

HVT Expert 1401

Generic Name : High Volume Fibre Tester

Product # : MAG – F1095

Test Category : Cotton Fibre

Industry Usage : Ginning and Spinning

TEXTILE
TESTING
SOLUTIONS

Features :

- Determines the fibre properties such as Length & Strength; Micronaire & Maturity; Moisture & Color and Gravimetric Trash.
- Compact and ergonomic model embedded with microcomputer controlled technology for rapid measurement.
- Less space occupation, less weight and comfortable SS top work space.
- One touch start / shutdown control by single switch button.
- Calibration in both ICC & HVI mode by USDA and any other international calibration cotton.
- Automated fiber comb sampling for better sampling repeatability and avoid operator influence.
- Intelligent pressure mechanism for accurate beard collection irrespective of sample size.
- Advanced trash separation by buoyancy separation technique by the use of air currents.
- Parallel as well as simultaneous operations ensure faster testing.
- More than 200 tests per hour under combined tests mode (Without Trash module) and more than 300 tests per hour under module testing mode.
- Since it is measuring real Trash Content (%), it will take 7 minutes for 50 gram sample size.
- Flexible report options like date wise, lot wise, cotton type wise as well as consolidated reports.



TECHNICAL DATA

Operating Modes : HVI and ICC

	Length	Strength	Micronaire	Moisture	Color	Trash
Measuring Principle	Optical	CRE	Airflow	Electrical Conductance	Optical	Buoyancy Separation

Measuring Range	12 to 45 mm	10 to 50 g/tex	2.0 to 8.0 µg/inch	3.5 to 20 %	Rd: 40 to 90 +b: 4 to 18	Up to 99%
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Sample size : 8.5 to 10.5 gram for Micronaire, 10 to 50 gram for Trash and one handful for Length, Strength, Moisture & Color

	Length	Strength	Fineness	Moisture	Color	Trash
Numerical Results	2.5% & 50% SL, UHML, ML (all in inch/mm), UR, UI, SFI, Amount	Bundle Strength in g/tex and Elongation in %	Micronaire and Maturity Ratio MR %	Moisture in %	Reflectance Rd % Degree of Yellowness +b and American upland Cotton Color Grade CG	Trash, Dust, Micro-dust and IV loss in %

FQI (Fibre Quality Index) derived from all above characteristics

Predicated Lea **CSP** (for combed & carded yarns) and **PP** (Process Proficiency)

Micro-dust filtering : Fine - 150 micron; Coarse - 300 micron

Balance Capacity : 420 gram; **Accuracy** : 0.001 gram

Compressed Air Supply : 6.2 to 7.2 bar dried and filtered air; Consumption : ~200 LPM (during test progress only)

Power Supply : Single Phase 220vAC @ 50Hz; Consumption : 2500 watts (Including printer 300 watts)

Applicable standard(s) : ASTM D5867 / D2812 & ITMF

Physical Dimensions : Size(WDH) : 3520 x 700 x 1300 mm Weight : 750 kg (Accessories excluded)

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SCOPE OF SUPPLY

- 1) Main Unit** – 3 Nos.
- 2) Accessories** : FibroSampler - 1 No., Comb - 2 Nos., FibroSampler cleaning brush - 1 No., TFT monitor - 1 CPU - 1 No., Keyboard and mouse - 1 No., Precision Electronic Balance - 2 Nos., Isolation transformer (2 KVA) - 1 No., Laser Printer - 1 No., Inlet air tube (6m) - 1 No., Micro-dust filter cartridge "Fine" - 1 No., Dust filter cartridge "Course" - 1 No., Sample feeding tray - 2 Nos., Blower unit - 1 No., Printer Tray - 1 No., Cotton Tray - 1 No., Cotton collecting Box - 6 Nos., Trash tray - 2 Nos., Trash cleaning brush - 1 No. and Set of connecting cables - 1 No.
- 3) Tools** : Maintenance Toolkit Box - 1 No.
- 4) Spares** : Comb - 1 No., Micro-dust filter cartridge "Fine" - 1 No., Dust filter cartridge "Course" - 1 No. and Set of System Software CDs - 1 No.
- 5) Documents** : User's guide, Warranty certificate, Test certificate & Calibration certificate.
- 6) Consumables** : Standard Calibration cotton (Pack of 200 g) - 2 Boxes (Each 1 No. of Low & High). Standard Calibration color tiles (Set of 5) - 1 Set.

- Optional Supply** : 1) BaleMAN Software (Bale management software)
 2) Barcode Software
 3) Air compressor
 4) Air dryer and filter
 5) Humidification system
 6) Online sine wave UPS

PRE-REQUISITES FOR INSTALLATION

Suitably conditioned (65% Relative Humidity atmospheric controlled) Room, Properly earthed and Stabilized single phase 220vAC @ 50Hz supply equipped with 1 KVA online UPS ported at 5 Amps supply socket 2 Nos. / 16 Amps supply socket 1 No., Laboratory standard compressed air supply at 8.0 bar (10 kg/cm² / 14.5 CFM / Min. 225 tank capacity) with a throughput of 200 LPM, Test samples and Suitably qualified operator.

OTHER AVAILABLE MODELS

HVT Genius 2030, HVT Genius 2020, HVT Expert 1301, HVT Expert 1201, HVT Expert 1103 and HVT Smile 100 (Compact High Volume Fibre Tester)