

Labtech Engineering

**Computerized filter tester with on-board Panel PC
+ instant key board with scroll mouse**



**In full conformity
to the new filter test
DIN Norm EN 13900-5**



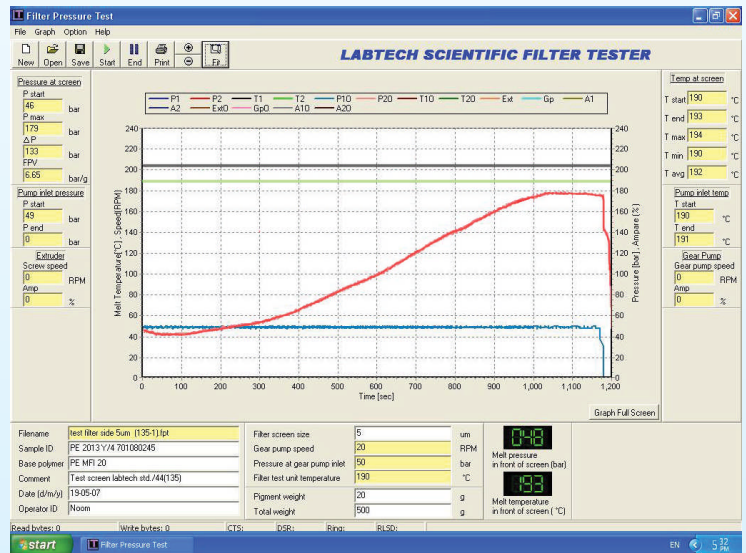
**With instant visualization of all test data on the on board Panel PC and featuring
High max Pressure of 300 Bar for optimum Filter Value precision**

The filter tester with Gear Pump is built up in the same way as our popular standard version. Please see our main catalogue pages 35 to 37 for full details

But instead of chart recorder and digital instruments, the recording and controls are here made with an on-board Panel PC with 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 Key Board with large Scroll Mouse on a pull out drawer, mounted on the control panel as shown above. 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.

The on-board 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 computerized filter tester enables
easy storing, retrieving and
visualization of all test data for best
possible accuracy**



The main screen above have a multitude of text boxes for entering on the keyboard all the essential parameters such as: Sample ID (test batch code number), Base Polymer, Comments on the test, date, Operator ID. Filter Mesh size, Pigment Weight and Total Weight of batch. The computer will automatically calculate the FPV (Filter Pressure Value) and show all running parameters in designated windows.

The large central graphic area on the screen will display continuously processing curves for pressure before gear pump, filter pressure as well as melt temperatures before and after gear pump.

After the test is completed, the data can be stored on board as well as transferred and printed through ports on the rear of the control panel.

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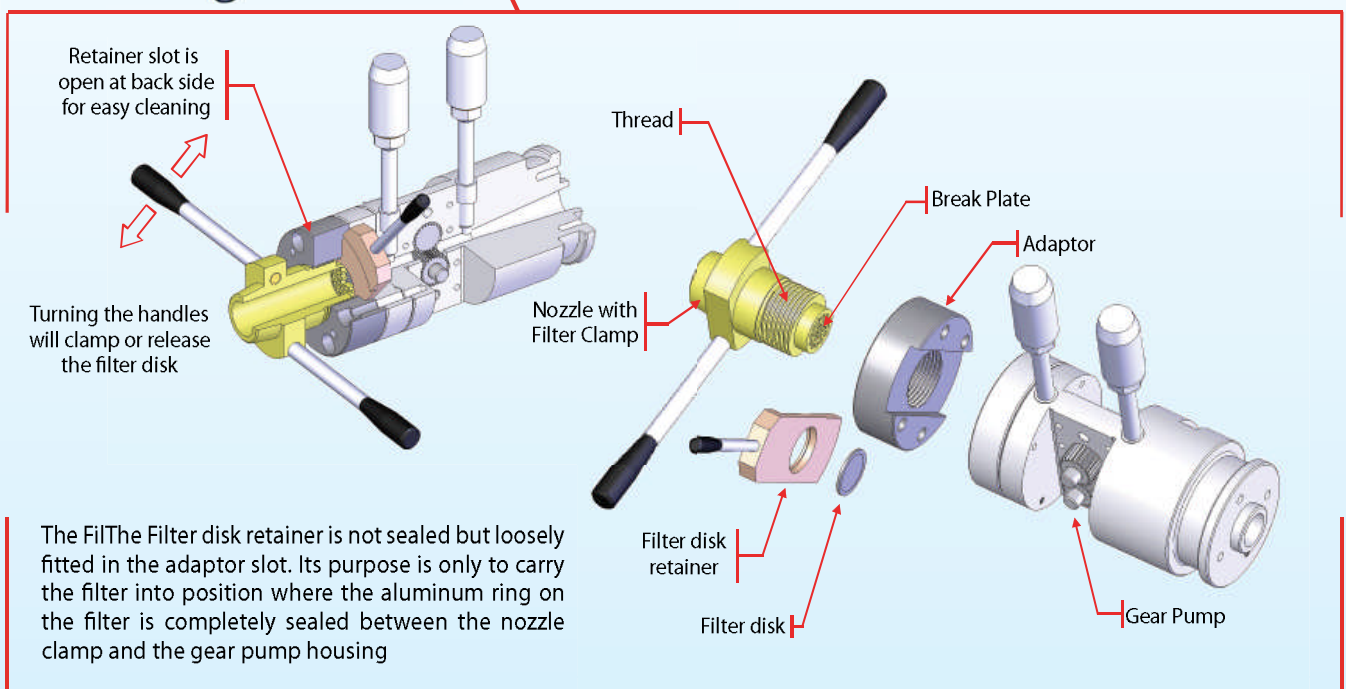
**New Quick Lock Filter Clamping System
Supplied as standard on all new Filter Testers**



**In full conformity
to the new filter test
DIN Norm EN 13900-5**

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

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

Labtech Standard filter pack

These packs are not in accordance with the DIN Norm but they are widely used for more precise evaluations and Quality Control in production of Masterbatches and compounds. They are available in a wide micron range which is valuable for determine the particle size of specific additives, fillers or pigments as well as the agglomerations of these components in the compounding process. These filters are also available in two diameters of 44 mm and 34 mm where the latter is the same size as the DIN filters. The larger 44 mm diameter of our Standard Filters has a much larger filter area which enables higher precision in evaluation of a compound or masterbatch.

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).

The first layer is one of the following:

- 5 micron screen = 200 x 1400 mesh
- 10 micron screen = 165 x 1400 mesh
- 15 micron screen = 165 x 800 mesh
- 25 micron screen = 500 x 500 mesh
- 45 micron screen = 325 x 325 mesh

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