

Scientific

New Compact Filter Tester

Fully computerized and equipped with 20 mm extruder incorporating a High Torque Servo Motor Drive for Gear Pump

**In full compliance with
DIN Norm EN 13900-5 and
ISO 23900-5 filter test standards**



With instant visualization of all test data on the on board Panel PC and featuring High max Pressure of 300 Bar for optimum Filter Value precision

With in line Gear Pump for optimum precision. For fast and accurate testing of pigment and fillers in compounds and masterbatches.

Enables establishment of reliable test methods to be used for quality control and classification of your specific product.

FULLY COMPUTERIZED CONTROLS OF FILTER TESTER AND EXTRUDER



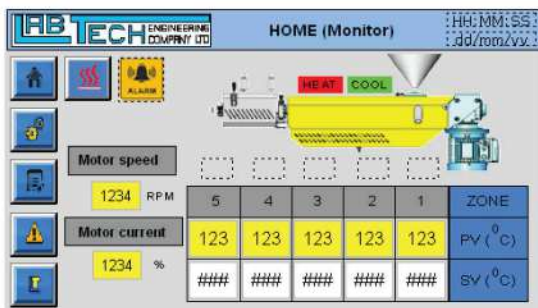
With this new version the recording and controls are made with an on-board Industrial Panel PC with a large 12.1 inch LCD screen . The control panel is also equipped with an in house made electronic microchip circuit which registers and controls signals from pressure transducers and thermocouples.

The test parameters can be keyed in on a very practical conventional Key Board with large ball type Scroll Mouse mounted on the control panel. This feature is a lot easier to use than for instance with a touch screen, since the running parameters and batch data can be keyed in on the key board in the same way as you work with a normal PC. However the touch screen also has a key board screen if you prefer to use this system.

The on-board Industrial type Panel PC has high memory capacity, using a solid 2 GB flash card instead of hard disk to ensure the system is insensitive to vibrations and chocks. The PC can store thousands of test result, which can be recalled on screen for immediate comparison and/or downloaded to another PC through an USB port on the side of the control panel



The lower part of the control panel has start/stop buttons for gear pump and extruder as well as main on/off and emergency switches. It also contains a speed control button for the screw RPM and



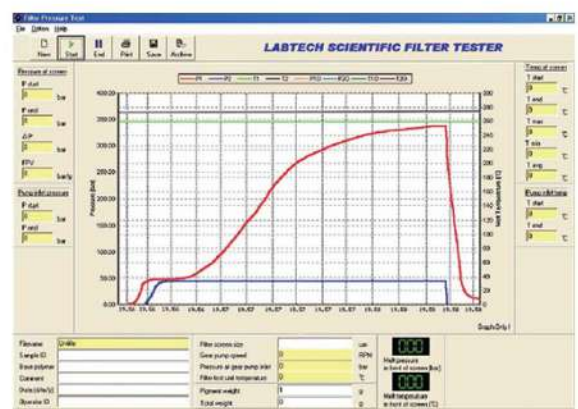
a selector switch for switching the filter tester from manual to auto mode. The second selector switch is for on/off of the on board panel PC

The control panel has a second smaller touch screen controlling the extruder parameters like heating and cooling of all barrel zones including auto tuning. The screen show actual motor load in percent of full load as well as screw RPM. Additional this extruder control screen feature an alarm system which will warn if any functions of the extruder is not working properly

The PC main screen shown above has a multitude of text boxes for entering on the keyboard all the essential batch parameters such as:

1. Sample ID (test batch code number),
2. Base Polymer and Comments on the test
3. Date
4. Operator ID
5. Filter Mesh size
6. Pigment Weight
7. Total Weight of batch.

The computer will automatically calculate the FPV (Filter Pressure Value) and show all running parameters in designated windows.



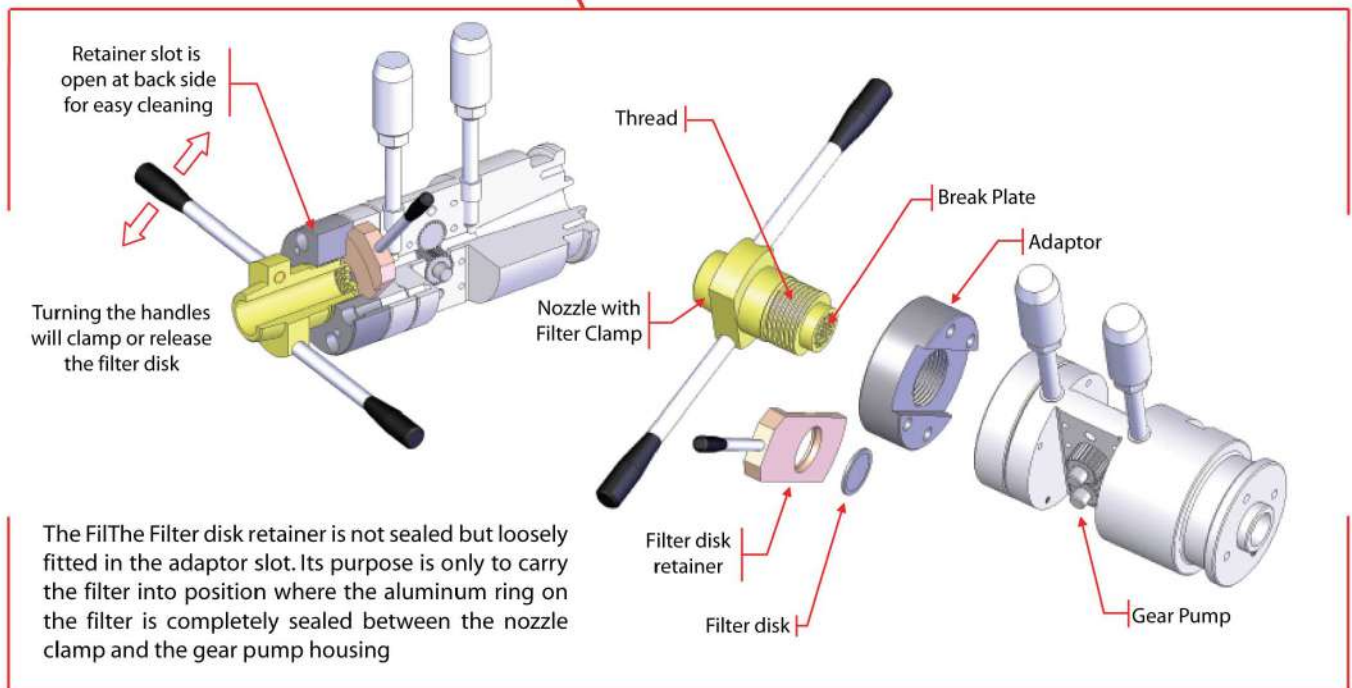
New Quick Lock Filter Clamping System Supplied as standard on all new Filter Testers



**In full compliance with
DIN Norm EN 13900-5
and ISO 23900-5
filter test standards**

Changing filters is done quickly by only turning the handles on the clamp a few turns

**For both low and high pressure
applications of up to 300 Bar**



With this system we will eliminate the possibility that the filter is wrongly inserted into the filter retainer. The retainer shown in the drawing is used only to push in the filter disk and it is loosely fitted into the adaptor slot. The retainer and the slot in the housing is designed so that it is not possible to insert the filter disk unless it is properly positioned in the retainer hole.

Turning the nozzle clamp will seal the filter against the breaker plate in the nozzle and rear housing of the gear pump so there will be no possibility for leaks. When the test is finished, the clamp is opened and retainer with filter is pulled out from the adaptor slot. The adaptor slot is opened at both ends so it is easy to clean this area by simply pushing out the resin through the slot. We have slanted the retainer slot in 45 degrees so that it is more convenient for the operator to clean and to visually inspect the slot for residues. The nozzle with the handles eliminates the use of tools and will be a lot easier and faster to use.

Labtech 34 mm DIN Norm Filter Packs

Made in full conformity to the DIN Norm EN 13900-5 and ISO 23900-5 filter test standards

Screen-pack 1

Two-layer construction, where the first layer is a reverse plain Dutch weave 615/108 warp/weft per 25,4 mm with a wire diameter of 0,042 mm/0,14 mm and the second layer (support mesh) is a square mesh plain weave 0,63 mm aperture width with a wire diameter of 0,40 mm calendered

Screen-pack 2

Two-layer construction, where the first layer is a reverse plain Dutch weave 615/132 warp/weft per 25,4 mm with a wire diameter of 0,042 mm/0,13 mm and the second layer (support mesh) is a square mesh plain weave 0,63 mm aperture width with a wire diameter of 0,40 mm calendered

Screen-pack 3

Three-layer construction, where the first layer is a twilled Dutch weave 165/1400 warp/weft per 25,4 mm with a wire diameter of 0,071 mm/0,040 mm and the second layer (support mesh) is a square mesh plain weave 0,25 mm aperture width with a wire diameter of 0,16 mm and the third layer (support mesh) is a square mesh plain

The wide micron range of our Standard Filter Packs also offers a much larger flexibility than with the DIN filters so that it is possible to make evaluations of compounds with particle sizes down to 5 Micron which is of importance for fiber applications. Also the higher Micron range of 25 and 45 are used for determine gels in resins as well as for compounds and masterbatches for thick walled plastic products where fine particle sizes are of less importance.

Our standard filter packs are made with a three-layer construction, where the first layer is a twilled Dutch weave of either 5, 10, 15, 25, or 45 microns aperture opening and the second layer (support mesh) is a square mesh plain weave of 50 mesh (300 µm aperture opening) and the third layer (support mesh) is a square mesh plain weave of 18 mesh (1 mm aperture opening).

Brief technical data:

FILTER TEST MACHINE TYPE		LCFT34-GP With Gear Pump
Recorder channels		4
Gear Pump motor power	(KW)	0,75
Pressure range at filter	(bar)	0 to max 300
Gear Pump inlet pressure	(bar)	0 to 100
Recommended test quantity	(KG)	0,2 to 0,5
Normal test time	(Min)	5 to 10
Single Screw Extruder Size	(mm)	20 mm.
Screw L/D ratio		30
Motor Power	(kW)	1,5
Screw Speed range	(RPM)	0-150
Number of heating zones on barrel		3
Maximum output with LDPE	Kg/Hr	4