

FORCE-TECH

Advance Computerized Touch Screen Micro Vickers Hardness Tester

Model - FATV-X8

Salient Features of our Top End Model

- Auto Turret
- Optical Measurement with Digital Encoder
- ➤ Worm UP/DOWN Movement
- Same Image at the same time is shown on Monitor and Optical System
- > Touch Screen
- Direct ECD value
- > 15 years Spare Back up
- Digital Computerized



FORCE-TECH CALIBRATION SYSTEM.•

Redefining qualities...

Advance Computerized Touch Screen Microvickers Hardness Testers

FATV-X8

Highly precise hardness tester suitable for test of widely hardness ranges from softest to hardest materials. This machines available with Manual & automatic turret system guided by optical cross rail to achieve highly accurate & precise results. This machine is equipped with built-in encoder with click button on encoder to avoid human errors. Equipment is also featured with a DATA storage & calibration. Most compact in size (540*260*650mm) & light weight (50kg).

Features

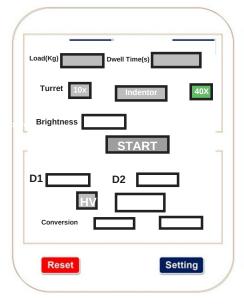
- Automatic Turret System.
- Multifunctional 8 inch LCD touch screen panel.
- Flexible & Foldable design of hand wheel.
- 10X digital Encoder with built in encoder.
- 8P Data Storage system with store up to 300 Test reports.
- LED cold light source (can use continuously for 24 hrs.)
- Easy conversion of hardness scales.
- Can print results data Min & Max values with graph facility

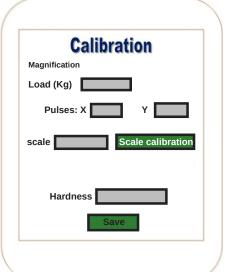


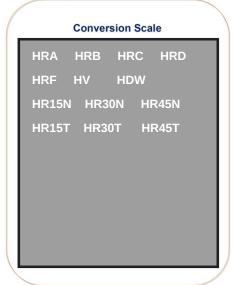
Model	FATV-X8		
Turret Movement	Automatic		
Measuring Eyepiece	10X & 40X		
Min. Measuring unit	0.01µm		
Testing Force	10g (0.098N), 25g (0.0245N), 50g (0.49N), 100g (0.98N), 200g (1.96N), 300g (2.94N), 500g (4.9N), 1000g (9.8N)		
Hardness Scale	HV0.01, HV0.025, HV0.05, HV0.1, HV0.2, HV0.3, HV0.5, HV1		
Hardness conversion scale	HRA, HRB, HRC, HRD, HRF, HR15N, HR30N, HR45N, HR15T, HR30T, HR45T, HV, HK, HBW.		
Hardness Range	1HV – 4000HV		
Hardness Value of reading	8 inch LCD touch screen display		
Magnification	100X for observation & 400X for Measurement		
Dwell time	1 - 99 sec		
Loading Control	Automatically (Load / Dwell / Unload)		
X-Y Testing table	100*100 mm, Travel up to 25*25 mm with resolution 0.01mm		
Max. Height of Specimen	100 mm (Vertical)		
Max. depth of specimen	130 mm (Horizontal)		
Light source	Cold light source 5V/3W LED (Can be continuous use for 24Hrs, No heat generate, ensure stable working, Services life can reach 1,00,000 hrs.)		
Executed Standard	IS1501-2 , ASTM384 & ASTM E92		
Overall dimension	540*260*650mm (L x W x H)		
Net weight approx.	65 kg		
Power supply	220V ± 5%, 50/60 Hz (110V is available)		

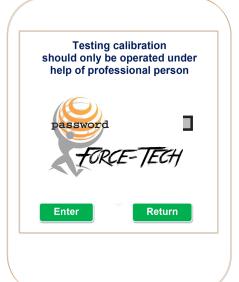
	10x Omron digital micro eyepiece	1 No.
	10X & 40X objective lens	1 No. Each
	Vickers Indentor	1 No.
Standard Accessories	X-Y Testing Table	1 No.
Accessories	Hardness Test Blocks (HV1 & HV0.2)	1 No. Each
	Screw Driver	1 No.
	Level Bubble	1 No.
	Allen Keys	1 Set
	Leveling Screw	4 Nos.
	Power Cable	1 No.
	Manual Book	1 No.
	Dust Proof Cover	1 No.
	Accessories Case	1 No.
Optional Accessories	Digital X-Y Table, Data transfer software, Built-in-printer Testing times & Avg. Value)	r (Hardness value- Max. & Min. value,

Menu Interface (8" Touch Screen Display)













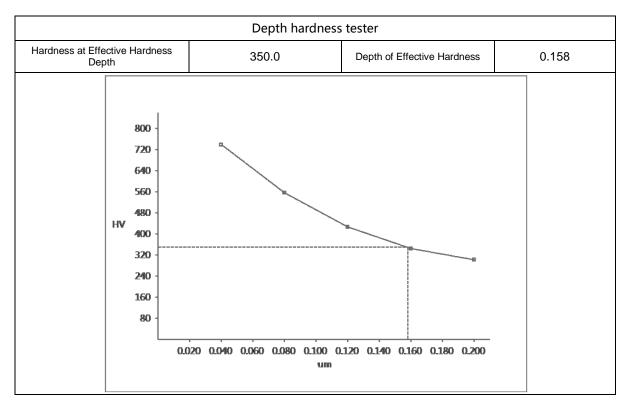
Test Report (ECD)

Sample Name	Sample Name	Sample S _n	Sample S _n
Min Value	300.0	Max Value	800.0
Inspection Company	Inspection Company	Inspection Date	2022-02-05
Tester	Tester	Reviewer	Reviewer
Force	0.2kgf	Load Time (s)	2

Statistical data						
NO MAX MIN AVE VAR STD Cp Cpk						
5 739.6 302.7 474.3 25085.65 158.38 0.53 0.37						

	Detailed data								
#	D1(um)	D2(um)	Davg(um)	Hardness type	Hardness value	Convet type	Convet value	Qualified	Depth
1	22.39	22.39	22.39	HV	739.6	HRC	61.8	YES	0.040
2	28.29	23.34	25.81	HV	556.7	HRC	52.8	YES	0.080

#	Pictures	#	Pictures
1	W. 739. 6 47/8 (um)	2	HV \$55/7



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OPTIONAL PURCHASES



Metallographic Specimen Mounting Machine



Touch Screen Automatic Mounting Machine

Model	FAM-30S
Mould Diameter	30 mm
Heating temperature range	100-200° C
Holding Time Range	0-999 sec
Cooling Method Water Cooling	
Pressure Automatically	
Mould Preparation Capacity	Single Mould
Electric Power	650W, 220V, 50Hz
Dimensional Weight	350 X 450 X 470 mm, 48kg



Touch Screen Manual Mounting Machine

Model	HMF-30S	HMF-45S	
Mould Diameter	30 mm	45 mm	
Temperature Adjusting Range	90-200° C		
Cooling Method	Air Cooling Fan		
Pressure	Manually by hand wheel		
Mould Preparation Capacity	Single Mould		
Electric Power	650W, 220V, 50Hz		
Dimension / Net Weight	440 X 253 X 310 mm, 32kg		

Metallographic Polishing Machine



Double Disc Polishing Machine

Model	FAP-2D
Disc Diameter	203 mm
Grinding/Polishing Speed	50-1000 RPM
Power	550W, 220 Volt
Head Rotating Speed	50 RPM
Sample Force	0-40 N
Sample Capacity	1-3 Nos.
Dimension/Net Weight	700 X 600 X 278 mm, 45kg



Double Disc Polishing Machine (Advanced)

Model	FP-M2-(VD)
Disc Diameter	200 mm
Disc Diameter (Optional)	10 Inch, 12 Inch
Grinding/Polishing Speed	50-1000 RPM
Sample Force	0.5 HP High Torque Motor
Power	550W, 220 Volts
Dimension/Net Weight	800 X 600 X 278 mm, 47kg

Metallographic Specimen Cutting Machine

MATRIX metallographic sample cutting machine is widely used to cut the various types of metal materials. These machines are equipped with cooling system which clear up the heat produced during sample cutting and avoid deformation of metal structure because of heating influence.



Model	FACM-100X	
Display	LCD Display with high resolution backlight	
Cutting Capacity	100mm	
Cutting Method	Manual & Automatic	
Way of infeed	Arbitrary adjustment	
Infeed distance	Arbitrary Set, Adjustment and fixture position	
Reset Mode	Automatic	
Cooling System	Water Cooling with 3 ways	
Effective workpiece Length	gth 200 mm	
Spindle Speed	2800 RPM	
Coolent Tank Capacity	65 liters	
Cutting wheel dimension	350mm X 2mm X 32mm	
Motor	4 HP (3 kw), 380V, 50Hz	
Dimension / Net Weight	1650 X 680 X 740 mm, 150kg	

Automatic Cutting Machine

Model	FCM-60 FCM-80		
Front Cover	Fully Enclosed		
Cutting Capacity	60 mm	80 mm	
Cutting Method	Manual		
Cooling System	Water Cooling		
Spindle Speed	2800 RPM		
Coolent Tank Capacity	50 liters		
Cutting wheel dimension	250mm X 2mm X 32mm		
Motor	2.9 HP (2.2 kw), 380V, 50Hz		
Dimension / Net Weight	700 X 650 X 560 mm, 117kg		



Abrasive Cutting Machine



Model	FCM-35	FCM-50
Cutting Capacity	35 mm	50 mm
Cutting Method	Manual	
Cooling System	Water Cooling	
Spindle Speed	2800 RPM	
Coolent Tank Capacity	50 liters	
Cutting wheel dimension	250mm X 2mm X 32mm	
Motor	1.4 HP (1.1 kw), 380V, 50Hz	2.9 HP (2.2 kw), 380V, 50Hz
Cutting Capacity	30 mm	55 mm
Net Weight	60 kg	80 kg