

# HARDNESS TESTERS



Opto-Fine make hardness Testers Model ORS, ORS, - 150, ORB, ORB 250 & OSM are manually operated. These models are designed and developed after years of experience in this field. All the models are manufactured under strict quality control at all manufacturing stages.

These models are suitable for testing hardness of metals and alloys of all

in s, hard or soft, whether flat or round etc. or of irregular shape. These tests are simple in design and easy to operate, still quite sensitive and accurate.

These models strictly conform to IS 3804, BS 891 Part-I and 11, ASTM E - 18 for Rockwell test and IS 2281 1983, BS 240, ASTM- E - 10 for Brinell Test & IS 5073 1988, ASTM-E-18 for Rockwell superficial Test.

MODEL	ORS	ORS-1 50	ORB	ORB-250	OSM
Test Loads (kgf)	60,100,150 (Rockwell)	60,100,150 (Rockwell)	60,100,150 (Rockwell) 187.5 (Brinell)	60,100,150, (Rockwell) 187.5,250 (Brinell)	60,100,150 (Rockwell) 15,30,45 (Rockwell Superficial)
Initial load (kgf)	10	10	10	10	10 (Rockwell) & 3 (Rockwell I Superficial)
Max. Test Height (mm)	215	295	215	295	295
Depth of throat (mm)	132	148	132	148	148
Max. depth of elevating Screw below base (mm)	230	290	230	290	290
Size of Base mm Approx	430X180	475X220	430X180	475X220	475X220
Machines height mm	635	865	635	865	865
Net weight Approx Kg.	105	65	105	125	65
<b>Standard Accessories</b>					
Rockwell Diamond Indentor	1 No.	1 No.	1 No.	1 No.	1 No.
Superficial Diamond Indentor	--	--	--	--	1 No.
Testing Table o 50mm	1 No.	1 No.	1 No.	1 No.	1 No.
Testing Table o 40mm with "V" groove for round jobs 6 to 45mm dia.	1 No.	1 No.	1 No.	1 No.	1 No.
Steel Ball Indentor o 1/16"	1 No.	1 No.	1 No.	1 No.	1 No.
Steel Ball Indentor o 2.5mm	--	--	1 No.	1 No.	--
Steel Ball Indentor o 5mm	--	--	1 No.	1 No.	--
Test Block HRC	1 No.	1 No.	1 No.	1 No.	1 No.
Test Block HRB	1 No.	1 No.	1 No.	1 No.	1 No.
Test Block HB 2.5/187.5	--	--	1 No.	1 No.	--
Test Block Rockwell Superficial 'N'	--	--	--	--	1 No.
Steel Ball o 1/16"	5 Nos.	5 Nos.	5 Nos.	5 Nos.	5 Nos.
Allen Spanners	3 Nos.	3 Nos.	3 Nos.	3 Nos.	3 Nos.
Clamping Device	1 No.	1 No.	1 No.	1 No.	1 No.
Brinell Microscope	--	--	1 No.	1 No.	--
PVC cover for machines	1 No.	1 No.	1 No.	1 No.	1 No.
Rubber bellow	1 No.	1 No.	1 No.	1 No.	1 No.
Instruction Manual	1 book	1 book	1 book	1 book	1 book