



# Rockwell Hardness Testing Machines



**KB 150 R**



**KBE 150 R**

**KB 150 R**

Rockwell  
Super Rockwell  
Hardness Testing Machine

Testing Machine with  
Depth Measurement

**KBE 150 R**



**KB 150 R Rockwell**  
**Hardness Testing from 0,2 kg - 250 kg**



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**Rockwell  
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**Testing Machine with  
Depth Measurement**

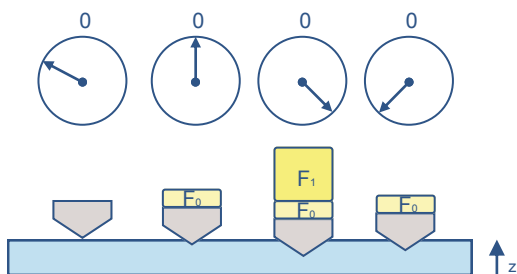
## KB 150 R - The Rockwell Specialist



- Customized settings
- Motor controlled load application

### Standard Accessories

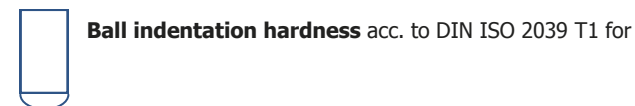
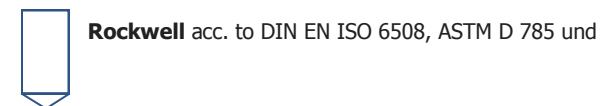
- Bright color LCD display
- 200 free adjustable test programs
- Spindle protection
- Clamping head with flexible holding down devices
- Elevation screw with hand wheel
- Standard load range 0,5-150 kgf
- Conversion tables acc. to DIN EN ISO 18265 (without copper) and DIN 50150



The superior hardness testing machine of KB Prüftechnik, Germany, test samples acc. to Rockwell with an **extremely high Rockwell resolution of 0.0125 HRC**.

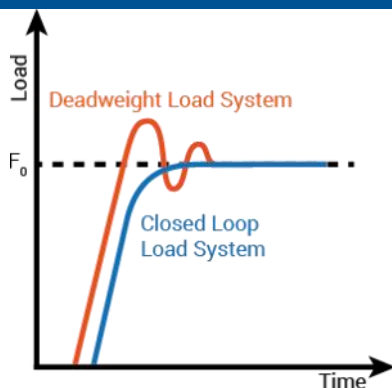
Every single Rockwell testing procedure can be calibrated by the operator. The Rockwell testing procedures have to be calibrated after an indenter change to reduce the indenter-dependent influence on the test value. The Rockwell calibration is protected from other oper-

## Test Procedures (controlled by one load cell)



HRA- HRB- HRC- HRD- HRE- HRF- HRG- HRH- HRK- HRL- HRM- HRP- HRR- HRS- HRV	HR 15/ 30/ 45 W
HR 15/ 30/ 45 N	HR 15/ 30/ 45 X
HR 15/ 30/ 45 T	HR 15/ 30/ 45 Y

## Closed Loop Load Application



Systematically comparison deadweight to load controlled system

Due to the closed loop system the KB 150 R achieves a high precision test load range from 0,2 - 250 kgf without load variation.

### Maximum precision:

The KB hardness testing machines apply the load controlled by a closed loop system. The **controlled load application** provides more accurate loads compared to a position controlled load application because the load will be supervised during the complete test procedure.

### Load application time: Flexible and according to the standard

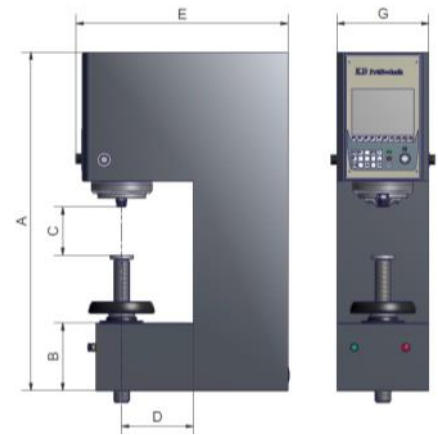
The application and the dwell time can be individually adjusted.

### Advantages compared to the deadweight system:

In the closed loop system the test load which is applied on the indenter will be constantly meas-

**Machine Dimensions - indication in [mm]**

	<b>KB 150</b> Standard	<b>KB 150</b> Art. No.: 1228	<b>KB 150</b> Art. No.: 1630	<b>KB 150</b> Art. No.: 1394
<b>A</b>	1180	1430	1638	1738
<b>B</b>	232	232	232	232
<b>C</b> Test room height	<b>320*</b>	<b>560*</b>	<b>700</b>	<b>800*</b>
<b>D</b>	250	250	250	250
<b>E</b>	735	735	735	735
<b>G</b>	362	362	362	362
<b>Weight</b>	215 kg	230 kg	240 kg	245 kg



\*Test room height without spindle protection, special size available on request.

Test room height C including standard table Ø 80 mm.

**Accessories**

**Heat Exchanger**

- For surrounding temperatures over 30°C
- For dirty environment



**Supports**

Please contact our sales or service department concerning your special projects. We would like to help



**Indenters**

We do offer a huge variation of indenters. Please contact our sales or service department for any help.



**Test Room Extension**

Test room extension to 560 mm

Test room extension to 700 mm

**Jominy Test Procedure - The End Quench Test**

The Jominy test method, also known as end quench test, determines the hardenability of a material. Therefore a cylindrical sample (L: 100mm, Ø: 25mm) is heated until it reaches a temperature in the austenitic region. After a defined time the heated sample is quenched with a water jet on the front edge.

To test the sample, it needs to be slightly grinded in longitudinal direction. The hardness is measured alongside the test area. The hardenability



Art. Nr.: Software option

**KB Hardwin XL Jominy**

2 samples: Sample holder + X/ Y- table 180x180

5 samples: Sample holder + X/ Y- table 300x200

**Operating System**

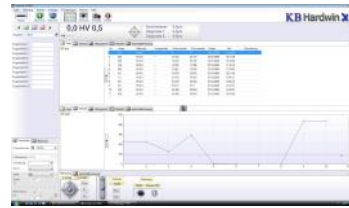
HardWin XL supports Windows XP, Vista (32bit) and 7 (32bit/ 64 bit). The use of a PC makes KB HardWin XL network- compatible.


**Data Management**

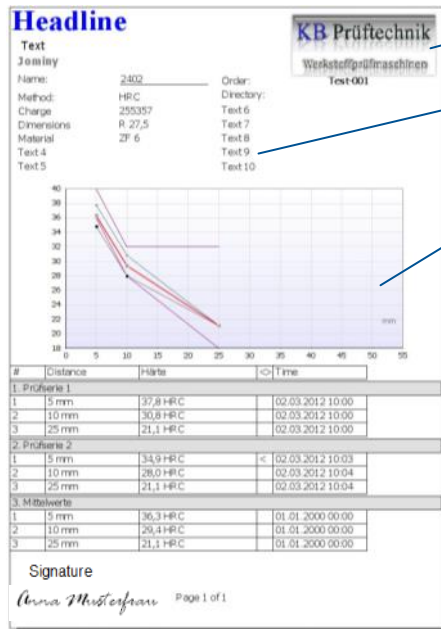
The data export is supported by **text (txt), Word, PDF, html or Excel** Data. Handling with SAP or Ac-

**Data View**

**All important information** to the test order on **one**


**Scanner**

KB Hardwin XL supports bar code scanner as well as QR code scanner. Thus the sample information can be

**Beispiel eines möglichen Druckprotokolls**


Customized logos can be embedded

Number and content of the property labels are freely

Diagramme, Verläufe und Statistiken können in das

The test report can be freely adjusted with the help of the report generator.

All software packets of KB Hardwin XL include the report generator. Special test report types can be programmed on request.

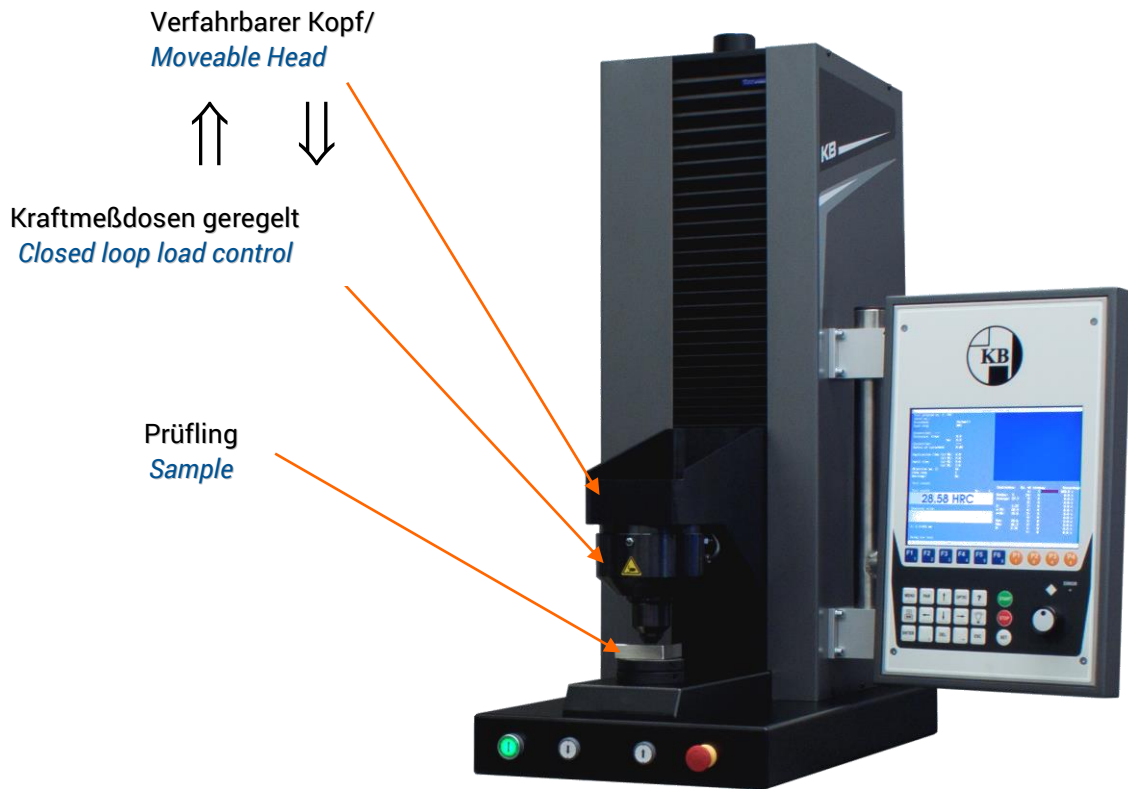
The test reports can also be programmed by the operator if required.

The file format of the report can be chosen between PDF, Excel, RTF, JPEG, PNG, TTY, CSV, XML etc.



# Hardness Tester Machine

## KBE 150 R



- Alle Rockwellverfahren (auch Super-Rockwell) verfügbar
- All scales (also Super-Rockwell) available

#### Rahmenbeschreibung:

C-Gestell für Universal-Härteprüfkopf für die automatische und normgerechte Rockwell Härteprüfung.

#### Frame description:

*C-frame for universal hardness testing head.  
For automatic Rockwell procedures acc. to standard.*

Digitale Rockwellprüfmaschine für alle Rockwellverfahren im Laststufenbereich

1 - 150 kg. für Rockwell, Super-Rockwell sowie Kugeldruck und Tiefenmessung nach Vickers und Brinell. Vollautomatischer Prüfablauf, höchste Auswertegenauigkeit.

*Digital Rockwell Tester for all Rockwell procedures with the load stage range from 1 - 150 kg.*

*For Rockwell, Super-Rockwell as well as ball indentation hardness and depth measurement for Vickers and Brinell.*

*Fully automatic test sequence, highest evaluation accuracy.*

Rockwell, Vickers HVT, Brinell HBT, Kugeldruckhärte,

- Großes LCD – Farbdisplay
- konfigurierbare Grundeinstellung
- motorisch geregelte Lastaufbringung
- 200 frei definierbare Prüfprogramme
- frei umschaltbare Sprachwahl D - F - E - I - S - CZ





- Rockwell, Vickers HVT, Brinell HBT, ball printing hardness,
- Large LCD - color display
- configurable basic adjustment
- motor regulated load creation
- 200 freely definable test programs
- freely switchable language German, French, English, Italian, Swedish, Czech

### Prüfverfahren genormt

- Rockwell - DIN EN ISO 6508, ASTM D 785, ASTM E 18,
- Kugeldruckhärte - DIN ISO 2039 T1 (für Kunststoffe)

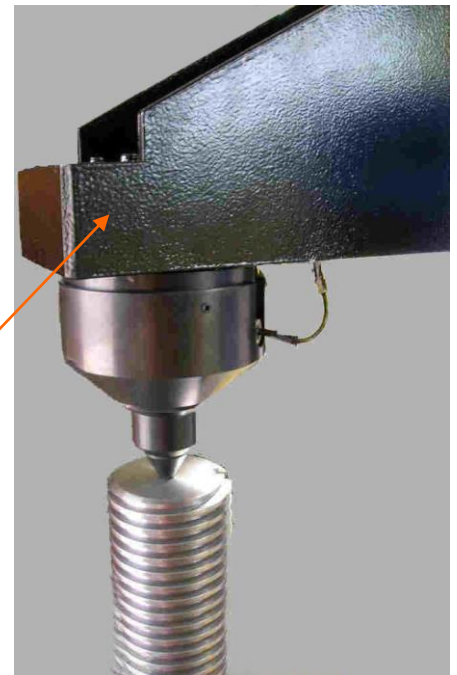
### Testing method standardized

- Rockwell - DIN EN ISO 6508, ASTM D 785, ASTM E 18,
- Ball printing hardness - DIN ISO 2039 T1 (for plastics)

### Prüfverfahren nicht genormt/ Testing methods not according to standard

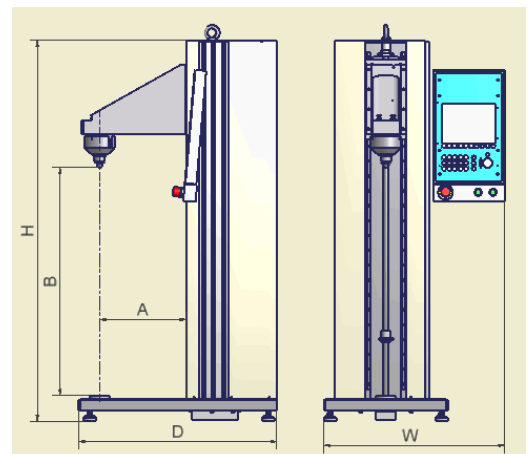
- Vickers – Tiefenmessung/ Depth measurement HVT 30 – 100
- Brinell – Tiefenmessung/ Depth measurement HBT 2,5/62,5 - 2,5/187,5 - 5/250
- Rockwell – Makro/ macro HMR 5/250

Prüfling  
Sample



### Besondere Merkmale/ Special Features

- Verfahrbare Traverse. Prüfkopf fährt von oben nach unten, dafür entfällt die Handspindel  
*Moveable traverse. The testing head is moving from top downwards. Therefore the manual spindle drive with hand wheel is inapplicable*
- mittels Tipptasten zum Auf- und Abfahren ist der Prüfkopf stufenlos in der Höhe verfahrbar/  
*Moveable traverse. The testing head is moving from top downwards. Therefore, the manual spindle drive with hand wheel is inapplicable*
- Extrem hohe Prüfraumhöhe je nach Modell bis zu 900 mm/  
*Extremely big testing room up to 900mm*
- Ausladung bis 350 mm möglich/ *Throat depth possible up to 350 mm*
- Optimale Ausrichtung der Maschine durch verstellbare FüÙe/ *Optimal alignment by adjustable feet*
- Optimale Bedienbarkeit und gewohnte Präzision im geschlossenen Regelkreis/  
*Optimal operation with high precision as usual in the closed loop system*



	KBE 150 R 225/ 390	KBE 150 R 200/ 660	KBE 150 R 350/ 900
A	225 mm	200 mm	350 mm
B	390 mm	660 mm	900 mm
D	730 mm	680 mm	800 mm
H	950 mm	1275 mm	1550 mm
W	700 mm	730 mm	730 mm
Weight	125 kg	300 kg	350 kg
Power Supply	1 Ph, 240V, AC, SL, N, 1kWA	1 Ph, 240V, AC, SL, N, 1kWA	1 Ph, 240V, AC, SL, N, 1kWA

### Optionen/ Options

Spannkappe mit reduzierter Spannkraft/ *Clamping device with reduced clamping force*

**Ihr Ansprechpartner**



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Angaben unter Vorbehalt.