

## CHONGQING LEEB INSTRUMENT CO., LTD.

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## **Uee Series - Portable Hardness Tester Uee916**



### **Functions & Features**

- Multifunction New system, high precision, easy operation
- Customized materials fucntion: able to measure special metal
- With LCD color screen, built-in thermal printer
- Able to calibrate on HL,HRC,HB blocks
- Freely switch to 7 different hardness scales
- Automatically identify 7 types of Impact devices
- Conversion to tensile strength (U.T.S)
- PC Software for data transmission, analysis and report printing
- 3 years warranty and life-long services

## **Measuring Materials**

• 10 types of metals: steel and cast steel, alloy tool steel, stainless steel, gray cast iron, nodular cast iron, cast aluminum alloy, copper zinc alloys, copper and tin alloy, copper, forged steel

• Customized materials: able to test metal materials which are not included above

# **Technical Parameters**

| Model                  | Uee916   |  |  |  |
|------------------------|--|--|--|--|
| Measuring Range        | (170-960)HLD,(17.9-69.5)HRC,(19-683)HB,(80-1042)HV,(30.6-102.6)HS,<br>(59.1-88)HRA, (13.5-101.7)HRB  |  |  |  |
| Hardness parameter     | HL, HRC,HRB, HRA,HRV,HS,HB,HV  |  |  |  |
| Accuracy               | ±6HLD/ ±1.5HRC   |  |  |  |
| Memory                 | 600 groups   |  |  |  |
| PC Connection          | Available  |  |  |  |
| Printer                | Build-in High-speed Thermal Printer,<br>Width for printer paper:44.5±0.5mm   |  |  |  |
| Battery                | Rechargeable Li-ion battery  |  |  |  |
| Operating Temperature  | <b>-20</b> ℃ <b>~+60</b> ℃   |  |  |  |
| Dimensions             | 230×86×46mm  |  |  |  |
| Weight                 | 450g   |  |  |  |
| Standard Configuration | Configuration Main unit, Impact Device type D, Calibration block,Power adapter,Small supporting ring, USB cable, Software, Backup accessories(Impact ball*1, Cable*1, Spanner *1) paper of Printer, Cleaning brush,Operation manual,Certificate. |  |  |  |
| Optional Accessories   | Optional Impact Devices(D,DC,DL,D+15,G,C,E), Shaped support rings, Testing blocks,Paper for Printer  |  |  |  |

## Pictures

| View   |           |           |  |  |
|--------|-----------|-----------|--|--|
|        | HL >>     | HRC       |  |  |
| No 002 | HL >>     | НВ        |  |  |
| No 003 | HL >>     | ΗV        |  |  |
| No 004 | HL >> HRB |           |  |  |
| No 005 | HL >>     | HL >> HRA |  |  |
|        |           |           |  |  |
| BACK   | DELETE    | SELECT    |  |  |

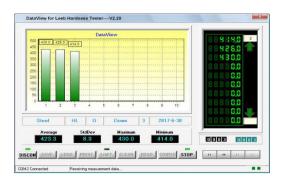
**Customized Materials** 

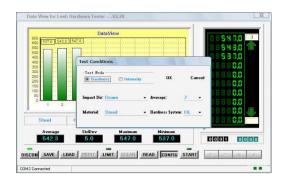


Calibration on HLD/HRC/HB Blocks



Water-proof packing box





#### **Receiving Measurement Data**

#### Select Test Conditions

### **Optional Accessories**



**Optional Impact Devices ( Probes)** 



**Supporting Rings** 

### **Application Fields**

•The bearings and other parts, heavy work-pieces, metal material, pressure vessel, failure analysis of turbine generator unit and equipment

•Mechanical or permanent assembly components have been installed, the test space is very narrow, requires the original record regular test results

•Large work-piece within a wide range of more rapid test measurement site

### **Measuring Conditions**

- •The weight of measuring object should be more than 2kg.
- •The thickness should be more than 10mm.
- •The surface roughness should be no more than 1.6µm.

**Tips:** If do not meet the above conditions, the measuring object must be laminated with steel substrate by coupling agents.

# Special Supporting Ring (use for different shaped surface)

| Model     | Notice                    | Notice Model |                         |
|-----------|---------------------------|--------------|-------------------------|
| Z10-15    | Outside cylinder R10-15   | K10-15       | Outside sphere R10-15   |
| Z14.5-30  | Outside cylinder R14.5-30 | K14.5-30     | Outside sphere R14.5-30 |
| Z25-50    | Outside cylinder R25-50   | HK11-13      | Inside sphere R11-13    |
| HZ11-13   | Inside cylinder R11-13    | HK12.5-17    | Inside sphere R12.5-17  |
| HZ12.5-17 | Inside cylinder R12.5-17  | HK16.5-30    | Inside sphere R16.5-30  |
| HZ16.5-36 | Inside cylinder R16.5-30  | UN           | Outside cylinder, R10-∞ |

## Measuring Range Table

| Material                     | Hardness | Impact Device ( Probe) |           |            |                |            |           |
|------------------------------|----------|------------------------|-----------|------------|----------------|------------|-----------|
|                              |          | D/DC                   | D+15      | С          | G              | E          | DL        |
| Steel & cast<br>Steel        | HRC      | 17.1~68.5              | 19.3~67.9 | 20.0~69.5  |                | 22.4~70.7  | 20.6~68.2 |
|                              | HRB      | 59.6~99.6              |           |            | 47.7~99.9      |            | 37.0~99.9 |
|                              | HRA      | 59.1~85.8              |           |            |                | 61.7~88.0  |           |
|                              | HB       | 80~651                 | 80~638    | 80~683     | 90~646         | 83~663     | 81~646    |
|                              | HV       | 83~976                 | 80~937    | 80~996     |                | 84~1042    | 80~950    |
|                              | HS       | 32.2~99.5              | 33.3~99.3 | 31.8~102.1 |                | 35.8~102.6 | 30.6~96.8 |
| Forged Steel                 | HB       | 142~651                |           |            |                |            |           |
| Alloy Tool<br>Steel          | HRC      | 17.1~67.1              | 19.8~68.2 | 20.0~69.5  |                | 22.6~70.2  |           |
|                              | HV       | 83~976                 | 80~935    | 80~996     |                | 82~1009    |           |
|                              | HRB      | 59.6~99.6              |           |            |                |            |           |
| Stainless<br>Steel           | HB       | 140~651                |           |            |                |            |           |
|                              | HV       | 83~976                 |           |            |                |            |           |
|                              | HRC      |                        |           |            |                |            |           |
| Gray Cast<br>Iron            | HB       | 140~334                |           |            | 92~326         |            |           |
|                              | HV       |                        |           |            |                |            |           |
| GC Iron                      | HB       | 140~387                |           |            | 140~364        |            |           |
| Cast Alum.                   | HB       | 30~159                 |           | 23~210     | <b>32</b> ~168 |            |           |
|                              | HRB      | 23.8~84.6              |           | 22.7~85.0  | 23.8~85.5      |            |           |
|                              | HV       | 83.2~648.2             |           |            |                |            |           |
| Copper-Zinc<br>Alloy (Brass) | HB       | 40~173                 |           |            |                |            |           |
|                              | HRB      | 13.5~95.3              |           |            |                |            |           |
| Bronze                       | HB       | 60~290                 |           |            |                |            |           |
| Copper                       | HB       | 45~315                 |           |            |                |            |           |