

HARDNESS REFERENCE BLOCKS ALL SCALES

With official calibration certificates UKAS, DKD or ASTM

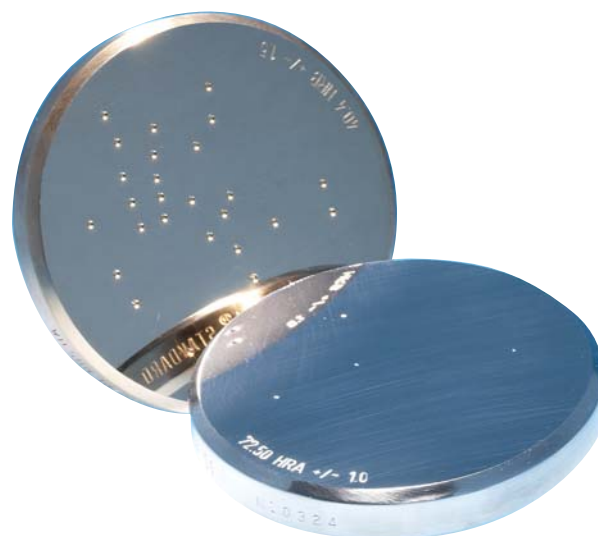
CV Instruments hardness reference blocks are used for annual verification and calibration of hardness testing machines, as well as for periodical check and sometimes for overtaking of hardness scales on a hardness testing machine. That's why hardness reference blocks are a necessary help of industrial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

The hardness reference 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 hardness reference block made of aluminium was developed for the lower hardness range which can not be covered by steel, using new materials technology methods.

When using hardness reference 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 hardness reference block shall only be used as according to the standards to that method and test condition for which it was calibrated.

CV Instruments certified hardness reference blocks are available as follows and all conform to the international standards as mentioned above.



All CV Instruments hardness reference 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

CV Instruments certified hardness reference blocks are available as follows and all conform to the international standards as mentioned above.

Scale	UKAS	DKD	DKD/MPA	ASTM	CV
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.

Hardness reference "soft" blocks made of aluminium

These CV Instruments reference 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 aluminium.

They are available in lower nominal values in Rockwell, Brinell and Vickers scales. Ask for our separate sales list.

INDENTORS FOR ALL HARDNESS SCALES

With official calibration certificates UKAS, DKD or ASTM

CV Instruments 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 (see below).

Specials

CV Instruments also offer special adapters for indentors to enlarge the field of application. Small gooseneck adapters 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 adapters 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 indentor) 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.

Ask for our separate product list of indentors.



Indentor type CV Instruments

Scale	UKAS	DKD	ASTM	CV
Rockwell type 120° diamond cone	■	■	■	■
Rockwell ball indentors	■	■	■	■
Steel Rockwell ball indentor - 1/16" dia.				
Steel Rockwell ball indentor - 1/8" dia.				
Steel Rockwell ball indentor - 1/4" dia.				
Steel Rockwell ball indentor - 1/2" dia.				
Carbide Rockwell ball indentor - 1/16" dia.				
Carbide Rockwell ball indentor - 1/8" dia.				
Carbide Rockwell ball indentor - 1/4" dia.				
Carbide Rockwell ball indentor - 1/2" dia.				
Spare steel balls Rockwell in packs of 10	■	■	■	■
Spare carbide balls Rockwell (singles)	■	■	■	■
Brinell ball indentors	■	■	□	■
Carbide ball indentor - 1mm dia.				
Carbide ball indentor - 2mm dia.				
Carbide ball indentor - 2.5mm dia.				
Carbide ball indentor - 5mm dia.				
Carbide ball indentor - 10mm dia.				
Spare Brinell carbide balls (singles) all sizes	■	■	□	■
Vickers Pyramid 136°	■	■	■	■
Micro Vickers 136°	■	■	■	■
Micro Knoop	■	■	■	■