |     |     |     |     |     |     |     |     |  |  |  |  |  |  |  |  |
| <b>HBW 10 / 1500</b> | 80 | 110 | 130 | 170 | 200 | 250 | 300 |     |     |     |     |     |     |     |  |  |  |  |  |  |  |  |
| <b>HBW 10 / 3000</b> |    | 110 | 130 | 170 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 |  |  |  |  |  |  |  |  |
| <b>HBW 5 / 125</b>   | 80 |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |  |  |  |  |
| <b>HBW 5 / 250</b>   | 80 | 110 | 130 | 170 | 200 |     |     |     |     |     |     |     |     |     |  |  |  |  |  |  |  |  |
| <b>HBW 5 / 750</b>   |    | 110 | 130 | 170 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 |  |  |  |  |  |  |  |  |

Material: Aluminium or steel

Possible deviation from the ordered hardness value:  $\pm 25\text{HBW}$

\*ASTM certification optionally available at extra charge





## BRINELL

DIN EN ISO 6506-3, ASTM E10\*

|                        |    |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
|------------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|
| <b>HBW 2,5 / 31,25</b> | 80 |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
| <b>HBW 2,5 / 62,5</b>  | 80 | 110 | 130 | 170 | 200 |     |     |     |     |     |     |     |     |     |  |  |  |  |
| <b>HBW 2,5 / 187,5</b> |    | 110 | 130 | 170 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 |  |  |  |  |
| <b>HBW 1 / 5</b>       | 80 |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
| <b>HBW 1 / 10</b>      | 80 | 110 | 130 | 170 | 200 |     |     |     |     |     |     |     |     |     |  |  |  |  |
| <b>HBW 1 / 30</b>      |    | 110 | 130 | 170 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 |  |  |  |  |

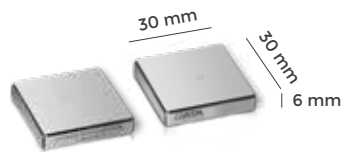
Material: Aluminium or steel

Possible deviation from the ordered hardness value:  $\pm 25\text{HBW}$

\*ASTM certification optionally available at extra charge

## KNOOP

DIN EN ISO 4545-3, ASTM E92\*



|                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|
| <b>HK 0,01</b>  | 200 | 250 | 300 | 350 |     |     |     |     |     |     |     |     |     |     |     |  |  |  |
| <b>HK 0,015</b> | 200 | 250 | 300 | 350 | 400 | 450 | 500 |     |     |     |     |     |     |     |     |  |  |  |
| <b>HK 0,02</b>  | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 |     |     |     |     |  |  |  |
| <b>HK 0,025</b> | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 |     |  |  |  |
| <b>HK 0,05</b>  | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |  |  |  |
| <b>HK 0,1</b>   | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |  |  |  |
| <b>HK 0,2</b>   | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |  |  |  |
| <b>HK 0,3</b>   | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |  |  |  |
| <b>HK 0,5</b>   | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |  |  |  |
| <b>HK 1</b>     | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |  |  |  |
| <b>HK 2</b>     | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 |  |  |  |

Material: Steel

\*ASTM certification optionally available at extra charge

FOR PERIODIC STANDARD-COMPLIANT TESTS

## SOFTWARE INCLUDED

Purchasing a hardness test block entitles you to free access to a comprehensive range of software. The software provides support with the periodic standard-compliance testing on your hardness tester. Measurement accuracy is visualized at a glance to show whether the measuring accuracy of the test method in use is with the current standard.

If original QATM hardness test blocks are in use, data can be called up online and the software is filled automatically. A comprehensive range of statistical functions has also been built in. All results from the test are clearly and logically documented, and can be presented whenever there is an audit.



PLEASE CONTACT OUR SALES TEAM

## INQUIRY & ORDER

Simply tell us your preferred test method, hardness value, dimension, desired certification (DIN EN ISO and/or ASTM), and the number of hardness test blocks required, and we quickly compile a quote including delivery costs. We can also help with unlisted hardness test blocks. We look forward to receiving your call - or an inquiry via e-mail:

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+43 6244 34393

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## VERDER scientific

VERDER SCIENTIFIC

SCIENCE  
FOR SOLIDS

Verder Scientific is a business field belonging to the Verder Group and sets standards in the development, manufacture and sale of laboratory and analytics devices. Used in quality control, research and development for test-piece preparation and the analysis of solids.

For several decades our companies have supplied production plants and research institutes, laboratories for quality testing and analytics, all kinds of technical specialists and scientists with modern, reliable devices to solve the many and varied challenges they face.

