



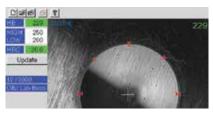
# The B.O.S.S.<sup>®</sup> Brinell Optical Scanning System

is an automatic scanning system for the measurement of Brinell Impressions. It is designed to make your testing program faster and more accurate. It also improves quality control management by saving each measurement in an included statistical program.



# **Minimize Errors**

# **Measurements are Quick and Easy**



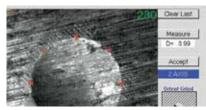
Locate the scan head over the impression and press the button. Diameter and Brinell hardness are displayed instantly.

## **Increased Accuracy**



The B.O.S.S. easily measures with 0.01 mm resolution on most normally prepared surfaces.

# **Reduce Operator Influence on Results**



The BOSS gives consistent measurements not affected by operator interpretation.

# **Reduce Operator Fatigue**



The B.O.S.S. prevents the chance of back ache caused from bending over a manual scope all day.

#### **Reduce Operator Influence on Results**

**It is well known** that measuring Brinell impressions can result in measurement errors of 0.1 mm between operators—the range is even greater between labs. This error can take up your entire tolerance specification. The B.O.S.S. will virtually eliminate operator influence on test results. Gage R&R evaluations show dramatically improved repeatability. With the B.O.S.S. your test results won't change with every shift change.



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# Measure & Record

## Accurate, Consistent HB Hardness Measurement



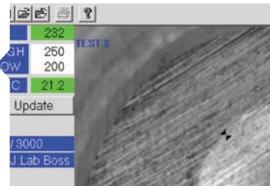
#### Intuitive Software:

The B.O.S.S. software allows easy navigation for functions such as quick setup of measurement conditions, tolerance and scale conversion settings, plus easy file management.

File View Se	etup Data Help	
	8 ?	
🔛 C:\Mt92v	w\test3.csv	
	3 2004 12:09	179
12 Jun 0	3 2004 12:09	177
13 Jun 0	3 2004 12:09	175
14 Jun 0	3 2004 12:09	181
C:\Mt92v	w\test3.csv	

Modular Architecture:

Thanks to its Modular Architecture, the B.O.S.S. may be used on most any desktop, laptop, or tablet PC. The B.O.S.S. can also be incorporated into automated test systems.



#### Data Collection:

Every test is saved with a date and time stamp. SPC data displays trends to head off out-of-tolerance situations. Statistical Reports—including X-bar, R-charts, and histograms—are easily created. And up to 10 fields of part information can be saved with results.

#### Measure... Instantly!

**The test sequence** is very simple. Move the scan head to center the impression on the screen, then press the button on the the scan head. In a fraction of a second, the B.O.S.S. captures an image



of the impression. Using the image to accurately measure the diameter, the system displays the resulting Brinell value, the diameter measurement, and the identified edges at 8 positions.



# **Expand Your System**

## The B.O.S.S System: Simple, Fast, and Powerful

The B.O.S.S. system can be added to any Brinell hardness tester; even our Newage Pin Brinell product. The system is comprised of a precision optical scan head, connected via a USB cable to a personal computer with the B.O.S.S. software installed. The software is used to select the primary hardness scale you are testing to. In addition, you have provisions to perform automatic hardness scale conversion.



#### Inch/millimeter Manual Measurement

The inch/millimeter manual measurement function allows the B.O.S.S. to be used to measure other visually discernable aspects such as etched total case depth layers.

#### You may set tolerances for your

test to provide warnings and indications on individual test results. Tolerance settings include low tolerance limit, low tolerance warning, high tolerance limit, and high tolerance warning. Tolerance and warning values can be entered that will cause test results to be color-coordinated according to tolerance status. You can even configure the system to initiate an audible signal for out-of-tolerance results.





#### Image Save Function

The Image Save feature allows you to save your image as a .bmp file. The operator can capture and name the image, and a .bmp extension is automatically added to the file name. Once saved, the image may be viewed, printed, or included in reports.



#### **Pin Brinell Option**

Use the BOSS system with your Pin Brinell hardware. By setting pin type, the BOSS software will automatically calculate the correct BHN number.



# Ordering

#### Lab B.O.S.S. Systems

**OS-100WX**..... Desktop-based System with monitor and USB-style scan head.

OS-100WX-LS... Desktop-based System with monitor and "small nose" USB-style scan head.

#### Lap B.O.S.S. Systems

**OS-300W** ...... Laptop-based System with USB-style scan head. **OS-300W-LS** .... Laptop-based System with "small nose" USB-style scan head.

#### Tablet B.O.S.S. Systems

OS-300WT ..... Tablet-based System with USB-style scan head. OS-300WT-LS... Tablet-based System with "small nose" USB-style scan head.

#### USB B.O.S.S. System Only

OS-300WC ..... USB-style B.O.S.S. System without computer. (customer must supply compatible PC)

#### **B.O.S.S. Software Modules**

MS-253W ...... Advanced Statistical Software for all B.O.S.S. Systems.

MS-273 ..... Image Save Software for all B.O.S.S. Systems.

MS-270W ...... Inch/Millimeter Scale Software for all B.O.S.S. Systems.

OS-275..... Pin Brinell Measurement Software for all "small nose" B.O.S.S. Systems.

#### **B.O.S.S. Software Upgrades**

C61011041 ..... Upgrade of older \* Windows versions to Windows 7. (With customer-supplied PC.)

C61011047 ..... Upgrade of older \* Windows versions to Windows 7, with new desktop CPU.

\*Windows 98 or newer. For DOS and Windows 95 units, call for upgrade pricing.

**C E** All systems conform to relevant EU standards and are CE marked.

#### B.O.S.S. Scan Heads Only

OS-300WE .... B.O.S.S. Scan Head only—USB. OS-100WE .... B.O.S.S. Scan Head only—Mutech Card Systems. OS-100WEP... B.O.S.S. Scan Head only—Picolo Card Systems.

#### **Options and Accessories**

<b>OS-013</b> Scan Head Cable—armored 10' (Mutech).
<b>OS-014</b> Scan Head Cable—armored 20' (Mutech).
<b>OS-015</b> Scan Head Cable—armored 15' (Units upgraded to Picolo).
<b>OS-041</b> Scan Head Cable—armored 15' (Picolo).
<b>OS-016</b> Scan Head Cable—armored 20' (Picolo).
<b>OS-019</b> Scan Head Cable—standard 15' (USB).
<b>OS-035</b> Scan Head Cable—armored 15' (USB).
<b>OS-101</b> "Snap-Tite" B.O.S.S. Scan Head Holder for wall or table mount.
<b>OS-103</b> Scan Head Tether—Recoiling Balancer only.
<b>OS-104</b> Scan Head Tether—Bench Clamp Mount.
<b>OS-106</b> Scan Head Holding Retractable Tether System.
OS-108Mobile Enclosure for Lab B.O.S.S. System.
HA-0204Scan Head Holding Bracket.
HA-0158B.O.S.S. Verification Block.
SA-0112Cable Adapter, 9- to 15-pin—armored (Mutech).
SA-0212Cable Adapter, 9- to 15-pin—vinyl (Mutech).
SA-0227Standard Cable—USB Scan Head, 6'.
SA-0271Armored Cable—USB Scan Head, 8'.
MT-210USB Printer with Cable.

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