



# MEASURING EQUIPMENT

## Hardness Tester

### Product Information

### Hardness Tester

#### Rockwell Series

#### DIGITAL DISPLAY

#### ROCKWELL HARDNESS TESTER

A frictionless loading shaft mechanism is adopted in this instrument instead of conventional type and the application of preliminary test force is controlled by a magnetic clutch, so that the accuracy of preliminary test force is greatly increased. A series of operations including applying, holding and releasing of total test force is performed automatically. That completely eliminates human error in the operation.

Reading error by operators can be avoided thoroughly as the measured hardness values are digitally displayed.

The measured hardness value and data processing result concerned can be recorded automatically by the recorder.



Model : PT-5301

TECHNICAL SPECIFICATION

#### General Technical Specification

Measuring range: 20-88HRA, 20-100HRB, 20-70HRC
Test force: 588.4, 980.7, 1471N (60, 100, 150kgf)
Max. height of test piece: 170mm
Depth of throat: 130mm
Unit for display: 0.1HR
Power supply: 220V AC or 110V AC, 50/60Hz
Dimensions: 500 x 250 x 700mm
Weight: approx. 75kg

#### Main Accessories

- Large flat anvil: 1 pc.
- Small flat anvil: 1 pc,
- Large V-notch anvil: 1 pc,
- Diamond cone penetrator: 1 pc.
- 1/16"steel ball penetrator: 1 pc.
- Rockwell standardized block: 5 pcs.
- Printer: 1 pc.



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#### Rockwell Series

#### DIAL GAUGE

#### ROCKWELL HARDNESS TESTER

This tester, the winner of the national quality silver medal prize, can be applied in the factories, and scientific research institutes and laboratories of colleges, for determining the Rockwell hardness of hard alloys, quenched and unquenched steels.



Model : PT-5302

TECHNICAL SPECIFICATION

#### General Technical Specification

- Measuring range: 20-88HRA, 20-100HRB, 20-70HRC
- Test force: 588.4, 980.7, 1471N (60, 100, 150kgf)
- Max. height of test piece: 170mm
- Depth of throat: 135mm
- Weight: approx. 65kg

#### Main Accessories

- Large flat anvil: 1 pc.
- Small flat anvil: 1 pc,
- Large V-notch anvil: 1 pc,
- Diamond cone penetrator: 1 pc.
- 1/16"steel ball penetrator: 1 pc.
- Rockwell standardized block: 5 pcs.

## MEASURING EQUIPMENT

### Hardness Tester

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#### Hardness Tester

#### *Rockwell Series*

#### **MOTOR DRIVEN**

#### **ROCKWELL HARDNESS TESTER**

This tester is a necessary instrument widely used in the fields of machine building, metallurgy and measurement department, for determining the Rockwell hardness of ferrous, non-ferrous metals, non-metal materials and their finished parts.



**Model : PT-5303**

TECHNICAL SPECIFICATION

#### General Technical Specification

Measuring range: 20-88HRA, 20-100HRB, 20-70HRC
Test force: 588.4, 980.7, 1471N (60, 100, 150kgf)
Max. height of test piece: 170mm
Depth of throat: 130mm
Min. scale value: 0.5HR
Power supply: 220V AC or 110V AC, 50/60Hz
Dimensions: 500 x 250 x 700mm
Weight: approx. 75kg

#### Main Accessories

- Large flat anvil: 1 pc.
- Small flat anvil: 1 pc,
- Large V-notch anvil: 1 pc,
- Diamond cone penetrator: 1 pc.
- 1/16" steel ball penetrator: 1 pc.
- Rockwell standardized block: 5 pcs.



# MEASURING EQUIPMENT

## Hardness Tester

### Product Information

### Hardness Tester

#### Rockwell Series

#### LONG RANGE

#### ROCKWELL HARDNESS TESTER

This tester is designed for use in measuring the Rockwell hardness of hard alloys, quenched and unquenched steels. As its frame is higher than that of conventional types, so that it is a desired instrument for determining the hardness of large sized work pieces in the factories and repair workshops.



Model : PT-5304

TECHNICAL SPECIFICATION

#### General Technical Specification

- Measuring range: 20-88HRA, 20-100HRB, 20-70HRC
- Test force: 588.4, 980.7, 1471N (60, 100, 150kgf)
- Max. height of test piece: 400mm
- Depth of throat: 160mm
- Dimensions 548 x 326 x 1025mm
- Weight: approx. 140kg

#### Main Accessories

- Large flat anvil: 1 pc.
- Small flat anvil: 1 pc,
- Large V-notch anvil: 1 pc,
- Diamond cone penetrator: 1 pc.
- 1/16"steel ball penetrator: 1 pc.
- Rockwell standardized block: 5 pcs.



# MEASURING EQUIPMENT

## Hardness Tester

### Product Information

### Hardness Tester

#### Rockwell Series

#### DIGITAL DISPLAY SUPERFICIAL

#### ROCKWELL HARDNESS TESTER

This tester can be used to determine the superficial Rockwell hardness value of steel, alloy steel, hard alloy, plated coating, carburized, nitride and cyanided layers. The hardness value measured can be read off the show windows.



Model : PT-5305

TECHNICAL SPECIFICATION

#### General Technical Specification

Measuring range: 70-94HR15N, 42-86HR30N, 20-77HR45N, 67-93HR15T, 29-82HR30T, 10-72HR45T
Test force: 147.1, 294.2, 441.3N (15,30,45kgf)
Max. height of test piece: 150mm
Depth of throat: 120mm
Power supply: 220V AC or 110V AC,50/60Hz
Dimensions: 500 x 240 x 700mm
Weight: approx. 68kg

#### Main Accessories

- Large flat anvil: 1 pc.
- Small flat anvil: 1 pc,
- V-notch anvil: 1 pc,
- Diamond cone penetrator: 1 pc.
- 1/16"steel ball penetrator: 1 pc.
- Rockwell standardized block: 4 pcs.
- Printer: 1 pc.

## MEASURING EQUIPMENT

### Hardness Tester

#### Product Information

#### Hardness Tester

#### Rockwell Series

#### MOTOR DRIVEN SUPERFICIAL

#### ROCKWELL HARDNESS TESTER



Model : PT-5306

This tester is a necessary instrument widely used in the fields of machine building, metallurgy and measurement and measurement department, for determining the superficial Rockwell hardness value of steel, alloy steel, hard alloy, plated coating, carburized and nitrated layers.

TECHNICAL SPECIFICATION

#### General Technical Specification

Measuring range: 70-94HR15N, 42-86HR30N, 20-77HR45N, 67-93HR15T, 29-82HR30T, 10-72HR45T
Test force: 147.1, 294.2, 441.3N (15,30,45kgf)
Max. height of test piece: 150mm
Depth of throat: 120mm
Power supply: 220V AC or 110V AC,50/60Hz
Dimensions: 500 x 240 x 700mm
Weight: approx. 68kg

#### Main Accessories

- Large flat anvil: 1 pc.
- Small flat anvil: 1 pc,
- V-notch anvil: 1 pc,
- Diamond cone penetrator: 1 pc.
- 1/16" steel ball penetrator: 1 pc.
- Rockwell standardized block: 4 pcs.
- Printer: 1 pc.



# MEASURING EQUIPMENT

## Hardness Tester

### Product Information

### Hardness Tester

#### Rockwell Series

#### MOTOR DRIVEN PLASTIC

#### ROCKWELL HARDNESS TESTER

This tester can be used to determine the hardness of plastic, composite materials and all kind of friction materials, software materials, non-metal soft materials. A specific automatic zeroing dial gauge, an automatic loading and unloading mechanism are adopted un it, so that the measuring accuracy is high and the performance is reliable.



Model : PT-5307

TECHNICAL SPECIFICATION

#### General Technical Specification

Measuring range: 70-100HRE, 50-115HRL, 50-115HRM, 50-115HRR
Test force: 588.4, 980.7, 1471N (60, 100, 150kgf)
Max. height of test piece: 150mm
Depth of throat: 135mm
Power supply: 220V AC or 110V AC,50/60Hz
Dimensions: 505 x 240 x 700mm
Weight: approx. 70kg

#### Main Accessories

- Large flat anvil: 1 pc.
- Small flat anvil: 1 pc,
- V-notch anvil: 1 pc,
- 1/8", 1/4", 1/2" steel ball penetrator: 1 pc.
- Plastic Rockwell standardized block: 4 pcs.



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## Hardness Tester

### Product Information

### Hardness Tester

#### Rockwell Series

#### DIGITAL DISPLAY & SUPERICIAL

#### ROCKWELL HARDNESS TESTER

This tester features high measuring accuracy, reliable performance and applicable to wide fields.

This tester has a big display screen which integrated multi-functions such as scale selection, match hint of indenter, contrast for Brinell, Rockwell and Vickers hardness value, keeping increase and decrease of time, data dispose, data storage, pickup, adjustment of illuminating brightness, print and capability of computer RS232 output

It is used for hardness testing of all kinds of Rockwell and Superficial Rockwell. It serves to measure the hardness of hard metals, carburized steels, quenched steels, mile steels, hard cast irons, aluminum, copper and malleable irons.



Model : PT-5308

TECHNICAL SPECIFICATION

#### General Technical Specification

Total test force: 147.1, 294.2, 441.3, 588.4, 980.7, 1471N (15, 30, 45, 60, 100, 150kgf)
Test force holding time: 0~60S
Test force holding and releasing method: Automatic
Display method: Back light LCD screen
Data dispose: CPU
Dimension (L x W x H): 550 x 260 x 80
Sample Max size: Working table to indenter 180mm
Power supply: AC 220V ± 5%, 50~60Hz
Weight: approx. 67kg

#### Main Accessories

- Diamond indenter: 1pc.
- Ball indenter: 1pc.
- Working tables: 3pcs.
- Hardness blocks: 5 pcs.
- HRC higher 1 pc.
- HRC lower 1 pc.
- HRB 1pc
- HRN 1pc.
- HRT 1 pc.



## PRODUCT INFORMATION

Rockwell Model	5301	5302	5303	5304
Measuring Range	20-88HRA, 20-100HRB, 20-70HRC	20-88HRA, 20-100HRB, 20-70HRC	20-88HRA, 20-100HRB, 20-70HRC	20-88HRA, 20-100HRB, 20-70HRC
Test Force	588.4, 980.7, 1471N (60, 100, 150kgf)	588.4, 980.7, 1471N (60, 100, 150kgf)	588.4, 980.7, 1471N (60, 100, 150kgf)	588.4, 980.7, 1471N (60, 100, 150kgf)
Max height of test piece (mm)	170	170	170	400
Display Output	LCD	Dial Gauge	Auto Zero Dial Gauge	Dial Gauge
Throat depth (mm)	130	135	130	160
Hardness Resolution	0.1 HR	As per scale	0.5 HR	As per scale
Dimension (mm) Width x Depth x Height	500 x 250 x 700	466 x 233 x 630	500 x 250 x 700	548 x 326 x 1025
Weight Approx (Kg)	75	65	75	140
Power Supply	220Vac or 110Vac, 50/60Hz	NA	220Vac or 110Vac, 50/60Hz	NA
Test Force Control	Magnetic Clutch	Force Lever	Automated	Force Lever
Specimen Usage	Ferrous, non-ferrous metal, non-metal materials	Hard alloys, quenched & unquenched steel	Ferrous, non-ferrous metal, non-metal materials	Large size work pieces

Rockwell Model	5305	5306	5307	5308
Measuring Range	70-94HR15N, 42-86HR30N, 20-77HR45N, 67-93HR15T, 29-82HR30T, 10-72HR45T	70-94HR15N, 42-86HR30N, 20-77HR45N, 67-93HR15T, 29-82HR30T, 10-72HR45T	70-100HRE, 50-115HRL, 50-115HRM, 50-115HRR	HRA,B,C,D,E,F,G,H, K HR15N.T, 30N.T, 45N.T (scale)
Test Force	147.1, 294.2, 441.3N (15,30,45kgf)	147.1, 294.2, 441.3N (15,30,45kgf)	588.4, 980.7, 1471N (60, 100, 150kgf)	147.1, 294.2, 441.3, 588.4, 980.7, 1471N (15, 30, 45, 60, 100, 150kgf)
Max height of test piece (mm)	150	150	150	180
Display Output	LCD	Dial Gauge	Auto Zero Dial Gauge	Backlight LCD Screen
Throat depth (mm)	120	120	135	160
Hardness Resolution	0.1 HR	0.5 HRN(T)	0.5 HR	Selectable
Dimension (mm) Width x Depth x Height	500 x 240 x 700	500 x 250 x 700	505 x 240 x 700	550 x 260 x 800
Weight Approx. (Kg)	68	75	70	67
Power Supply	220Vac or 110Vac, 50/60Hz	220Vac or 110Vac, 50/60Hz	220Vac or 110Vac, 50/60Hz	220Vac 50Hz
Test Force Control	Magnetic Clutch	Motor-Driven Superficial	Motor-Driven Plastic	Automated main load
Specimen Usage	Steel, alloy steel, hard alloy, plated coating, carburized, nitrated and cyanided layers	Steel, alloy steel, hard alloy, plated coating, carburized and nitrated layers	Plastic, composite materials and all kinds of friction materials, soft materials, non metal soft material	Hard metals, carburized steels, quenched steels, mild steels, hard cast irons, aluminum, copper and malleable irons



Pinnacletech Pte Ltd

*QUALITY IS OUR VISION, YOUR SATISFACTION IS OUR MISSION*

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## For More Information

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