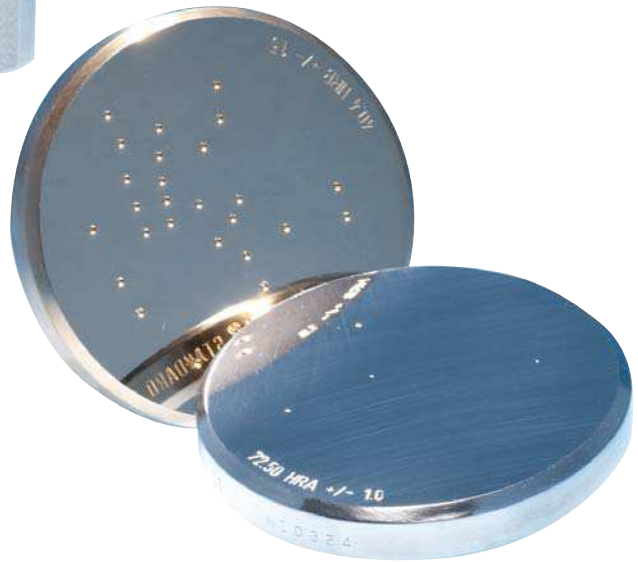


INDENTORS AND REFERENCE HARDNESS BLOCKS**INDENTORS****REFERENCE HARDNESS BLOCKS****With INNOVATEST® factory certificate or according to international standards UKAS, DKD, ASTM**

INNOVATEST® offers a wide range of indentors. All certified indentors will be issued with a certificate traceable to internationally recognised standards such as UKAS, DKD or ASTM. We also offer low cost factory certified indentors and specials.

Specials

INNOVATEST® also offers special adaptors for indentors to enlarge the field of application. Small gooseneck adaptors are available in three sizes to permit regular or superficial Rockwell hardness testers to perform internal tests on rings, tubes and annular parts where the inside diameter, plus the wall thickness, is less than 50.8mm or 2 inches. These adaptors will fit any of the standard Rockwell hardness testers. The gooseneck adaptor can be clamped into the bottom of the plunger rod (in the same manner as an indenter) and is not heavy enough to affect a reading due to increasing the applied load. The minimum internal diameter which can be tested is 11.5mm or 7/16 inch.

INDENTORS AND REFERENCE HARDNESS BLOCKS

With INNOVATEST® factory certificate or according to international standards UKAS, DKD, ASTM

INNOVATEST® reference hardness blocks are used for annual verification and calibration of hardness testing machines, as well as for periodical check and sometimes for overtaking of hardness scales on a hardness testing machine. That's why reference hardness blocks are a necessary help of industrial Quality Management. Only the use of high quality, precise reference hardness blocks calibrated to applicable standards can ensure the functionality and relative reliability and accuracy of measurement of a hardness testing machine.

The reference hardness blocks used for indirect verification should conform largely to the workpiece to be tested, in terms of material characteristics and hardness range. For this reason a reference hardness block made of aluminum was developed for the lower hardness range which cannot be covered by steel, using new materials technology methods.

When using reference hardness blocks it is irrelevant whether the value of the nominal hardness to be delivered corresponds exactly to the actual calibration value observed, since scale adaptation should be carried out with at least two hardness values. A reference hardness block shall only be used according to the standards to that method and test condition for which it was calibrated.

INNOVATEST® certified reference hardness blocks are available as follows and all conform to the international standards as mentioned.

All INNOVATEST® reference hardness block certificates are based on following international standards:

Brinell	DIN-EN-ISO 6506-3	ASTM E 10
Vickers	DIN-EN-ISO 6507-3	ASTM E 92 / E 384
Rockwell	DIN-EN-ISO 6508-3	ASTM E 18
Knoop	ISO 4545-3	ASTM E 384
Rockwell carbide	DIN 30999	ISO 3738
Martens hardness	DIN 50359	ISO DIS 14577

Scale	UKAS	DKD	DKD/MPA	ASTM	INNOVATEST
Regular Rockwell (all scales)	•	•	•	•	•
Superficial Rockwell (all scales)	•	•	•	•	•
Brinell (all scales)	•	•	•	○	•
Macro Vickers (all scales)	•	•	•	•	•
Micro-Vickers (all scales)	•	•	•	•	•
Knoop	•	•	•	•	○
Martens hardness	•	•	•	•	○

Order your blocks based on nominal values. Please ask for our separate product list of nominal hardness values available per hardness scale and type of certificate.

Reference hardness "soft" blocks made of aluminum

These INNOVATEST® reference hardness blocks are available with DKD/MPA certificate only. For several years there has been a need for "soft" blocks. Using new materials technology methods, it is now possible to produce blocks made of aluminum. They are available in lower nominal values in Rockwell, Brinell and Vickers scales.

INDENTORS FOR VARIOUS HARDNESS SCALES

ROCKWELL INDENTORS

Code No.	Description
IN/6001	Diamond Rockwell indenter including INNOVATEST® certificate
IN/6002	Diamond Rockwell indenter including DKD certificate
IN/6005	Diamond Rockwell indenter including UKAS certificate
IN/6010	Diamond Rockwell indenter, short version, including DKD certificate
IN/7501	"1/16" "Ball indenter including 1 steel ball & INNOVATEST® certificate"
IN/7505	"1/16" "Ball indenter including 1 steel ball & UKAS certificate"
IN/7510	"1/16" "Ball indenter including 1 steel ball & DKD certificate"
IN/7601	"1/8" "Ball indenter including 1 steel ball & INNOVATEST® certificate"
IN/7605	"1/8" "Ball indenter including 1 steel ball & UKAS certificate"
IN/7701	"1/4" "Ball indenter including 1 steel ball & INNOVATEST® certificate"
IN/7705	"1/4" "Ball indenter including 1 steel ball & UKAS certificate"
IN/7801	"1/2" "Ball indenter including 1 steel ball & INNOVATEST® certificate"
IN/7805	"1/2" "Ball indenter including 1 steel ball & UKAS certificate"
IN/2505	"Spare steel balls 1/16" "including UKAS certificate (set of 10 pcs.)"
IN/2510	"Spare steel balls 1/8" "including UKAS certificate (set of 10 pcs.)"
IN/2515	"Spare steel balls 1/4" "including UKAS certificate (set of 10 pcs.)"
IN/2520	"Spare steel balls 1/2" "including UKAS certificate (set of 10 pcs.)"

MICRO-VICKERS INDENTORS

Code No.	Description
IN/8101	Micro-Vickers 136° indenter including INNOVATEST® certificate
IN/8105	Micro-Vickers 136° indenter including UKAS certificate
IN/8110	Micro-Vickers 136° indenter including DKD certificate for HV 0.1 upto HV1
IN/8115	Micro-Vickers 136° indenter including DKD certificate for HV 0.2 upto HV2

KNOOP INDENTORS

Code No.	Description
IN/8205	Knoop indenter including UKAS certificate for 400 series
IN/8210	Knoop indenter including DKD certificate for 400 series

INDENTORS FOR VARIOUS HARDNESS SCALES

VICKERS INDENTORS

Code No.	Description
IN/8015	Vickers 136° indenter including INNOVATEST® certificate
IN/8010	Vickers indenter including UKAS certificate
IN/8005	Vickers 136° indenter including DKD certificate for HV0.2 and higher
IN/8000	Vickers 136° indenter including DKD certificate for HV5 and higher

BRINELL INDENTORS FOR 3000LB AND NEXUS 3000 SERIES

Code No.	Description
IN/7105	Brinell indenter 1mm including carbide ball & INNOVATEST® certificate
IN/7110	Brinell indenter 2.5mm including carbide ball & INNOVATEST® certificate
IN/7115	Brinell indenter 5mm including carbide ball & INNOVATEST® certificate
IN/7120	Brinell indenter 10mm including carbide ball & INNOVATEST® certificate
IN/2105	Tungsten carbide ball 1mm including INNOVATEST® certificate
IN/2110	Tungsten carbide ball 2.5mm including INNOVATEST® certificate
IN/2115	Tungsten carbide 5mm ball including INNOVATEST® certificate
IN/2120	Tungsten carbide 10mm ball including INNOVATEST® certificate

Code No.	Description
IN/7000	Brinell indenter 1mm including carbide ball & UKAS certificate
IN/7005	Brinell indenter 2.5mm including carbide ball & UKAS certificate
IN/7010	Brinell indenter 5mm including carbide ball & UKAS certificate
IN/7015	Brinell indenter 10mm including carbide ball & UKAS certificate
IN/2005	Tungsten carbide ball 1mm including UKAS certificate
IN/2010	Tungsten carbide ball 2.5mm including UKAS certificate
IN/2015	Tungsten carbide ball 5mm including UKAS certificate
IN/2020	Tungsten carbide ball 10mm including UKAS certificate

Code No.	Description
IN/7205	Brinell indenter 1mm including carbide ball & DKD certificate
IN/7210	Brinell indenter 2.5mm including carbide ball & DKD certificate
IN/7215	Brinell indenter 5mm including carbide ball & DKD certificate
IN/7220	Brinell indenter 10mm including carbide ball & DKD certificate
IN/2205	Tungsten carbide ball 1mm including DKD certificate
IN/2210	Tungsten carbide ball 2.5mm including DKD certificate
IN/2215	Tungsten carbide ball 5mm including DKD certificate
IN/2220	Tungsten carbide ball 10mm including DKD certificate

Further indentors available on request.

ROCKWELL & SUPERFICIAL ROCKWELL HARDNESS TEST BLOCKS

MASTERBLOCK®

A GLOBAL REFERENCE FOR HARDNESS TEST BLOCKS

ROCKWELL & SUPERFICIAL ROCKWELL HARDNESS TEST BLOCKS

TEST BLOCKS SUPPLIED WITH A STANDARD **MASTERBLOCK®** FACTORY CERTIFICATE

All mentioned hardness values are nominal values, the actual calibrated values may vary.

ROCKWELL NOMINAL VALUES

HRC	20	25	30	35	40	45	50	55	60	62	63	65
HRA soft	40	49	55									
HRA hard	60	62	65	67	70	73	75	78	81	82	83	
HRD	40	44	48	51	55	59	63	67	71	73	75	
HR 15N	68	71	74	76	79	82	85	88	90	90,8	92	
HR30N	41	46	50	55	59	64	68	72	77	79	81	
HR45N	19	25	31	37	43	49	55	60	66	69	72	

Block size: $\varnothing 60\text{mm} \times 10\text{mm}$ thickness

Weight: 0.230kg

ROCKWELL NOMINAL VALUES

Blocks below are calibrated using a **Steel ball**

HRB	60	75	90	100								
HRE	95											
HRF	90	95										
HRG	62	81	87	94								
HRH												
HRK	76	97										
HR 15T	80	87	91	92								
HR30T	56	69	77	82								
HR45T	33	53	65	72								

Block size: $\varnothing 64\text{mm} \times 12\text{mm}$ thickness

Weight: 0.250kg

ROCKWELL NOMINAL VALUES

Blocks below are calibrated as standard using a **Carbide ball**

HRB (W)	60	75	90	100								
HRE (W)	95											
HRF (W)	90	95										
HRG (W)	62	81	87	94								
HRH (W)												
HRK (W)	76	97										
HR 15T (W)	80	87	91	92								
HR30T (W)	56	69	77	82								
HR45T (W)	33	53	65	72								

Block size: $\varnothing 64\text{mm} \times 12\text{mm}$ thickness

Weight: 0.250kg

VICKERS HARDNESS TEST BLOCKS

MASTERBLOCK®

A GLOBAL REFERENCE FOR HARDNESS TEST BLOCKS

VICKERS HARDNESS TEST BLOCKS

TEST BLOCKS SUPPLIED WITH A STANDARD **MASTERBLOCK®** FACTORY CERTIFICATE

All mentioned hardness values are nominal values, the actual calibrated values may vary.

STANDARD LOADS

NOMINAL VALUES

HV1	140	240	300	400	450	540	620	720	840		
HV2	140	240	300	400	450	540	620	720	840		
HV3	140	240	300	400	450	540	620	720	840		
HV5	140	240	300	400	450	540	620	720	840		
HV10	140	240	300	400	450	540	620	720	840		
HV20	140	240	300	400	450	540	620	720	840		
HV30	140	240	300	400	450	540	620	720	840		
HV50	140	240	300	400	450	540	620	720	840		
HV60	140	240	300	400	450	540	620	720	840		
HV100	140	240	300	400	450	540	620	720	840		
HV120	140	240	300	400	450	540	620	720	840		
HV125	140	240	300	400	450	540	620	720	840		
HV150	140	240	300	400	450	540	620	720	840		

Macro block size: $\varnothing 60\text{mm} \times 10\text{mm}$ thickness

Weight: 0.230kg

Polished surface

MICRO VICKERS BLOCKS

NOMINAL VALUES

HV10	240	300	400	450	540	620	720	840			
HV5	240	300	400	450	540	620	720	840			
HV3	240	300	400	450	540	620	720	840			
HV2	240	300	400	450	540	620	720	840			
HV1	240	300	400	450	540	620	720	840			
HV0.5	240	300	400	450	540	620	720	840			
HV0.3	240	300	400	450	540	620	720	840			
HV0.2	240	300	400	450	540	620	720	840			
HV0.05	240	300	400	450	540	620	720	840			

All blocks will possibly be supplied within +/- 25 Vickers of the ordered value

Micro block size: $\varnothing 25\text{mm} \times 5\text{mm}$ thickness

Weight: 0.035kg

Polished surface

BRINELL & LEEB HARDNESS TEST BLOCKS

MASTERBLOCK®

A GLOBAL REFERENCE FOR HARDNESS TEST BLOCKS

BRINELL HARDNESS TEST BLOCKS

TEST BLOCKS SUPPLIED WITH A STANDARD **MASTERBLOCK®** FACTORY CERTIFICATE

All mentioned hardness values are nominal values, the actual calibrated values may vary.

BRINELL

NOMINAL VALUES

HBW 10/3000	150	200	250	300	350	400	450	500	600		
HBW 10/1500											
HBW 10/1000	150	200									
HBW 10/500	150										
HBW 5/750	150	200	250	300	350	400	450	500	600		
HBW 5/250	150	200									
HBW 5/125	150										
HBW2.5/187.5	150	300	450	600							
HBW2.5/62.5	75	100	125								

Block size HBW10, HBW5:

∅100mm x 15mm thickness

Weight: approx. 1.60kg

Block size HBW2.5s:

∅90mm x 15mm thickness

Weight: approx. 1.20kg

Block size HBW2.5/5 Low load:

∅64mm x 12mm thickness

Weight: approx. 0.25kg

LEEB TEST BLOCKS

TEST BLOCKS SUPPLIED WITH A STANDARD **MASTERBLOCK®** FACTORY OR UKAS CERTIFICATE

All mentioned hardness values are nominal values, the actual calibrated values may vary.

LEEB

NOMINAL VALUES

HLD	490	600	880								
HLG	150	300	500								
HLD UKAS	490	600	880								
HLG UKAS	150	300	500								

Additional HLD values are available on request

Block size: ∅90mm x 55mm thickness

ROCKWELL & SUPERFICIAL ROCKWELL REFERENCE HARDNESS BLOCKS

MASTERBLOCK® - UKAS

A GLOBAL REFERENCE FOR HARDNESS TEST BLOCKS

ROCKWELL & SUPERFICIAL ROCKWELL REFERENCE HARDNESS BLOCKS

TEST BLOCKS SUPPLIED WITH A **MASTERBLOCK® - UKAS** CERTIFICATE (**BS/EN/ISO 6508 3 & ASTM E18**)

All mentioned hardness values are nominal values, the actual calibrated values may vary.

ROCKWELL NOMINAL VALUES

HRC	20	25	30	35	40	45	50	55	60	63	65	67
HRA Soft	22	26	31	35	40	45	47	50	53	55	59	62
HRA Hard	60	63	65	68	70	73	76	78	81	83	84	85
HRD	40	44	48	52	56	60	64	67	71	73	74	77
HR15N	69	72	75	78	81	83	85	88	90	91	92	93
HR30N	41	46	50	55	59	64	68	73	77	80	82	83
HR45N	19	25	31	37	43	49	55	61	66	70	72	74

Block size: $\varnothing 64\text{mm} \times 15\text{mm}$ thickness

Weight: 0.450kg

ROCKWELL NOMINAL VALUES

Blocks below are calibrated using a **Steel ball**

HRB	20	30	40	50	60	70	75	80	85	90	95	100
HRE		75	81	87	93	100						
HRF		74	80	86	91	97	100					
HRG				3	18	33	41	49	58	66	74	83
HRH	94	98										
HRK	38	47	56	65	73	81	86	91	95	99		
HR15T	67	70	73	77	80	83	85	86	88	90	91	93
HR30T	29	36	43	49	56	63	66	69	73	76	80	83
HR45T		2	12	22	32	43	48	53	58	63	68	73

Block size: $\varnothing 64\text{mm} \times 15\text{mm}$ thickness

Weight: 0.450kg

ROCKWELL NOMINAL VALUES

Blocks below are calibrated as standard using a **Carbide ball**

HRB (W)	20	30	40	50	60	70	75	80	85	90	95	100
HRE (W)		75	81	87	93	100						
HRF (W)		74	80	86	91	97	100					
HRG (W)				3	18	33	41	49	58	66	74	83
HRH (W)	94	98										
HRK (W)	38	47	56	65	73	81	86	91	95	99		
HR15T (W)	67	70	73	77	80	83	85	86	88	90	91	93
HR30T (W)	29	36	43	49	56	63	66	69	73	76	80	83
HR45T (W)		2	12	22	32	43	48	53	58	63	68	73

Block size: $\varnothing 64\text{mm} \times 15\text{mm}$ thickness

Weight: 0.450kg

VICKERS REFERENCE HARDNESS BLOCKS

MASTERBLOCK® - UKAS

A GLOBAL REFERENCE FOR HARDNESS TEST BLOCKS

VICKERS REFERENCE HARDNESS BLOCKS

TEST BLOCKS SUPPLIED WITH A **MASTERBLOCK® - UKAS CERTIFICATE (BS/EN/ISO 6507 3)**

All mentioned hardness values are nominal values, the actual calibrated values may vary.

STANDARD LOADS

NOMINAL VALUES

HV2	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HV3	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HV5	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HV10	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HV20	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HV30	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HV50	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HV100	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	

Above blocks are supplied with UKAS Certification to BS EN ISO 6507-3 and ASTM E92
Block size: $\varnothing 64\text{mm} \times 15\text{mm}$ thickness

LOW FORCE

NOMINAL VALUES

HV1	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HV0.5	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HV0.3	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HV0.2	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	

Above blocks are supplied with UKAS Certification to BS EN ISO 6507-3
Calibrations to ASTM E384 on request only Block size: $\varnothing 30\text{mm} \times 10\text{mm}$ thickness

MICRO FORCE

NOMINAL VALUES

HV0.1	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HV0.050	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HV0.025	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HV0.010	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	

Above blocks are supplied with UKAS Certification to BS EN ISO 6507-3
Calibrations to ASTM E384 on request only Block Size: $\varnothing 30\text{mm} \times 10\text{mm}$ thickness

VICKERS & KNOOP REFERENCE HARDNESS BLOCKS

MASTERBLOCK® - UKAS

A GLOBAL REFERENCE FOR HARDNESS TEST BLOCKS

VICKERS REFERENCE HARDNESS BLOCKS

TEST BLOCKS SUPPLIED WITH A **MASTERBLOCK® - UKAS CERTIFICATE (BS/EN/ISO 6507 3 & ASTM E92)**

All mentioned hardness values are nominal values, the actual calibrated values may vary.

STANDARD LOADS

NOMINAL VALUES

HV10	1180	1300	1350	1420	1500	1550	1600	1640	1700	1740	1820
------	------	------	------	------	------	------	------	------	------	------	------

Additional loads available on request only

Above blocks are supplied with UKAS Certification to BS EN ISO 6507-3 and ASTM E92

Block size: 25mm square x 6mm thickness

KNOOP REFERENCE HARDNESS BLOCKS

TEST BLOCKS SUPPLIED WITH A **MASTERBLOCK® - UKAS CERTIFICATE (ASTM E384)**

All mentioned hardness values are nominal values, the actual calibrated values may vary.

LOW FORCE LOADS

NOMINAL VALUES

HK1	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HK0.5	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HK0.3	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HK0.2	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	

Block size: \varnothing 30mm x 10mm thickness

MICRO FORCE LOADS

NOMINAL VALUES

HK0.1	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HK0.050	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HK0.025	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	
HK0.010	40	70	100	150	200	250	300	350	400	450	
	500	550	600	650	700	750	800	850	900	950	

Block size: \varnothing 30mm x 10mm thickness

BRINELL REFERENCE HARDNESS BLOCKS

MASTERBLOCK® - UKAS

A GLOBAL REFERENCE FOR HARDNESS TEST BLOCKS

BRINELL REFERENCE HARDNESS BLOCKS

TEST BLOCKS SUPPLIED WITH A **MASTERBLOCK® - UKAS** CERTIFICATE (**BS/EN/ISO 6506 3 & ASTM E10**)

All mentioned hardness values are nominal values, the actual calibrated values may vary.

BRINELL NOMINAL VALUES

HBW 10/3000	70	100	150	170	200	250	300	350	400	450	500	550	600	650
HBW 10/1500	70	100	150	170	200	250	300	350	400	450	500	550	600	650
HBW 10/1000	70	100	150	170	200	250	300	350	400	450	500	550	600	650
HBW 10/500	70	100	150	170	200	250	300	350	400	450	500	550	600	650
HBW 10/250	70	100	150	170	200	250	300	350	400	450	500	550	600	650
HBW 5/750	70	100	150	170	200	250	300	350	400	450	500	550	600	650
HBW 5/250	70	100	150	170	200	250	300	350	400	450	500	550	600	650

Remark **XXX** Outside the ranges specified in ISO and ASTM standards.
Certificate will mention the specific measured value but will state that the value is outside the allowed range.

Block size: 150mm x 125mm x 16mm thickness

BRINELL NOMINAL VALUES

HBW 10/100	40	70	100	150	170	200	250	300	350	400	450	500	550	600
HBW 5/125	40	70	100	150	170	200	250	300	350	400	450	500	550	600
HBW 5/62.5	40	70	100	150	170	200	250	300	350	400	450	500	550	600
HBW 5/25	40	70	100	150	170	200	250	300	350	400	450	500	550	600
HBW 2.5/187.5	40	70	100	150	170	200	250	300	350	400	450	500	550	600
HBW 2.5/62.5	40	70	100	150	170	200	250	300	350	400	450	500	550	600
HBW 2.5/31.25	40	70	100	150	170	200	250	300	350	400	450	500	550	600
HBW 2.5/15.625	40	70	100	150	170	200	250	300	350	400	450	500	550	600
HBW 2.5/6.25	40	70	100	150	170	200	250	300	350	400	450	500	550	600
HBW 1/30	40	70	100	150	170	200	250	300	350	400	450	500	550	600
HBW 1/10	40	70	100	150	170	200	250	300	350	400	450	500	550	600
HBW 1/5	40	70	100	150	170	200	250	300	350	400	450	500	550	600
HBW 1/2.5	40	70	100	150	170	200	250	300	350	400	450	500	550	600
HBW 1/1	40	70	100	150	170	200	250	300	350	400	450	500	550	600

Remark **XXX** Outside the ranges specified in ISO and ASTM standards.
Certificate will mention the specific measured value but will state that the value is outside the allowed range.

Block size: \varnothing 64mm x 15mm thickness

ROCKWELL & SUPERFICIAL ROCKWELL REFERENCE HARDNESS BLOCKS

MASTERBLOCK® - DKD/MPA

A GLOBAL REFERENCE FOR HARDNESS TEST BLOCKS

ROCKWELL & SUPERFICIAL ROCKWELL REFERENCE HARDNESS BLOCKS

TEST BLOCKS SUPPLIED WITH A **MASTERBLOCK® - DKD/MPA (NEN/EN/ISO 6508-3)**

All mentioned hardness values are nominal values, the actual calibrated values may vary.

ROCKWELL

NOMINAL VALUES

HRC	20	25	30	35	40	45	50	55	60	62	63	65
HRA Soft	40	49	55									
HRA Hard	60	62	65	67	70	73	75	78	81	82	83	
HRD	40	44	48	51	55	59	63	67	71	73	75	
HR15N	68	71	74	76	79	82	85	88	90	90,8	92	
HR30N	41	46	50	55	59	64	68	72	77	79	81	
HR45N	9	25	31	37	43	49	55	60	66	69	72	

Block size: 60mm square x 16mm thickness

Weight: 0.450kg

ROCKWELL

NOMINAL VALUES

Blocks below are calibrated using a **Steel ball**

HRB	60	75	90	100								
HRE	95											
HRF	90	95										
HRG	62	81	87	94								
HRH												
HRK	76	97										
HR15T	80	87	91	92								
HR30T	56	69	77	82								
HR45T	33	53	65	72								

Block size: 60mm square x 16mm thickness

Weight: 0.450kg

ROCKWELL

NOMINAL VALUES

Blocks below are calibrated as standard using a **Carbide ball**

HRB (W)	60	75	90	100								
HRE (W)	95											
HRF (W)	90	95										
HRG (W)	62	81	87	94								
HRH (W)												
HRK (W)	76	97										
HR15T (W)	80	87	91	92								
HR30T (W)	56	69	77	82								
HR45T (W)	33	53	65	72								

Block size: 60mm square x 16mm thickness

Weight: 0.450kg

ROCKWELL

NOMINAL VALUES

HR 62.5	58	61	64	66	69	72	75	78	80	82	83	
---------	----	----	----	----	----	----	----	----	----	----	----	--

Additional loads available on request

Weight: 0.450kg

Block size: 60mm square x 16mm thickness

VICKERS REFERENCE HARDNESS BLOCKS

MASTERBLOCK® - DKD/MPA

A GLOBAL REFERENCE FOR HARDNESS TEST BLOCKS

VICKERS REFERENCE HARDNESS BLOCKS

TEST BLOCKS SUPPLIED WITH A **MASTERBLOCK® - DKD/MPA (NEN/EN/ISO 6508-3)**

All mentioned hardness values are nominal values, the actual calibrated values may vary.

STANDARD LOADS MACRO BLOCKS

NOMINAL VALUES

HV1	140	240	300	400	450	540	620	720	840		
HV2	140	240	300	400	450	540	620	720	840		
HT	140	240	300	400	450	540	620	720	840		
HV5	140	240	300	400	450	540	620	720	840		
HV10	140	240	300	400	450	540	620	720	840		
HV20	140	240	300	400	450	540	620	720	840		
HT0	140	240	300	400	450	540	620	720	840		
HV50	140	240	300	400	450	540	620	720	840		
HV60	140	240	300	400	450	540	620	720	840		
HV100	140	240	300	400	450	540	620	720	840		
HV120	140	240	300	400	450	540	620	720	840		
HV125	140	240	300	400	450	540	620	720	840		
HV150	140	240	300	400	450	540	620	720	840		

All blocks will possibly be supplied within +/- 25 Vickers of the ordered value

Macro block size: 70mm x 70mm x 70mm x 6mm thickness

Weight: 0.130kg

MICRO VICKERS

NOMINAL VALUES

HV10	240	300	400	450	540	620	720	840			
HV5	240	300	400	450	540	620	720	840			
HT	240	300	400	450	540	620	720	840			
HV2	240	300	400	450	540	620	720	840			
HV1	240	300	400	450	540	620	720	840			
HV0.5	240	300	400	450	540	620	720	840			
HV0.3	240	300	400	450	540	620	720	840			
HV0.2	240	300	400	450	540	620	720	840			
HV0.05	240	300	400	450	540	620	720	840			
HV0.03	240	300	400	450	540	620	720				
HV0.025	240	300	400	450	540	620	720				
HV0.015	240	300	400	450	540						
HV0.010	240										
HV0.005	240										

All blocks will possibly be supplied within +/- 25 Vickers of the ordered value

Micro block size: 35mm x 35mm x 35mm x 6mm thickness

Weight: 0.035kg

Polished surface

ALUMINUM VICKERS & KNOOP REFERENCE HARDNESS BLOCKS

MASTERBLOCK® - DKD/MPA

A GLOBAL REFERENCE FOR HARDNESS TEST BLOCKS

ALUMINUM VICKERS REFERENCE HARDNESS BLOCKS

TEST BLOCKS SUPPLIED WITH A **MASTERBLOCK® - DKD/MPA (NEN/EN/ISO 6508-3)**

All mentioned hardness values are nominal values, the actual calibrated values may vary.

STANDARD LOADS

NOMINAL VALUES

HV1	60	80	100								
HV2	60	80	100								
HT	60	80	100								
HV5	60	80	100								
HV10	60	80	100								
HV20	60	80	100								
HT0	60	80	100								
HV50	60	80	100								
HV60	60	80	100								

Block size: 75mm square x 16mm thickness

Weight: 0.195kg

Polished surface

KNOOP REFERENCE HARDNESS BLOCKS

TEST BLOCKS SUPPLIED WITH A **MASTERBLOCK® - DKD/MPA (ISO 4545-3 & ASTM E384)**

All mentioned hardness values are nominal values, the actual calibrated values may vary.

MICRO BLOCKS KNOOP

NOMINAL VALUES

HK0.005	140	240									
HK0.01	140	240									
HK0.015	140	240	300	400	450	540	620	720			
HK0.025	140	240	300	400	450	540	620	720			
HK0.05	140	240	300	400	450	540	620	720	840		
HK0.1	140	240	300	400	450	540	620	720	840		
HK0.2	140	240	300	400	450	540	620	720	840		
HK0.3	140	240	300	400	450	540	620	720	840		
HK0.5	140	240	300	400	450	540	620	720	840		
HK1	140	240	300	400	450	540	620	720	840		
HK2	140	240	300	400	450	540	620	720	840		

All blocks will possibly be supplied within +/- 25 knoop of the ordered value

Micro block size: 35mm x 35mm x 35mm x 6mm thickness

Weight: 0.035kg Polished surface

Macro block size HK140: 70mm x 70mm x 70mm x 6mm thickness

Weight: 0.130kg Polished surface

BRINELL REFERENCE HARDNESS BLOCKS

MASTERBLOCK® - DKD/MPA

A GLOBAL REFERENCE FOR HARDNESS TEST BLOCKS

BRINELL REFERENCE HARDNESS BLOCKS

TEST BLOCKS SUPPLIED WITH A **MASTERBLOCK® - DKD/MPA (NEN/EN/ISO 6508-3)**

All mentioned hardness values are nominal values, the actual calibrated values may vary.

BRINELL

NOMINAL VALUES

HBW 10/3000	150	200	250	300	350	400	450	500	600		
HBW 10/1500											
HBW 10/1000	150	200									
HBW 10/500	150										
HBW 5/750	150	200	250	300	350	400	450	500	600		
HBW 5/250	150	200									
HBW 5/125	150										

Block size at hardness 150 HBW: 150mm x 100mm x 16mm thickness
Block size all others: 100mm square x 16mm thickness

Weight: approx. 1.88kg
Weight: approx. 1.26kg

BRINELL

NOMINAL VALUES

HBW 2.5/187.5	100	150	200	250	300	350	400	450	500	600	
HBW 2.5/62.5	100	150	200								
HBW 2.5/31.25	100										
HBW 2.5/15.625	100										
HBW 1/30	150	240	300	400	450	540	620				
HBW 1/10	150	240									
HBW 1/5	150										

Above reference blocks HBW1 have a polished surface

Block size: 70mm x 70mm x 70mm x 6mm thickness

Weight: approx. 0.13kg

ALUMINUM BRINELL REFERENCE HARDNESS BLOCKS

MASTERBLOCK® - DKD/MPA

A GLOBAL REFERENCE FOR HARDNESS TEST BLOCKS

ALUMINUM BRINELL REFERENCE HARDNESS BLOCKS

TEST BLOCKS SUPPLIED WITH A **MASTERBLOCK® - DKD/MPA (DIN/EN/ISO 6506-3)**

All mentioned hardness values are nominal values, the actual calibrated values may vary.

BRINELL

NOMINAL VALUES

HBW 10/1000	60	80	100								
HBW 10/500	60	80	100								
HBW 10/250	60	80									
HBW 5/250	60	80	100								
HBW 5/125	60	80	100								
HBW 5/62.5	60	80									

Block size: 150mm x 100mm x 16mm thickness

Weight: approx. 0.520kg

BRINELL

NOMINAL VALUES

HBW 2.5/62.5	60	80	100								
HBW 2.5/31.25	60	80	100								
HBW 2.5/15.625	60	80									

Block size: 75mm square x 16mm thickness

Weight: approx. 0.195kg