Portable Hardness Tester

Model No. PHT-1900

State of the art, digital tester is designed to test the hardness of large hard metal parts. Clean crisp display shows the incredible functions that can only be found on this new model such as auto-probe detection, auto direction detector, single and multi-point calibration make the new 1900 the most versatile portable hardness tester in the industry. Blazing fast test speeds coupled with memory and output, this unit is a must have for virtually any work shop.

The PHT-1900 can perform tests that easily convert to the most popular hardness scales, including Rockwell, Brinell, Vickers, Shore, etc.

Designed to test large hard parts:

***Example:* Tool steel should be close to 1" thick of solid material**

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Operation:

- Load the impact body
- Place the impact device on your test piece
- Push the button to begin testing and obtain reading

Standard Accessories:

- Base instrument
- Impact device D
- Calibrated test block
- Custom carry case
- Cleaning brush
- Operation manual

Optional accessories:

- Impact devices; DC, D+15, DL, G, C
- Special support rings
- Mini Printer

Functions:

- *Easy to use keypad operation*
- *Auto identification of Impact Device*
- *Large LCD display with back light*
- *USB Output*
- *Automatic conversions to: Brinell, Rockwell B & C, Vickers and Shore*
- *Automatic mean value as well as Min & Max values*
- *Battery Indicator*
- *Large Memory capacity*

Specifications:

- *Accuracy: +/- 0.5% (referred to L=800,*
- *Repeatability accuracy: +/- 4L units) L=Leeb*
- *Measuring range: 200-960 HL*
- *Materials: steel & cast steel, alloy tool steel, stainless steel, grey cast iron, spheroidal iron, cast aluminum, brass, bronze, wrought copper alloy*
- *Battery type: AA alkaline (4)*
- *Operating temperature: 5-104 degrees F*
- *Dimensions: 150 x 74 x 32mm*
- *Weight: 245 grams*

Special Application Impact Devices

Impact Device D
Universal standard device:
Use for the majority of hardness testing assignments

Impact Device DL
Needle front section .109" diameter x 1.96" length
Measurements in extremely confined spaces

Impact Device G
Enlarged test tip: For use on solid heavy components such as; rough castings and forgings. Brinell only.

Impact Device DC
Extremely short impact device
Used for very confined spaces such as holes, cylinders, internal measurements

Impact Device D+15
Slim front section with coil set back.
Hardness measurements in grooves, recessed surface.

Impact Device C
Reduced impact energy
For testing case hardened components

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Impact Device Specifications for PHT-1900

Impact devices ➔	D/DC/DL	D+15	C	G
Impact energy	11Nmm	11Nmm	3Nmm	90Nmm
Mass of the impact body	5.5g	7.8g	3.0g	20g
	DL: 7.2g			
Test tip				
** Hardness*	1600HV	1600HV	1600HV	1600HV
** Diameter*	3mm	3mm	3mm	5mm
** Material*	Tungsten	Tungsten	Tungsten	Tungsten
	carbide	carbide	carbide	carbide
Impact device				
** Diameter*	20mm	20mm	20mm	30mm
** Length*	147/86mm	162mm	141mm	254mm
** Weight*	75/50g	80g	75g	250g
Max. hardness of sample	940HV	940HV	1000HV	650HB
Preparation of surface				
** Max. roughness depth Rt*	10 µ m	10 µ m	2.5 µ m	30 µ m
** Average roughness Ra*	2 µ m	2 µ m	0.4 µ m	6.3 µ m
Min. weight of sample				
** Of compact shape*	5kg	5kg	1.5kg	15kg
** On solid support*	2kg	2kg	0.5kg	5kg
** Coupled on plate*	0. 1kg	0. 1kg	0. 02kg	0. 5kg
Min. thickness of sample				
** Coupled*	3mm	3mm	1mm	10mm
** Min. thickness of layers*	0. 8mm	0. 8mm	0. 2mm	-
Indentation of test tip				
With 300 HV				
** Diameter*	0. 54mm	0. 54mm	0. 38mm	1.03mm
** Depth*	24 µ m	24 µ m	12 µ m	53 µ m
with 600 HV				
** Diameter*	0. 45mm	0. 45mm	0. 32mm	0. 90mm
** Depth*	17 µ m	17 µ m	8 µ m	41 µ m
with 800 HV				
** Diameter*	0. 35mm	0. 35mm	0. 30mm	-
** Depth*	10 µ m	10 µ m	7 µ m	-

SUPPORT RINGS: ***We offer a 12pc set of rings for testing concave or convex parts. PHT1500-300***