



RADIAL ARM BRINELL HARDNESS TESTER



STANDARDS

ASTM E 10
ASTM E-18
EN-ISO 6506-2
EN-ISO 6508-2
ISO 6506

APPLICATIONS

Radial Arm Brinell Hardness Tester - EF3000

Radial Arm Brinell Hardness Tester - EF3000 is a specialized Brinell hardness tester with integrated milling, designed to address the limitations of radial drills. Standard radial drills cannot handle loads exceeding 3000 kg while also securing parts or withstand the vibrations generated during milling.

TEST LOADS: from 10 kgf to 3000 kgf (98.07 to 29421 N)

BRINELL HBWT ISO 6506 / ASTM E-10: HBW 1/10 - HBW 1/30 - HBW 2.5/15.625 - HBW 2.5/31.25 - HBW 2.5/62.5 - 2.5/187.5 - 5/25 - 5/62,5 - 5/125 - 5/250 - 5/750 - 10/100 - 10/250 - 10/500 - 10/1000 - 10/1500 - 10/3000

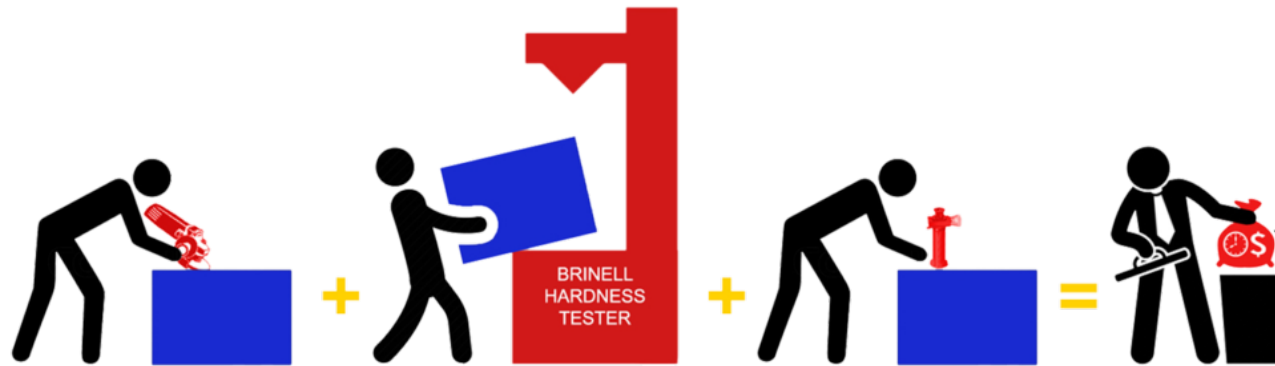
Rockwell and superficial Rockwell ISO 6508 / ASTM E-18: HRA - HRB - HRC - HRD - HRF - HRG - HRL - HRM - HRR / HRN - HRT

Conventional Brinell Test

In most forges and steel factories, the standard Brinell test involves testing large parts after surface preparation to remove rust and scale. A grinding disk is often used for manual polishing, but this approach has drawbacks, including material

heating, unknown material loss, metal dust production, and significant time consumption.

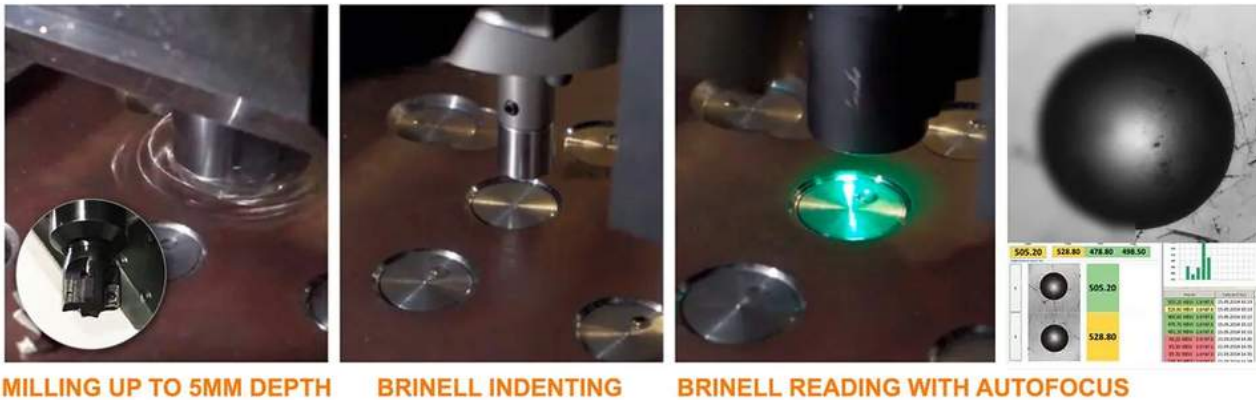
Once prepared, the sample is placed under a Brinell hardness tester, either manual or automatic. The resulting indentation is then measured with a microscope to determine the hardness value.



The Solution: EF

The EF3000 Brinell Hardness Testing Machine is a fully automatic system that completes the entire testing process with a single button press:

- Automatically detects and contacts the sample
- Performs milling to a programmed depth
- Applies the indentation and load
- Reads the indentation with autofocus
- Returns and moves to the next test position automatically



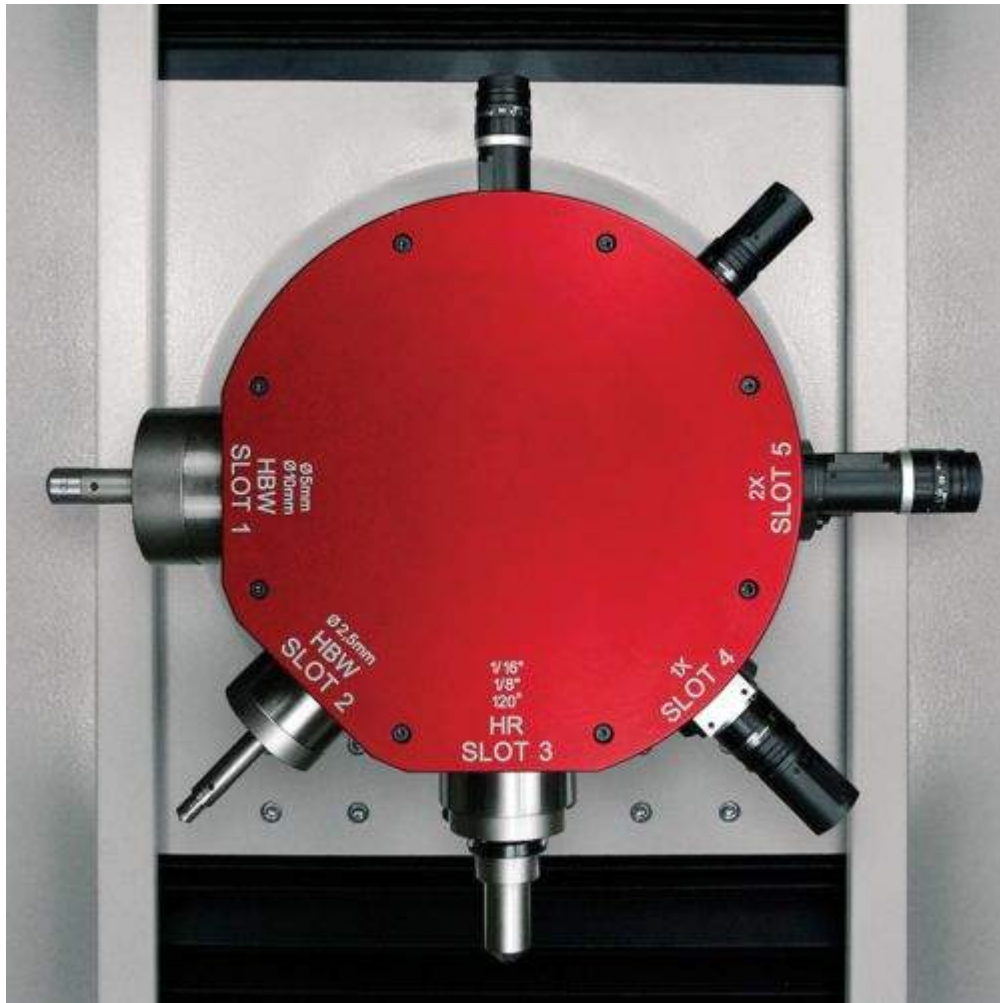
Save time, Reduce costs, and boost accuracy!

- Complete a full test, including surface preparation, in just 45 seconds
- Achieve maximum Brinell accuracy while testing 100% of production
- Automate quality inspections for consistent results
- Free up personnel for other tasks
- Maintain uniform surface roughness with no risk of damage or overheating
- Pays for itself within a year

FEATURES

Radial Arm Brinell Hardness Tester - EF3000 Features

MOTORIZED TURRET



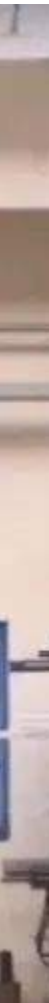
The system supports up to 8 slots (or more) for different hardness scale indenters, optical lenses, lasers, and even a milling surface preparation tool. With auto-rotating and auto-tool-switching, it ensures a fully automated measurement cycle. Designed for both single and multi-hardness testing methods, it delivers precision and efficiency using just one machine.

CLAMPING SYSTEM



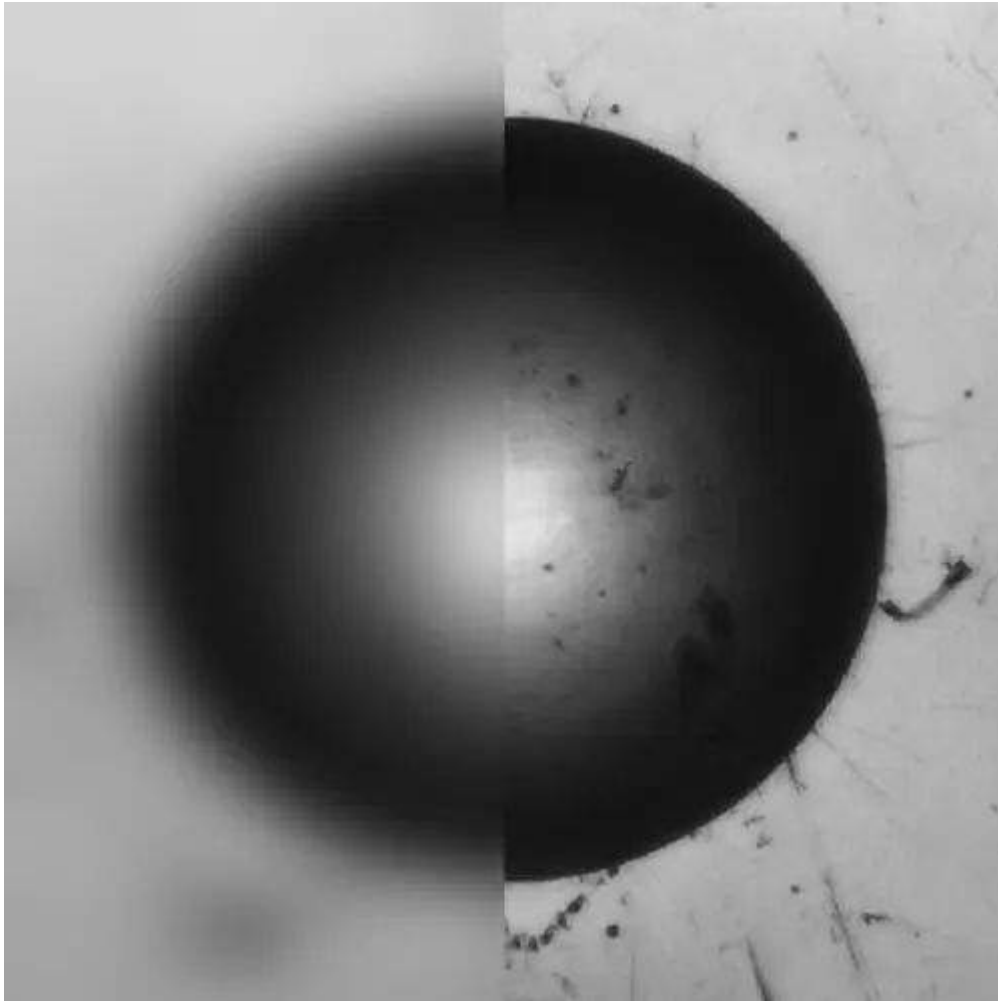
The system ensures secure contact with the specimen at all times, even if the specimen shifts during operation. Its advanced clamping mechanism guarantees complete stability throughout the test cycle, regardless of surface conditions, including oil, rust, or debris.

AUT



The cent
testi

AUTOFOCUS



The system features automatic focus adjustment for each optic, ensuring precise positioning at any magnification through real-image scanning brightness. With continuous step adjustment for infinite accuracy, it guarantees high reading standards, reproducible focus levels, and faster readings. This eliminates subjectivity, ensuring consistent and reliable hardness results.

CAMERA AUTO-READING



The software automatically measures indents on any sample surface, from perfectly polished to rough or etched. It features automatic light regulation, adapting to dark, opaque, or polished samples. By adjusting light and contrast, the system ensures optimal visibility and precise indent measurement without manual intervention.

EF M

The
for t
heig
enha

EASY COMMANDS



The system features an intuitive joystick, button controls, and a touchscreen for seamless operation. A high-capacity hard drive and PC ensure unlimited performance, with remote access for easy support from anywhere. Equipped with USB and Ethernet outputs, it connects to databases, PCs, and printers, enabling data downloads and customized reports.

DATA IMPORT / EXPORT



The Universal Hardness Tester supports barcode scanning for seamless data entry. Test cycles or sample drawings can be loaded directly from a central system, ensuring fully automated operation. After testing, the system automatically appends results to the barcode data and instantly updates the order management system, streamlining workflow and data tracking.

REM

The
in th
oper
supp

TECHNICAL SPECIFICATIONS

Radial Arm Brinell Hardness Tester - EF3000 Technical Specifications

Standards	EN-ISO 6506-2 / EN-ISO 6508-2 / ASTM E-10 / ASTM E-18
Vertical head stroke	2500 mm fully motorized
Depth capacity	2000 mm fully motorized
Force range	Brinell: 98.07 - 153.2 - 245.2 - 294.2 - 306.5 - 612.9 - 980.7 - 1226 - 1839 - 2451 - 4903 - 7355 - 9807 - 14710 - 29421 N (10 - 15.6 - 25 - 30 - 31.2 - 62.5 - 100 - 125 - 187.5 - 250 - 500 - 750 - 1000 - 1500 - 3000 kgf). Optional tests : Rockwell: 588.4 - 980.7 - 1471 N (60 - 100 - 150 kgf) Superficial Rockwell: 29.42 - 147.1 - 294.2 - 441.3 N (3 - 15 - 30 - 45 kgf)
Feasible tests	Brinell: HBW 1/30 - HBW 2.5/15.625 - HBW 2.5/31.25 - HBW 2.5/62.5 - HBW 2.5/187.5 - HBW 5/25 - HBW 5/31.25 - HBW 5/62.5 - HBW 5/125 - HBW 5/250 - HBW 5/750 - HBW 10/100 - HBW 10/125 - HBW 10/250 - HBW 10/500 - HBW 10/1000 - HBW 10/1500 - HBW 10/3000 Optional tests : Rockwell: HRC - HRA - HRD - HRB - HRF - HRG - HRL - HRM - HRR Superficial Rockwell: HRN - HRT
Load accuracy	Better than 0.05 %



ADVANCED TESTING TECHNOLOGIES

USA | CANADA | UAE | GCC | EU | INDIA | APAC | AFRICA | LATIN AMERICA

Connect with us

Contact our **QualiTeam** today to find out how we can help your organization **select the most suitable testing solution** for your application, requirements, and budget.

Qualitest USA (Corporate Sales Office)

Toll-Free: 1.877.884.TEST (8378) | Fax: 954.697.8211
E-mail: info@qualitest-inc.com
Address: 8201 Peters Rd., #1000,
Plantation, FL 33324, USA.

Qualitest Canada & International

Tel: +1.905.944.9825 | Fax: +1.905.944.0304
E-mail: sales@qualitest-inc.com
Address: 70 East Beaver Creek Rd., #9, Richmond Hill,
Ontario L4B 3B2, Canada.

Qualitest Latin America (Mexico and LATAM Region)

E-mail: ventas@qualitest-inc.com

Qualitest KSA (Regional Office)

Tel: +966 11 500 6659
Address: Level 7, 3.09, District 3, King Abdullah
Financial District, Riyadh, Saudi Arabia

Qualitest Singapore (ASIA PACIFIC Regional Office)

Tel: +65 6393 5480 | E-mail: singapore@qualitest-inc.com
Address: 50 Raffles Place, Singapore Land Tower,
Level 46, Singapore, 048623.

Qualitest Indonesia (Representative Office)

Tel: +62 21 2985 9522 | Fax: +62 21 2985 9889
E-mail: indonesia@qualitest-inc.com
Address: One Pacific Place Level 11, Jl. Jend. Sudirman,
Kav. 52-53, SCBD Area, Jakarta 12190, Indonesia.

Qualitest FZE (Regional GCC/ME Office)

Tel: +971 4 8819252 | Fax: +971 4 8819262
Email: gcc@qualitest-inc.com
Address: Jafza One, BB 1610, Jebel Ali Free Zone,
PO Box 261440, Dubai, UAE.

Qualitest India

E-mail: india@qualitest-inc.com
Address: 15th Floor, Dev Corpora, Pokhran Road No.1,
Eastern Express Highway, Thane, Maharashtra,
Mumbai, 400601, India

