User Friendly Dependability



Wilson® UH4000 Series

The **UH4000** series universal hardness tester is designed for high volume production labs and production floor. The **UH4000** series is available in two different configurations, i.e. the UH4250 and UH4750. Universal hardness testers are designed to perform several hardness scales with one machine, in most cases for higher loads (>5kgf).

Due to its sturdy design, it is a reliable machine and suitable for rough workshop conditions. The innovative hardness tester features extremely fast testing cycles and a newly developed turret to hold several indenters and objectives. The operator can test to a variety of test methods without the need for manual indenter/objective changes. The frame is made from a very robust and sturdy Al alloy, as well as the turret cover, which protect the highly accurate measurement system and turret assembly against outer influences and collisions, e.g. with test pieces. The large 300mm [11.8in] x 400mm [15.7in] T-slot stage and the weight capacity enables testing of heavy and big parts.

The **UH4000** series suits for the following applications and many more.

- Hardness of castings and forgings
- On flat and cylindrical work pieces
- Wide field of application within the automotive and aerospace industry
- Product quality control testing
- Steels, non-ferrous metals, stainless steels, heat treated materials
- Cemented carbides, ceramics
- Plastics and carbon testing

Technical Specifications

	UH4250	UH4750
Hardness Scales	HV 0.5 - HB 10/250	HV 3 - HBW 10/750
Test Load Range	0.5-250 kgf	3-750 kgf
Test Load Type	Closed loop	
Optics	5-megapixel USB 3 digital camera, with digital zoom and autofocus	
Turret	8 positions for objectives and indenters	
Objectives Long Working Distance (Optional)	2.5x (optional with ring light), 5x, 10x, 20x, 40x, 50x	
Indenters (Optional)	Brinell 1mm, 2.5mm, 5,0mm and 10,0mm carbide balls, Rockwell diamond cone, 1/16", 1/8", ¼", ½" carbide ball indenters, Vickers diamond and Knoop diamond	
	diamond and Knoop diamond	

	UH4250	UH4750
Test Standards	Brinell (ISO 6506-1, ASTM E10), Vickers (ISO 6507-1, ASTM E92), Rockwell (ISO 6508-1, ASTM E18), Knoop (ISO4545-1, ASTM E384), Plastic testing ball indentation (ISO 2039-1, 2039-2)	
Z Spindle	Manual hand wheel and automatic Z axis drive	
Maximum Specimen Height/Weight	300 mm (11.8 in), 70 kg (154 lb)	
Test Stage Dimensions	T-slot stage with 12mm slot width, 300mm [11.8ln] x 400mm [15.7ln]	
Machine Dimensions (L × W × H)	704 Mm (28 in) × 534 mm (21 in) × 995 mm (39.2 ln)	
Machine Net Weight	300 kg (660 lb)	
Power Supply	110 - 240V / 50 - 60HZ	



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