



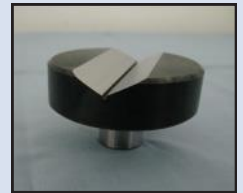
Vickers Hardness Testing Machines
KBW 1/2-V Standalone
KBW 10/50-V Standalone



KBW 1-V Vickers Standalone



KBW 10-V Vickers Standalone



KBW 1-V Standalone
KBW 2-V Standalone
KBW 10-V Standalone
KBW 50-V Standalone

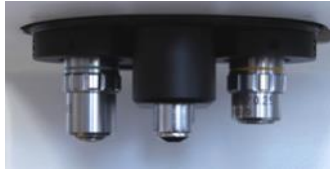
Micro
Macro
Hardness Testing Machines
Including automatic toll changer

Vickers
Knoop

Hardness tester for the micro, low load and macro range KBW 1/2/10/50-V Standalone

- ◆ Fully automatic turret with up to 5 positions

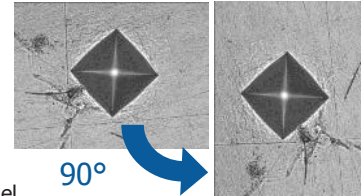
3 installed positions



5 installed positions

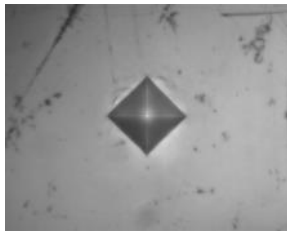


- ◆ Various objectives can be adjusted via the operating panel
- ◆ After the indentation setting the measuring objective will be positioned automatically.
- ◆ The projection of the indentation can be automatically rotated by 90° by the push of one button. The ocular does not need to be manually turned for the measurement of the second diagonal.

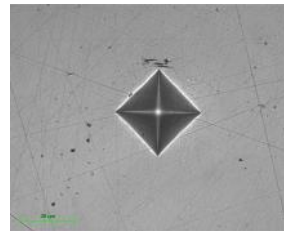


- ◆ The dwell time can be adjusted between 5 seconds and 99 seconds via the operating panel.
- ◆ LED illumination for higher contrast and higher sharpness

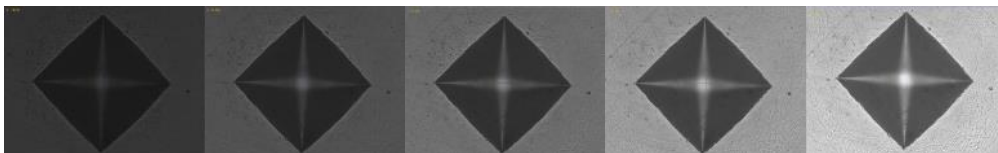
Without LED



KBW: Including LED



- ◆ The
tion
steps



LED illumina-
tion can be ad-
justed in 16

Standard equipment KBW 1/2-V

- Standard automatic 5-fold turret
- LED illumination
- 2 test blocks HV 1 und HV 0,2 with factory certificate
- Vickers indenter with factory certificate
- Basic objectives: 10x and 40x
- Manual X/Y-stage 110x110 mm incl. 25x25mm travel distance and analogue measuring screws
- Machine cover
- Auxiliary tools
- Accessory Box
- 10x measuring ocular

Standard equipment KBW 10/50-V

- Standard automatic 5-fold turret
- LED illumination
- 2 test blocks HV 1 and HV 010 with factory certificate
- Vickers indenter with factory certificate
- Basic objectives KBW 10-V: 10x and 40x
- Basic objective KBW 50-V: 10x
- Test table diameter 80 mm
- 2 Anvils V-shaped big and small
- Machine Cover
- Auxiliary tools
- Accessory Box
- 10x measuring ocular

Technical Data

Resolution with the 5 MP USB camera

| Objective | Resolution | KBW 1-V | KBW 2-V | KBW 10-V | KBW 50-V |
|-----------|------------|---------|---------|----------|----------|
| 5x | 0,48 | ○ | ○ | ○ | ○ |
| 10x | 0,24 | ■ | ■ | ■ | ■ |
| 20x | 0,12 | ○ | ○ | ○ | ○ |
| 40x | 0,06 | ■ | ■ | ■ | ○ |
| 80x | 0,03 | ○ | ○ | ○ | ○ |

■ Standard

○ Optional

The KBW hardness tester can be equipped with 1, 2, 3 or 4

Attention:

If the resolution is smaller than 0,2 µm, also diagonals smaller 40 µm can be measured acc. to standard.

Load step range

| Machine type | Load range |
|--------------|-----------------|
| KBW 1-V | 0,01 - 1 [kgf] |
| KBW 2-V | 0,025 - 2 [kgf] |
| KBW 10-V | 0,5 - 10 [kgf] |
| KBW 50-V | 1 - 50 [kgf] |

Dimensions

| Machine type | KBW 1-V | KBW 2-V | KBW 10-V | KBW 50-V |
|-------------------|----------|----------|----------|----------|
| Weight | 43 kg | 43 kg | 83 kg | 83 kg |
| Throat | 118 mm | 118 mm | 160 mm | 160 mm |
| Test height | 90 mm | 90 mm | 200 mm | 200 mm |
| Resolution Z-axis | 0,005 µm | 0,005 µm | 0,005 µm | 0,005 µm |

Load steps



Vickers acc. to DIN EN ISO 6507 and ASTM E 384

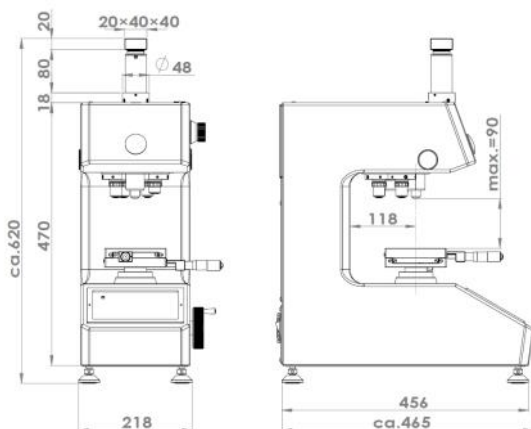
| Load step | 0,01 | 0,025 | 0,05 | 0,1 | 0,2 | 0,3 | 0,5 | 1 | 2 | 3 | 5 | 10 | 20 | 30 | 50 |
|-----------|------|-------|------|-----|-----|-----|-----|---|---|---|---|----|----|----|----|
| KBW 1 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | |
| KBW 2 | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | |
| KBW 10 | | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| KBW 50 | | | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |



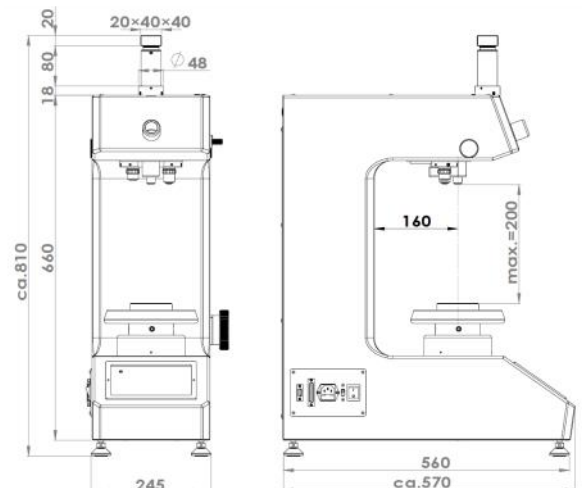
Knoop (optional) acc. to DIN EN ISO 4545 and ASTM E 384

| Load step | 0,01 | 0,025 | 0,03 | 0,05 | 0,1 | 0,2 | 0,3 | 0,5 | 1 |
|-----------|------|-------|------|------|-----|-----|-----|-----|---|
| KBW 1 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| KBW 2 | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

KBW 1-V and KBW 2-V



KBW 10-V and KBW 50-V



Your Representative



KB Prüftechnik GmbH
Im Weichlingsgarten 10 b
67126 Hochdorf – Assenheim

Tel: +49-6231 – 93992-0
Fax: +49-6231 – 93992-69

Email: info@kbprueftechnik.de
Internet: www.kbprueftechnik.com

Information with reservation.