Fowler

Portable Hardness Testers

▲ #53-760-001

▲ #53-760-005 shown with #53-760-020

The simplicity of the Fowler Tester enables it to be used in almost any direction, preferably vertically, without affecting accuracy. It can be used "on site" with complete success. The grips are depressed to the fullest extent by using the palms of the hands, and the hardness value can be read off the appropriate scale directly.

There is no need for microscopic measurement of the indentation or reference to conversion tables. Operators cannot overload instrument or influence reading by varying applied hand pressure. Reading obtained is completely dependent on the specially designed preloaded springs in the tester. Repeatability is excellent and calibration can be checked against reference test block supplied with each instrument. If necessary, the indentor adjusting bush can easily reset to give the exact test block reading.

Special Features:

- Suitable for use on ferrous and nonferrous metals from small diameter rods to large surfaces.
- Special bases available for use on small diameters or large radii.
- Stand accepts tester in a firm clamp, and table in stand is raised vertically to meet diamond indentor by means of pressure on a simple lever device.
- Special "V" base on each stand checks the hardness of round parts.
- Overall dimensions of 3" x 6" (75mm x 150mm) enables the Instrumatic to be used universally and conveniently by Quality Control Engineers and inspectors, etc.
- Tester is entirely mechanical, using special preloaded springs which provide a load of about 14.3 lbs. (6.5 kg) for the 53-760-001, 002 and 005 to the diamond.
- For 53-760-006 the load is 8.8 lbs. (4 kg).
- For 53-760-007, load is 35.2 lbs. (16 kg).
- When taking hardness reading, springs operating against diamond assembly are balanced against hardness of specimen, i.e., the harder the part being tested, the more movement is affected between diamond point and datum face of the unit.
- Movement is transmitted through a direct mechanical linkage to the gage head where a movement of .0001" (.0025mm) at the diamond is amplified to approximately .250" (6.35mm) of rotary movement at the tip of the pointer. Maximum penetration of diamond into specimen is .005" (.125mm).
- The Instrumatic Tester is supplied with detailed operating instructions, a test block and adjusting wrenches.
- Price includes a hardwood case.

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▲ Left to right: #53-760-002, #53-760-005 and #53-760-007.

Order No.	Description	Scales
Portable Hardness Testers:		
53-760-001	Portable Hardness Tester. British B.S.8601967 w/Rockwell C Test Block.	Rockwell C 20-70 Brinell 100-500 Vickers Pyramid 100-1000
53-760-002	Portable Hardness Tester. American SAE 1949 w/Rockwell C Test Block.	Rockwell C 20-70 Rockwell A 40-85 Rockwell B 50-100
53-760-005	Portable Hardness Tester. Low range Steel w/Vickers Pyramid Test Block.	Vickers Pyramid 40-300 Brinell 40-300
53-760-006	Portable Hardness Tester. Low range Non-ferrous w/Vickers Pyramid Test Block.	Brinell 40-300 Vickers Pyramid 40-30
53-760-007	Portable Hardness Tester. Cast Iron only with Brinell Test Block.	Brinell 100-600
Accessories:		
53-760-020	Portable Bench Stand (not for use with 53-760-007).	
53-760-025	Magnetic Holder	
53-760-035	Replacement Diamond Indentor for 53-760-001, 002, 005 & 006.	
53-760-040	Replacement Indentor Bushing for 53-760-001, 002, 005 & 006.	
53-760-045	Replacement Diamond Indentor for 53-760-007 only.	
53-760-050	Replacement Indentor Bushing for 53-760-007 only.	
53-760-060	Test Block for Steel-High Range. (Included with 53-760-001 and 53-760-002 for Rockwell C). Mid-range	
53-760-065	Test Block for Steel Range. (Included with 53-760-005 for Vickers or Brinell). Mid-range Vickers	
53-760-070	Test Block for Non-ferrous. (Included with 53-760-006 for Vickers or Brinell). Mid-range Vickers Rockwell B	
53-760-075	Test Block for Cast Iron. (Included with 53-760-007 for Brinell) Mid-range Rockwell B.	
53-760-080	Replacement base for all models.	
53-760-085	160 degree base for internal radii over 6".	
53-760-090	Double "V" base for diameters larger than .08".	
53-760-061	Rockwell C Test Block, high range	
53-760-062	Rockwell C Test Block, low range	
53-760-063	Rockwell B Test Block, high range	
53-760-064	Rockwell B Test Block, low range	