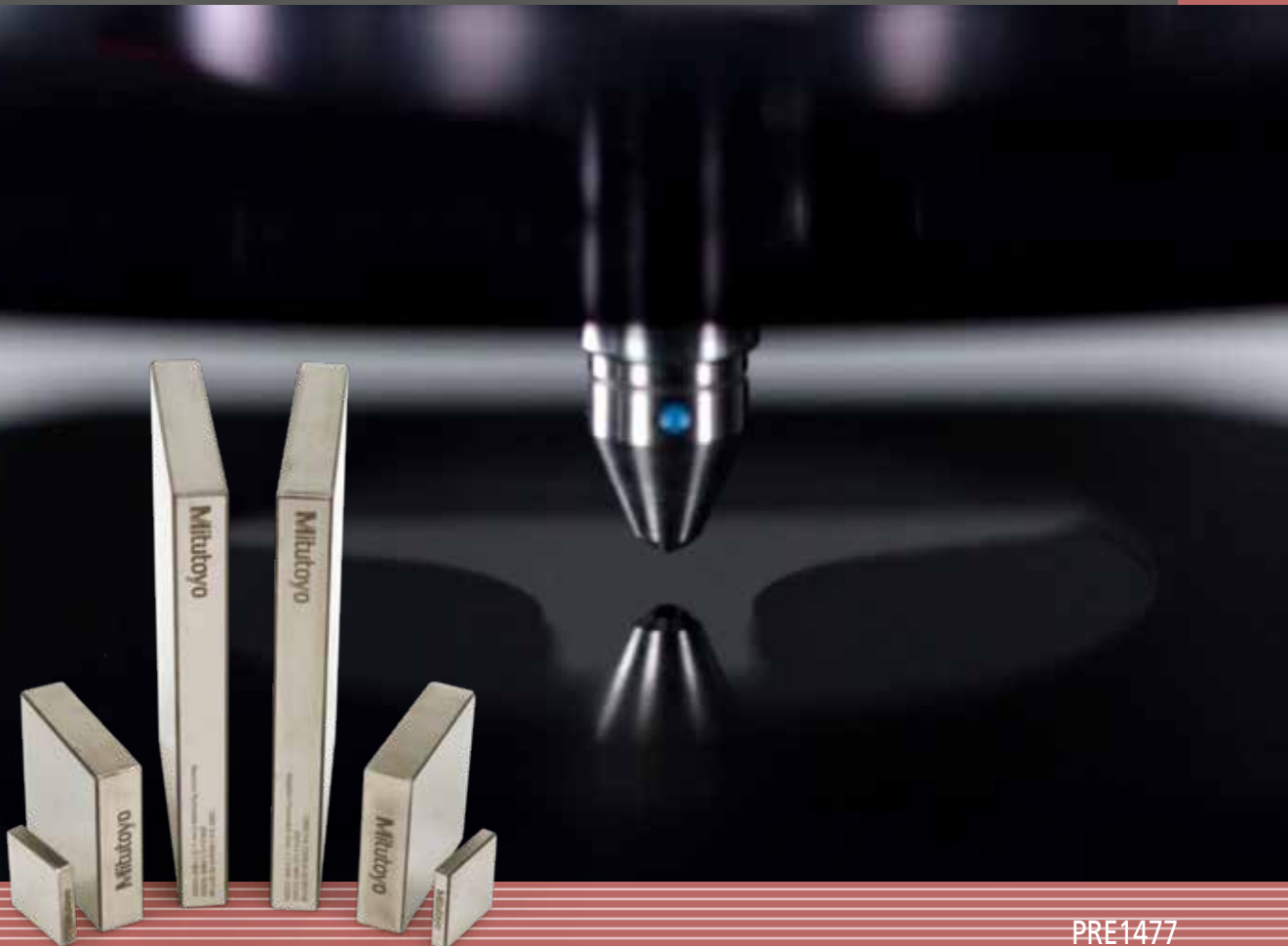


HARDNESS REFERENCE MATERIALS AND INDENTERS

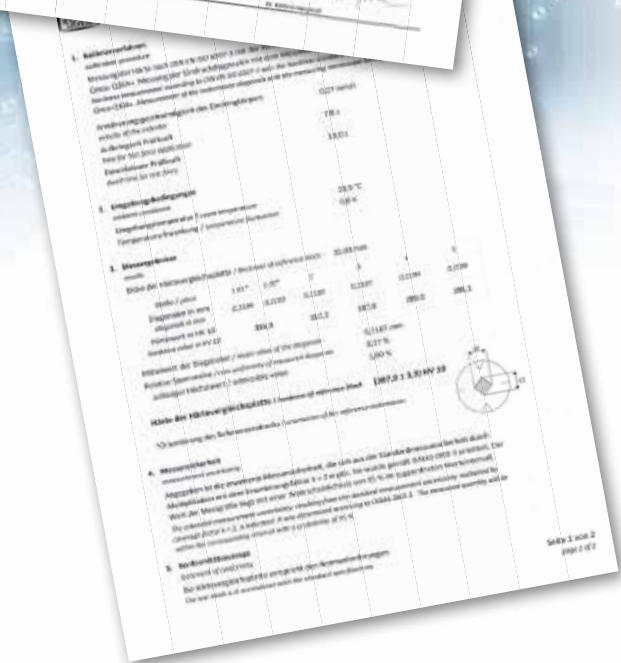
ACCESSORIES FOR HARDNESS TESTING

TEST EQUIPMENT
AND SEISMOMETERS



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Hardness reference materials in quality control: The boost for your process safety!

The daily verification, performed by the user, is described in the according hardness testing standards and significantly contributes to quality management processes.

In the daily verification process, all parameters of the hardness test system that build up to the hardness value, are examined by indentations on the hardness reference material.

This periodical inspection of the machine by means of hardness reference materials should be carried out immediately before the daily start of the test schedule.

If the device is used only once a week, the check should only be done on that day.

In three-shift operation, a check at the beginning of each shift makes sense.

Vickers, Knoop and Brinell HVP have a reference indentation for checking the optical measuring system.

During the calibration process of the hardness reference material, the reference indentation is marked on the surface of the test block (see image on the right) and the measurements are recorded in the calibration certificate. After measuring the reference indentation, the determined values can be compared with those in the calibration certificate and the function of the optical measuring system can be assessed.

An according documentation enhances the process safety, as value shifts due to damage or malfunction can be detected easily.

A comprehensive direct and indirect verification should be performed once a year as part of a calibration. The direct examination includes test force, measuring system, test cycle and indenter. Indirect testing using hardness reference material block, indicate the correct interaction of all the parameters that were checked in the direct verification of the testing machine. In addition, the repeatability of results of the hardness testing machine can also be checked with the hardness test blocks.



Brinell reference
indentation

Mitutoyo reference materials:

- First-class quality Made in Germany
- Independent DAkkS calibration according to DIN EN ISO in an accredited laboratory
- Multiple calibrations (up to 3 scales on one test block), surface grid and calibrations according to ASTM on request
- Large square or rectangular surface with large
- Space advantage over triangular or round plates
- Short delivery time
- MPE "Maximum Permitted Error" of the hardness testing system engraved – all relevant information at a glance

12599 D-K-15009-01-00 2017-08
(387,8 ± 3,9) HV 10
Maximum Permissible Error: ± 11,6 HV 10

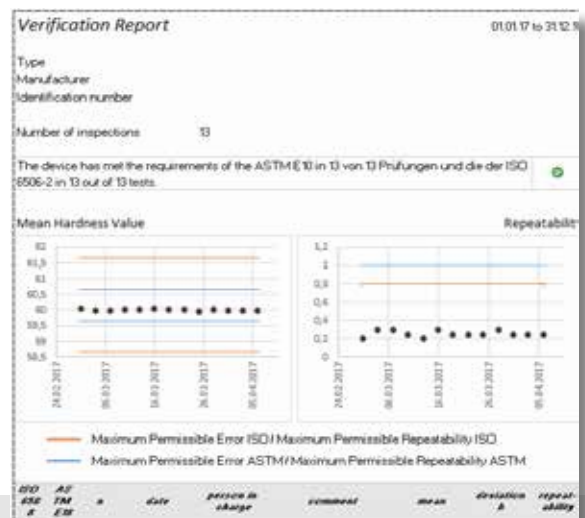
Daily verification report software

This free of charge excel sheet supports you with your daily verification schedule of your hardness testing machines. At a glance overview if your system is working up to standard.

By inputting the calibration number of your original Mitutoyo hardness reference material, the calibration data is collected online and filled into the software.

Collect and document data for

- Daily verification (with reporting)
- Statistics
- Uncertainty of measurement





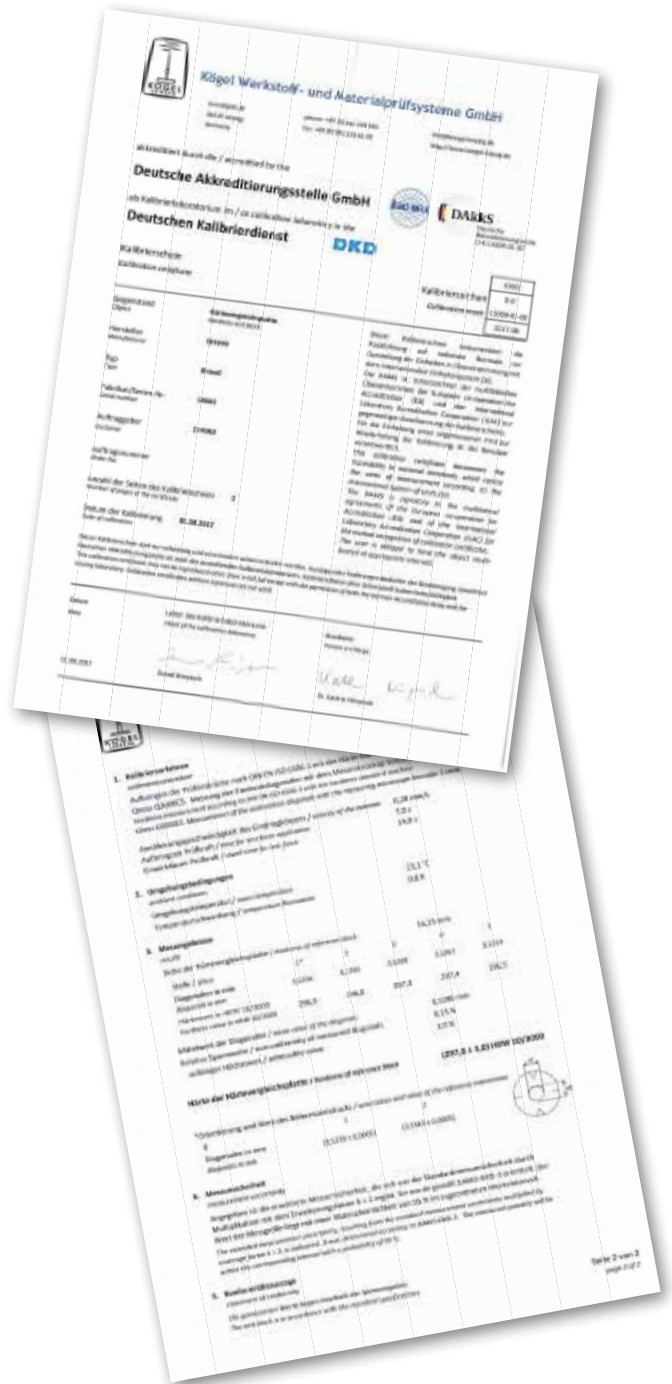
Order no.	Value and scale	Certificate, dimensions and material
HR30N		
63ETB101	41 HR30N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB102	46 HR30N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB103	50 HR30N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB104	55 HR30N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB105	59 HR30N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB106	64 HR30N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB107	68 HR30N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB108	73 HR30N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB109	77 HR30N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB110	80 HR30N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB111	82 HR30N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB112	83 HR30N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
HR45N		
63ETB114	19 HR45N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB115	25 HR45N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB116	31 HR45N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB117	37 HR45N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB118	43 HR45N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB119	49 HR45N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB120	55 HR45N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB121	61 HR45N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB122	66 HR45N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB123	70 HR45N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB124	72 HR45N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB125	74 HR45N HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
HR15TW		
63ETB1010	67 HR15TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm alu.
63ETB128	73 HR15TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm alu.
63ETB1011	80HR15TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm alu.
63ETB130	82 HR15TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm alu.
63ETB131	88 HR15TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm alu.
63ETB132	90 HR15TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB133	91 HR15TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB134	93 HR15TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
HR30TW		
63ETB139	43 HR30TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm alu.
63ETB141	60 HR30TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm alu.
63ETB142	73 HR30TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm alu.
63ETB143	76 HR30TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm alu.
63ETB144	80 HR30TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB145	83 HR30TW HTB Rockwell non standard	with works certificate 60x60x16mm steel

Order no.	Value and scale	Certificate, dimensions and material
HR45TW		
63ETB147	12 HR45TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm alu.
63ETB149	38 HR45TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm alu.
63ETB151	58 HR45TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm alu.
63ETB152	63 HR45TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB153	68 HR45TW HTB Rockwell ISO 6508-3	with DAkkS certificate 60x60x16mm steel
63ETB154	73 HR45TW HTB Rockwell non standard	with works certificate 60x60x16mm steel
VDI/VDE 2616-1		
63ETB157	65 HR 2,5/31,25 HTB HBT VDI/VDE 2616-1	60x60x16mm alu.
63ETB159	72 HR 2,5/62,5 HTB HBT VDI/VDE 2616-1	60x60x16mm alu.
63ETB1012	80 HR 2,5/62,5 HTB HBT VDI/VDE 2616-1	60x60x16mm alu.
63ETB161	85 HR 2,5/62,5 HTB HBT VDI/VDE 2616-1	60x60x16mm alu.
63ETB164	53 HR 2,5/187,5 HTB HBT VDI/VDE 2616-1	60x60x16mm steel
63ETB165	61 HR 2,5/187,5 HTB HBT VDI/VDE 2616-1	60x60x16mm steel
63ETB167	73 HR 2,5/187,5 HTB HBT VDI/VDE 2616-1	60x60x16mm steel



Brinell

Order no.	Value and scale	Certificate, dimensions and material
HBW 10/500		
63ETB434	80HBW 10/500 HTB Brinell ISO 6506-3	with DAkkS certificate 150x100x16mm alu.
63ETB435	110HBW 10/500 HTB Brinell non standard	with works certificate 150x100x16mm alu.
63ETB436	130HBW 10/500 HTB Brinell non standard	with works certificate 150x100x16mm alu.
63ETB437	160HBW 10/500 HTB Brinell non standard	with works certificate 150x100x16mm alu.
63ETB438	200HBW 10/500 HTB Brinell non standard	with works certific. 150x100x16mm steel
63ETB439	250HBW 10/500 HTB Brinell non standard	with works certific. 150x100x16mm steel
63ETB440	300HBW 10/500 HTB Brinell non standard	with works certific. 150x100x16mm steel
63ETB441	350HBW 10/500 HTB Brinell non standard	with works certific. 150x100x16mm steel
63ETB442	400HBW 10/500 HTB Brinell non standard	with works certific. 150x100x16mm steel
63ETB443	450HBW 10/500 HTB Brinell non standard	with works certific. 150x100x16mm steel
63ETB444	500HBW 10/500 HTB Brinell non standard	with works certific. 150x100x16mm steel
63ETB445	550HBW 10/500 HTB Brinell non standard	with works certific. 150x100x16mm steel
63ETB446	600HBW 10/500 HTB Brinell non standard	with works certific. 150x100x16mm steel
63ETB447	650HBW 10/500 HTB Brinell non standard	with works certific. 150x100x16mm steel
HBW 10/1000		
63ETB450	80HBW 10/1000 HTB Brinell ISO 6506-3	with DAkkS certificate 150x100x16mm alu.
63ETB451	110HBW 10/1000 HTB Brinell ISO 6506-3	with DAkkS certificate 150x100x16mm alu.
63ETB452	130HBW 10/1000 HTB Brinell ISO 6506-3	with DAkkS certificate 150x100x16mm alu.
63ETB453	160HBW 10/1000 HTB Brinell ISO 6506-3	with DAkkS certificate 150x100x16mm alu.
63ETB454	200HBW 10/1000 HTB Brinell ISO 6506-3	with DAkkS certific. 150x100x16mm steel
63ETB455	250HBW 10/1000 HTB Brinell non standard	with works certific. 150x100x16mm steel
63ETB456	300HBW 10/1000 HTB Brinell non standard	with works certific. 150x100x16mm steel
63ETB457	350HBW 10/1000 HTB Brinell non standard	with works certific. 150x100x16mm steel
63ETB458	400HBW 10/1000 HTB Brinell non standard	with works certific. 150x100x16mm steel
63ETB459	450HBW 10/1000 HTB Brinell non standard	with works certific. 150x100x16mm steel
63ETB460	500HBW 10/1000 HTB Brinell non standard	with works certific. 150x100x16mm steel
63ETB461	550HBW 10/1000 HTB Brinell non standard	with works certific. 150x100x16mm steel
63ETB462	600HBW 10/1000 HTB Brinell non standard	with works certific. 150x100x16mm steel
63ETB463	650HBW 10/1000 HTB Brinell non standard	with works certific. 150x100x16mm steel
HBW 10/3000		
63ETB480	80HBW 10/3000 HTB Brinell non standard	with works certificate 150x100x16mm alu.
63ETB481	110HBW 10/3000 HTB Brinell ISO 6506-3	with DAkkS certificate 150x100x16mm alu.
63ETB482	130HBW 10/3000 HTB Brinell ISO 6506-3	with DAkkS certificate 150x100x16mm alu.
63ETB483	160HBW 10/3000 HTB Brinell ISO 6506-3	with DAkkS certificate 150x100x16mm alu.
63ETB484	200HBW 10/3000 HTB Brinell ISO 6506-3	with DAkkS certific. 150x100x16mm steel
63ETB485	250HBW 10/3000 HTB Brinell ISO 6506-3	with DAkkS certific. 150x100x16mm steel
63ETB486	300HBW 10/3000 HTB Brinell ISO 6506-3	with DAkkS certific. 150x100x16mm steel
63ETB487	350HBW 10/3000 HTB Brinell ISO 6506-3	with DAkkS certific. 150x100x16mm steel
63ETB488	400HBW 10/3000 HTB Brinell ISO 6506-3	with DAkkS certific. 150x100x16mm steel
63ETB489	450HBW 10/3000 HTB Brinell ISO 6506-3	with DAkkS certific. 150x100x16mm steel
63ETB490	500HBW 10/3000 HTB Brinell ISO 6506-3	with DAkkS certific. 150x100x16mm steel
63ETB491	550HBW 10/3000 HTB Brinell ISO 6506-3	with DAkkS certific. 150x100x16mm steel
63ETB492	600HBW 10/3000 HTB Brinell ISO 6506-3	with DAkkS certific. 150x100x16mm steel
63ETB493	650HBW 10/3000 HTB Brinell ISO 6506-3	with DAkkS certific. 150x100x16mm steel



Knoop

Order no.	Value and scale	Certificate, dimensions and material
HK 2		
63ETB496	140HK2 HTB Knoop ISO 4545-3	with DAKkS certificate 60x60x16mm steel
63ETB512	240HK2 HTB Knoop ISO 4545-3	with DAKkS certificate 60x60x16mm steel
63ETB513	300HK2 HTB Knoop ISO 4545-3	with DAKkS certificate 60x60x16mm steel
63ETB529	400HK2 HTB Knoop ISO 4545-3	with DAKkS certificate 60x60x16mm steel
63ETB530	450HK2 HTB Knoop ISO 4545-3	with DAKkS certificate 60x60x16mm steel
63ETB546	540HK2 HTB Knoop ISO 4545-3	with DAKkS certificate 60x60x16mm steel
63ETB547	620HK2 HTB Knoop ISO 4545-3	with DAKkS certificate 60x60x16mm steel
63ETB593	720HK2 HTB Knoop ISO 4545-3	with DAKkS certificate 60x60x16mm steel
63ETB594	840HK2 HTB Knoop ISO 4545-3	with DAKkS certificate 60x60x16mm steel

Leeb reference materials

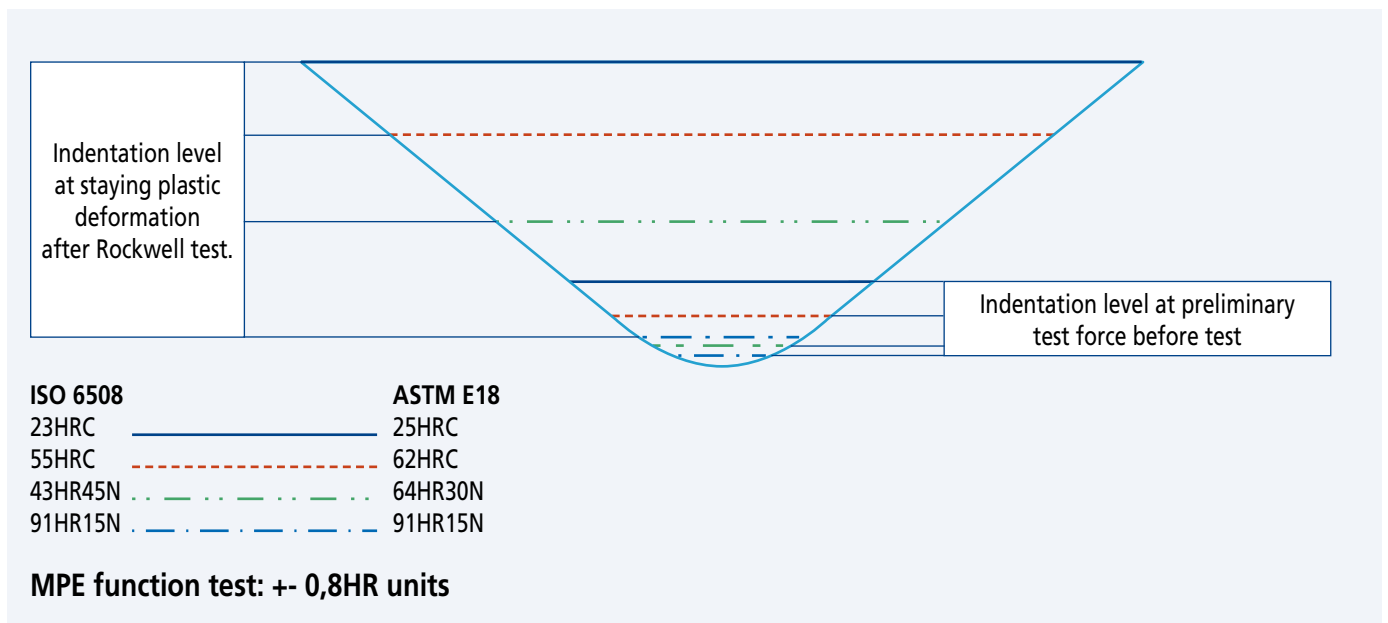
Order no.	Value and scale	Certificate, dimensions and material
63HLD010	500 HLD Reference material Leeb ISO 16859-3/ASTM A956	steel Ø90x54mm with Dakks certificate
63HLD011	650 HLD Reference material Leeb ISO 16859-3/ASTM A956	steel Ø90x54mm with Dakks certificate
63HLD012	800 HLD Reference material Leeb ISO 16859-3/ASTM A956	steel Ø90x54mm with Dakks certificate

Rockwell Diamond indenter - Function Test

Additionally to the geometrical specification for the calibration of Rockwell diamond indenters, a „function test“ is described in the relevant standards ISO 6508-2 and ASTM E-18.

The intention is to verify the applicability of the indenter in regard of various indentation depth levels under different test forces.

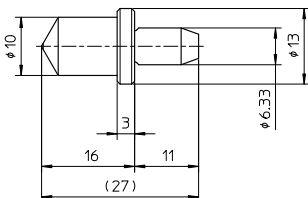
The diagram shows 4 indentation levels, as described in the ISO standard.



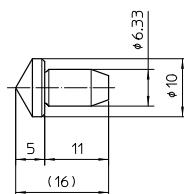
Rockwell indenters and spare carbide balls

Code number	Rockwell Diamond indenters		Applicable machines
63DIA001	Diamond Indenter Rockw. ISO 6508-2 HRA HRC HRD HRN	with DAkkS certificate and Function test Table 4, standard shape	All Mitutoyo Rockwell testing machines
63DIA021	Diamond Ind. Rockw. ISO 6508-2 HRA HRC HRD	with DAkkS certificate and Function test Table 5, standard shape	All Mitutoyo Rockwell testing machines
63DIA022	Diamond Ind. Rockw. Superficial ISO 6508-2 HRN	with DAkkS certificate and Function test Table 6, standard shape	All Mitutoyo Rockwell testing machines
63DIA002	Diamond Ind. Rockw. ISO 6508-2	with DAkkS cert. without Function test, standard shape	All Mitutoyo Rockwell testing machines
63DIA004	Diamond Indenter Rockw. ASTM E-18	with DAkkS certificate and Function test, standard shape	All Mitutoyo Rockwell testing machines
63DIA006	10HRC Diamond Indenter Rockwell ISO 6508-2	with DAkkS certificate and Function test, standard shape	All Mitutoyo Rockwell testing machines
63DIA007	HR-500 Diamond Indenter Rockwell ISO6508-2	with DAkkS cert. without Function test, short type HR-500 only	HR-500 Series only
63DIA008	Diamond Indenter Rockwell ISO6508-2 long	with DAkkS certificate and Function test l = 28mm	All Mitutoyo Rockwell testing machines
63DIA009	Diamond Indenter Rockwell ISO6508-2	with DAkkS certificate and Function test w = 6mm, slim type	All Mitutoyo Rockwell testing machines

Standard shape diamond indenter



Short type diamond indenter 63DIA007 for inside testing from 22mm



Code number	Rockwell carbide ball indenters		Applicable machines
11AAD465	Rockwell carbide ball indenter $\phi 1,5875\text{mm}$	Marked with Serial No., w/o certificate	All Mitutoyo Rockwell testing machines
11AAD466	Rockwell carbide ball indenter $\phi 3,175\text{mm}$	Marked with Serial No., w/o certificate	All Mitutoyo Rockwell testing machines
11AAD467	Rockwell carbide ball indenter $\phi 6,35\text{mm}$	Marked with Serial No., w/o certificate	All Mitutoyo Rockwell testing machines
11AAD468	Rockwell carbide ball indenter $\phi 12,7\text{mm}$	Marked with Serial No., w/o certificate	All Mitutoyo Rockwell testing machines



Code number	Replacement Carbide balls Rockwell test		
19BAA507	Carbide Ball Rockwell $\phi 1,5875\text{mm}$	w/o certificate	1 pc.
19BAA508	Carbide Ball Rockwell $\phi 3,175\text{mm}$	w/o certificate	1 pc.
19BAA509	Carbide Ball Rockwell $\phi 6,35\text{mm}$	w/o certificate	1 pc.
19BAA510	Carbide Ball Rockwell $\phi 12,7\text{mm}$	w/o certificate	1 pc.
63BAL005	Carbide Ball Rockwell $\phi 1,5875\text{mm}$	ISO 6506-2 with DAkkS certificate	1 pc.
63BAL006	Carbide Ball Rockwell $\phi 3,175\text{mm}$	ISO 6506-2 with DAkkS certificate	1 pc.
63BAL007	Carbide Ball Rockwell $\phi 6,35\text{mm}$	ISO 6506-2 with DAkkS certificate	1 pc.
63BAL008	Carbide Ball Rockwell $\phi 12,7\text{mm}$	ISO 6506-2 with DAkkS certificate	1 pc.
63BAL013	Carbide Ball Rockwell $\phi 1,5875\text{mm}$	ASTM E-18 with DAkkS certificate	1 pc.
63BAL014	Carbide Ball Rockwell $\phi 3,185\text{mm}$	ASTM E-18 with DAkkS certificate	1 pc.
63BAL015	Carbide Ball Rockwell $\phi 6,35\text{mm}$	ASTM E-18 with DAkkS certificate	1 pc.
63BAL016	Carbide Ball Rockwell $\phi 12,7\text{mm}$	ASTM E-18 with DAkkS certificate	1 pc.

Brinell indenters and spare carbide balls

Code number	Brinell carbide ball indenters		Applicable machines
11AAD469	Brinell carbide ball indenter $\phi 1,0\text{mm}$	Marked with Serial No., w/o certificate	All Mitutoyo Rockwell testing machines
11AAD470	Brinell carbide ball indenter $\phi 2,5\text{mm}$	Marked with Serial No., w/o certificate	All Mitutoyo Rockwell testing machines
11AAD471	Brinell carbide ball indenter $\phi 5,0\text{mm}$	Marked with Serial No., w/o certificate	All Mitutoyo Rockwell testing machines
11AAD472	Brinell carbide ball indenter $\phi 10,0\text{mm}$	Marked with Serial No., w/o certificate	All Mitutoyo Rockwell testing machines



11AAD469



11AAD470



11AAD471



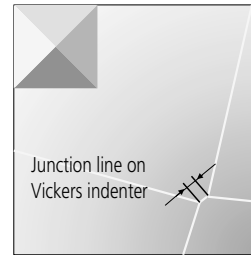
11AAD472

Code number	Replacement Carbide balls Brinell test		
19BAA281	Carbide Ball Brinell $\phi 1,0\text{mm}$	w/o certificate	1 pc.
19BAA283	Carbide Ball Brinell $\phi 2,5\text{mm}$	w/o certificate	1 pc.
19BAA162	Carbide Ball Brinell $\phi 5,0\text{mm}$	w/o certificate	1 pc.
19BAA163	Carbide Ball Brinell $\phi 10,0\text{mm}$	w/o certificate	1 pc.
63BAL001	Carbide Ball Brinell $\phi 1,0\text{mm}$	ISO 6506-2 with DAkkS certificate	1 pc.
63BAL002	Carbide Ball Brinell $\phi 2,5\text{mm}$	ISO 6506-2 with DAkkS certificate	1 pc.
63BAL003	Carbide Ball Brinell $\phi 5,0\text{mm}$	ISO 6506-2 with DAkkS certificate	1 pc.
63BAL004	Carbide Ball Brinell $\phi 10,0\text{mm}$	ISO 6506-2 with DAkkS certificate	1 pc.
63BAL009	Carbide Ball Brinell $\phi 1,0\text{mm}$	ASTM E-10 with DAkkS certificate	1 pc.
63BAL010	Carbide Ball Brinell $\phi 2,5\text{mm}$	ASTM E-10 with DAkkS certificate	1 pc.
63BAL011	Carbide Ball Brinell $\phi 5,0\text{mm}$	ASTM E-10 with DAkkS certificate	1 pc.
63BAL012	Carbide Ball Brinell $\phi 10,0\text{mm}$	ASTM E-10 with DAkkS certificate	1 pc.



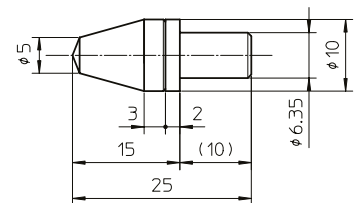
Vickers indenters

The grinding process for Vickers diamond indenters leaves a junction line at the point, where the faces of the diamond join together, rather than having a perfect tip. ISO and ASTM standards define the maximum length of the junction line in dependence to the test force that is being used. Due to the obtained length, the indenter is classified for the use in different testforce ranges. The values in the table include uncertainty of measurement.

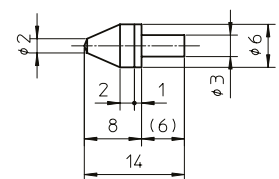


Parameters for Vickers indenters DIN EN ISO	6507-2
Plane angle	136° ± 30'
Junction line between opposite faces	junction line
HV 5	2,0 µm
HV 0,2 - HV5	1,0 µm
HV 0,01 - 0,2	0,5 µm

Code number	Vickers diamond indenters		Applicable machines
63DIA011	Diamond Indenter Vickers HV 0,2	ISO 6507-2 with DAkkS certificate, HV/AVK-Series	HV-100 Series, HV-112, HV-114, AVK Series
63DIA012	Diamond Indenter Vickers HV 5	ISO 6507-2 with DAkkS certificate, HV/AVK-Series	HV-100 Series, HV-112, HV-114, AVK Series
63DIA020	Diamond Indenter Vickers HV 0,2	ASTM E92 with DAkkS certificate, HV/AVK-Series	HV-100 Series, HV-112, HV-114, AVK Series

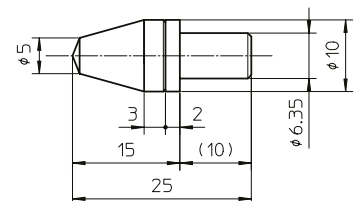


63DIA015	Diamond Indenter Vickers HV0,01	ISO 6507-2 with DAkkS certificate, HM/MVK-Series	HM-100 Series, HM-200 Series, MVK Series
63DIA016	Diamond Indenter HV0,2	ISO 6507-2 with DAkkS certificate, HM/MVK-Series	HM-100 Series, HM-200 Series, MVK Series
63DIA019	Diamond Indenter HV 0,01	ASTM E92 with DAkkS certificate, HM/MVK-Series	HM-100 Series, HM-200 Series, MVK Series

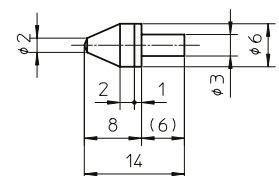


Knoop indenters

Code number	Knoop diamond indenters		Applicable machines
63DIA014	Diamond Indenter Knoop HK	ISO 4545-2 with DAkkS certificate, HV/AVK-Series	HV-100 Series, HV-112, HV-114, AVK Series
63DIA018	Diamond Indenter Knoop HK	ASTM E92 with DAkkS certificate, HM/MVK-Series	HV-100 Series, HV-112, HV-114, AVK Series



63DIA013	Diamond Indenter Knoop HK	ISO 4545-2 with DAkkS certificate, HM/MVK-Series	HM-100 Series, HM-200 Series, MVK Series
63DIA017	Diamond Indenter Knoop HK	ASTM E92 with DAkkS certificate, HM/MVK-Series	HM-100 Series, HM-200 Series, MVK Series

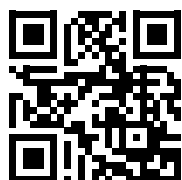




**Whatever your challenges are,
Mitutoyo supports you from start to finish.**

Mitutoyo is not only a manufacturer of top quality measuring products but one that also offers qualified support for the lifetime of the equipment, backed up by comprehensive services that ensure your staff can make the very best use of the investment.

Apart from the basics of calibration and repair, Mitutoyo offers product and metrology training, as well as IT support for the sophisticated software used in modern measuring technology. We can also design, build, test and deliver bespoke measuring solutions and even, if deemed cost-effective, take your critical measurement challenges in-house on a sub-contract basis.



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Mitutoyo

Mitutoyo Europe GmbH

Borsigstraße 8-10
41469 Neuss

Tel. +49 (0) 2137-102-0
Fax +49 (0) 2137-102-351

info@mitutoyo.eu
www.mitutoyo.eu