

# 650 SERIES

Rockwell Hardness Tester





**655**  
MOTORIZED



**656**  
AUTOMATIC LOAD SELECTOR



**657**  
MOTORIZED SPINDLE, FULL AUTO

## FEATURES

- Super rigid Rockwell hardness tester
- Simultaneous conversion to HV, HB and other HR scales
- Rugged fine casted frame with large workpiece accommodation
- ASTM, DIN-EN-ISO, JIS compliant
- Unique motorized load application system, auto selection of loads depending on HR scale (656 & 657 only)
- LCD touch screen, userinterface with user-friendly menu operation in multiple languages
- High speed: preload, loading and unloading procedure for ultra high efficiency
- Motorized elevating screw simplifies and speeds up test operation (657 only)
- Fully automatic positioning, trip and measurement procedure: trip, preload, mainload, dwell, unload (657 only)
- Storage of 50 test programs and tester settings, allowing you to set up your tester in just seconds
- Continuous automatic "online" statistics, incl. average of readings, standard deviation, etc.
- Storage of 20,000 single hardness values
- Go/No Go mode, convex and concave measuring mode
- Prints statistics to built-in printer or external printer
- Data output directly to MS Office applications such as Word and Excel
- Connects with PC or SPC network via built-in bi-directional USB2 connector



### TECHNICAL SPECIFICATIONS

Rockwell scales	A, B, C, D, E, F, G, K, L, M, P, R, V
Conversion to	HV, HB, other HR scales
Hardness resolution	0.05 of a Rockwell unit
Pre-load	10kgf
Main loads	60, 100, 150kg
Pre-load application	Manual (automatic for 657)
Test load application	Fully automatic
Unload	Automatic for 657
Accuracy	Conforms to EN-ISO 6508 and ASTM E-18
Data output	Built-in high speed printer & USB2
LCD Display	Industrial touch screen showing hardness value, conversion value, test force, progress bar, dwell time, memory contents, all machine settings, Go/No Go, all statistics
Specimen accommodation	Vertical space 275mm; Horizontal space (from elevator spindle center) 190mm
Power supply	110/240V, 50 – 60Hz
Machine dimensions	Approx. 940mm x 390mm x 670mm (HxWxD)
Machine weight	Approx. 140kg

### OPTIONAL JOMINY & X-Y STAGES



Motorized stages for jominy or coordinate pattern testing on the 657. Fully automatic systems with database structures.

**IMPRESSIONS™** INNOVATEST® leading hardness testing software.

### ORDER DETAILS

- 655** Touch-screen, twin scale, motorized
- 656** Touch-screen, twin scale, motorized, motorized load selector
- 657** Touch-screen, twin scale, as 656 plus motorized spindle

### STANDARD DELIVERY

- Built-in printer
- Data-output USB2 and RS-232C
- Diamond Rockwell indenter
- Rockwell ball indenter 1/16"
- Rockwell testing balls
- Flat anvil ø60mm
- Testing table large ø150mm
- V-anvil ø40mm
- Hardness test blocks: ±60 HRC, ±40 HRC, ±85 HRB
- Power cable
- Spare fuse
- Adjustable feet (4 Pcs)
- Spindle protection cover
- Machine cover
- Solid accessories case
- INNOVATEST® certificate
- User and installation manual

### OPTIONAL ACCESSORIES

- Reference hardness blocks
- Certified indentors & balls
- Clamping and indenter protection nose
- Pedestal spot anvil
- Special support systems for large workpieces
- Tester stand with cabinet



Represented by:

## **CORPORATE HEAD OFFICE**

### **MANUFACTURING, DISTRIBUTION & SERVICE**

#### **INNOVATEST Europe BV**

Borgharenweg 140  
6222 AA Maastricht (The Netherlands)  
Phone: +31 43 3520060  
Fax: +31 43 3631168  
Email: [info@innovatest-europe.com](mailto:info@innovatest-europe.com)

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#### **INNOVATEST Benelux BVBA**

##### **SALES & SERVICE**

Phone: +32 12 779002  
Fax: +32 12 779003  
E-mail: [info@innovatest-benelux.com](mailto:info@innovatest-benelux.com)

#### **INNOVATEST Shanghai Co., Ltd.**

##### **DISTRIBUTION, SALES & SERVICE**

101, Bld. 7, No. 59 Shennan Road,  
Minhang District, Shanghai, P.R. China  
Zip code: 201108  
Phone: +86 21 34635955  
Fax: +86 21 34635269  
E-mail: [info@innovatest-shanghai.com](mailto:info@innovatest-shanghai.com)

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