Digital Rockwell Hardness Tester,

Model: RASNE\_TFTKBD

Digital Rockwell Cum Superficial Hardness Tester,

Model: RASNET\_TFTKBD

Digital Rockwell Cum Brinell Hardness Tester,

Model: RASNEB\_TFTKBD

#### Features:

- Suitable for Rockwell Tests.
- Manually operated.
- Test force selection by external dialing.
- Auto zero setting dial gauge.
- Result print-out through built-in thermal printer.
- Built-in hardness converter.

All models confirm to respective standards as under -

IS: 1586-2, BS 10109-2 & ASTM E-18 for Rockwell Test

IS: 1586-2, BS 10189-2 & ASTM E-18 for Rockwell Superficial Test.

IS: 1500-2, BS 10003-2 & ASTM E-10 for Brinell Test.

#### Scope:

Present digital hardness testing machines are with Digital dial gauge. Output of which are 2 sine waves of 20 microns. It requires bulky and complicated circuit to get 1 micron resolution. Because of this there will be possibility of errors, maintenance problems and bulky electronic circuit required.

#### Data Entry:

Data entry provision is implemented using front panel keyboard, user friendly for operator setting for result, programmable dwell setting & scale selection also done using front panel keyboard.

# Auto/Manual Mode:

Bulk number of Specimens is to be test. Auto mode operation is very helpful operation. Auto or manual mode selection provision is provided in menu.

### Operation Cycle:

At Power ON, TFT Display Shows bar indication with dial reading, also selected scale will get displayed. Due to advance micro-controller system and user friendly

Place the specimen on table and lift the table till set point to reach.

Once set point reached depending on the mode of operation selected either Auto or Manual, further operation takes place.

If Auto mode operation is selected, no need of pressing start button further operation like loading, dwell and unloading takes place automatically.

If Manual mode operation is selected then, Press cycle start button to start cycle.

### Loading Starts:

When load position (timer) switch gets operated motor stops automatically for entered dwell time. Motor starts again after dwell & cycle gets completed when home switch gets operated, with hardness value & remark display.





FIE Pvt. Ltd.
Hardness Tester:RASNET IFTKBD
Sr.No.: 07/2013-2883

Scale: HRC
Hardnes: 59.2
Vickers: 674 HV
Brinell: 634 HBM

**Final Result Window** 

Result Print-out

DEVELOPMENT OF GAUGE AND TEST SYSTEMS

Azienda Certificata

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Codice Fiscale e Partita Iva IT 10785460154 - Registro delle Imprese 10785460154 - REA MB 1407783 - Cap. Soc. € 90.000,00 I.V

## Standard Accessories:

Model	RASNE-TFTKBD	<b>RASNET-TFTKBD</b>	RASNEB-TFTKBD
Testing table 50mm dia	1	1	1
Testing table 38mm dia with "V" groove for round jobs 6-45 mm dia.	1	1	1
Diamond indenter - Rockwell RA	1	-	1
Diamond indenter - Rockwell SF		1	
Steel Ball indenter 1/16" with 5 spare balls	1	1	′1
Steel Ball indenter 2.5 mm with 5 spare balls	1111		1
Test block Rockwell "C"	1	1	1
Test block Rockwell "B"	1	1	1
Test block HB 2.5/187.5	-	). <del>=</del>	1
Test block HR 30 N		1	SEL-LUCK
Allen Spanners	5	5	5
Screw Driver	1	1	1
Clamping device	1	1	1
Wooden box for std. accessories	1	1	1
Telescopic sleeves for elevating screw position	1 set	1 set	1 set
Spare fuse 1 AMP	1	1	1
Power cable	1	1	1
Brinell microscope		Section 1	1
Machine cover	1	1	1
Instruction Manual	1	1	1

# Technical Specifications:

Model	Unit	RASNE_TFTKBD	RASNET_TFTKBD	RASNEB_TFTKBD
Major Load	N	588.4, 980.7, 1471	147.1, 294.2, 441.3, 588.4, 980.7, 1471	588.4, 980.7, 1471, 1839, 2452
iviajoi Load	kgf	(60,100,150)	(15,30,45,60,100,150)	(60,100,150,187.5,250)
	N	98.7	29, 42, 98.07	98.07
Minor Load	kgf	(10)	(3, 10)	(10)
Max Test height	mm	230	230	230
Depth of throat	mm	133	133	133
Net Wt. Approx.	kg	75	77	77
M/c dimensions	mm	L-450, W-175 H-627	L-450, W-175 H-627	L-450, W-175 H-627

## 'FIE' Motorized Digital Hardness Tester:

Model	RASNE_TFTKBD	RASNET_TFTKBD	RASNEB_TFTKBD
Туре	Digital Rockwell	Digital Rockwell & Rockwell Superficial	Digital Rockwell cum Brinell
Operation Cycle	Automatic Load/Dwell/Unload	Automatic Load/Dwell/Unload	Automatic Load/Dwell/Unload
Preliminary Test Force	98.07 N (10 kgf)	29.42 N (3kgf) & 98.07N (10 kgf)	98.07 N (10 kgf)
Additional Test Force	490.3, 882.6, 1373 N (50, 90, 140 kgf)	177.7, 264.8, 411.9, 490.3, 882.6, 1373 N (12, 27, 42, 50, 90, 140 kgf)	490.3, 882.6, 1373, 1471, 2354 N (50, 90, 140, 177.5, 240 kgf)
Total Test Force	588.4, 980.7, 1471 N (60, 100, 150 kgf)	141.7, 294.2, 441.3, 588.4, 980.7, 1471 N (15, 30, 45, 60, 100, 150 kgf)	588.4, 980.7, 1471, 1839, 2452 N (60, 100, 150, 187.5, 250 kgf)
Test Force Selection	By external dialing	By external dialing	By external dialing
Set Position	With LCD bar indicator	With LCD bar indicator	With LCD bar indicator
Key Board Entry	Through membrane key for scale, GO-NO GO & dwell time selection.	Through membrane key for scale, GO-NO GO & dwell time selection.	Through membrane key for scale, GO-NO GO & dwell time selection.
Resolution	0.1 Rockwell	0.1 Rockwell or 0.1 Rockwell Superficial	0.1 Rockwell
Output	Output through Serial Thermal Printer.	Output through Serial Thermal Printer.	Output through Serial Thermal Printer.
Optional	Serial PC interface & windows software	Serial PC interface & windows software	Serial PC interface & windows software for only Rockwell scales.

Note: For Brinell scale - manually select (187.5 or 250 kgf) with respected ball indentor. At that time take reference of set point only, apply the load, then measure the impression dia by Brinell microscope only. (No Brinell scale display on screen).

Optional Accessories: • Steel Ball Indenter 1/8", 1/4", 1.2" • Testing table 200mm dia. • Testing table 70mm dia. with V groove for round jobs 10mm to 80mm dia. • Vari-rest to support odd shaped jobs. • Jominy test fixture for end quench test. • Gooseneck Adopter No.1 • Special Diamond Indenter suitable for Gooseneck Adopter No.1. • Short Nib Diamond Indenter suitable for Gooseneck Adopter No. 1. • Gooseneck Adopter No. 2. • Special Diamond Indenter suitable for Gooseneck Adopter No. 3. • Raised center testing table 15mm dia. • Diamond Spot Anvil • Cylindron anvil for testing big jobs above 20mm dia. • Eyeball anvil with 25.4mmdia. or 38mm dia. ball. • Gooseneck anvil for pipes 5 to 25mm ID with 5mm step inserts. • Jack rest for long and heavy jobs.

Due to constant Research & Development, Specifications and Features are subject to change without notice.