

# KING

Portable Brinell  
Hardness Tester

1500kg.

1000kg.

500kg.

3000kg.

DO NOT EXCEED  
4000 PSI INPUT

**KING®**

KING TESTER CORPORATION

Made in U.S.A.



**KING®**  
by  
ERNST

## STANDARD KING BRINELL HARDNESS TESTER

The King Brinell hardness tester has a

- base with a 14" gap and 4" throat
- head and gauge calibrated for a 0 — 3000 kg. load
- filled hydraulic reservoir
- 10mm steel ball
- flat, dome and vee shaped anvils
- instruction and maintenance manuals.

**ALLOY STEEL-THREADED POSTS**  
Wear longer, resist distortion.

**PRESSURE LEVER**  
Used to apply up to a true 3000 kg load.

**BOURDON-TYPE PRESSURE GAUGE**  
Indicates true load exerted by pump and when full load has been reached.

**STAINLESS STEEL TEST HEAD**  
Contains sealed hydraulic pump and reservoir.  
Calibrated to release load at 3,000 kg.  
Fully interchangeable with optional King bases.  
Also available in a low pressure version for testing softer metals and in a long ram version.

**GEAR TRAIN WITH HAND CRANK**  
Allows easy, positive adjustment of opening to any size specimen up to 14" (20" optional).

**STANDARD 10mm BRINELL BALL**  
Can be easily changed to 2.5 & 5mm ball or reverse direction load head.

**THROAT**  
Standard is 4" with 6" optional.

**HANDLE**  
Made of walnut wood for easy grip and durability.

**FLAT, DOME AND VEE ANVILS**  
Supplied as standard equipment for testing various shaped specimens. Also accepts reverse direction impression adapters.

**WIRE BASKET**  
Rounded corners and no sharp edges for maximum safety.



## OPTIONAL ADAPTERS AND COMPONENT PARTS



### STANDARD TEST HEAD

Calibrated accurate to 1/2 of 1% load.  
Releases at 3,000 kg automatically.  
Capable of incremental loads.



### STANDARD TEST HEAD WITH LONG RAM

Same features as standard test head plus a long ram that puts impression head at end of 2" extension for easy access into recessed areas or over raised edges.

### LOW PRESSURE TEST HEAD

Applied load and indicator dial are coordinated for softer metals. Can be calibrated to release at loads of 62-1/2 kg, 125 kg, 250 kg, 500 kg, or 1000 kg.



### LOW PRESSURE TEST HEAD WITH LONG RAM

Same features as low pressure test head plus a long ram that puts impression head at end of 2" extension for easy access into recessed areas or over raised edges.



### CHAIN ADAPTER

Used for large cylinders it fits onto a standard test head and wraps around specimens that are too big for regular tester. High strength chrome/molybdenum steel arms hold the chain to the test head and allow it to stay rigid while the chain takes the full thrust of the load. Supplied with 4' chain.



### BASE

14" base with 14" test height opening and 4" throat is standard. Optional 6" throat with either 14" or 20" test height opening available. 20" base also available with 4" throat and 20" test height opening.

### ADAPTER TO HOLD TEST HEAD UPRIGHT WITHOUT BASE

For testing large flats it enables test heads to be used under large drill presses, boring mills, arbor presses and beams that are capable of withstanding 3000 kg load.



### 2.5 & 5mm BALL ADAPTER

Used on softer materials or where a smaller impression is desired.

### REVERSE DIRECTION LOAD ADAPTER

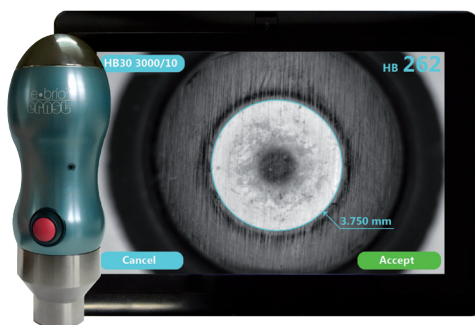
Used inside pipes, tubes and other interior locations that are otherwise impossible to reach. Consists of an anvil which drops into the base and contains a 10mm ball penetrator; and a reverse direction load head, which screws onto the ram.





## COMPLEMENTING ERNST PRODUCTS

eobrio<sup>2</sup>  
ERNST



### E-BRIO² - OPTICAL BRINELL SCOPE

The Brinell test is of basic importance in many areas of quality control, but often inaccurate readings and long test cycles have a negative impact on productivity.

Ernst is pleased to introduce the new model eobrio<sup>2</sup>, equipped with a new lighting system and a new algorithm of indentation's edge detection, able to read reliably and accurately on every material and surface, even on rough ones.

These features and its single probe suitable for all the indentation sizes make it a unique system in its category.

antares  
ERNST

### ANTARES - 20X LIGHT MICROSCOPE

Antares is the new ERNST 20X light microscope for BRINELL reading.  
6mm long scale - 0.05mm graduations.  
Suitable for checking of mechanical components.

The built-in leds provide an excellent and even illumination of the Brinell indentation's edge, avoiding that ambient light reaches the impression and disturbs the reading.

In this way, accurate and reliable results are ensured in any situation.  
Rugged aluminium housing provides durability and great efficiency up to 50 hours continuous operation without replacing the battery (a lamp on the main body indicates that light is on).

The scope is delivered complete with ring for improved stability during testing and with stainless steel base for testing in tight locations.

