Filter Testers in full Conformity to the DIN Norm

Computerized Filter Tester

Fully computerized version with on board large capacity PC featuring a practical keyboard and mouse for convenience in entering all the test data. This version automatically calculates the filter test value.

Filter Tester with Gear Pump for accurate quality testing and standardization of master batches and compounds.

- Standard filter sizes from 40 down to 5 microns, as well as DIN sizes. Available for both our 20 and 25 mm extruders.

New Compact Filter Tester type with 20 mm extruder

Our filter test head with gear pump is designed specifically for easy cleaning where the melt flows in a straight line from extruder through gear pump all the way up to the filter. The filter is easily installed and removed with our quick clamping system.
Labtech Filter Tester

The test determines ‘oversize’ particles in a sample
The test is commonly used for QC on color masterbatches
Features of the Labtech Filter Tester

- Two pressure transducer/temperature monitoring instruments: P1 and T1 (before gear pump), and P2 and T2 (before screen pack),

- Screen pack size: 34 mm (for DIN standard) or 44 mm diameter 5

  Screen pack sizes: 10 µ, 15 µ, 25 µ, and 45 µ.

  And ‘screen packs 1, 2, and 3’ for DIN standard
Labtech Filter Tester

Computerized control of filter tester

Filter tester head

LBE20-30/P Benchtop single-screw extruder
Computerized Control of the Filter Test

Panel for setting the gear pump speed and inlet melt pressure

Temperature controller for the filter tester head

Real-time plot of graph during the test
Typical Computer Screen from a Filter Test
The Filter Tester Head

- Screen pack
- Retainer plate
- Handles for quick clamping and unclamping of the unit
- Gear pump
Running the Filter Test
Extruders used for the Filter Test:

1. The LBE20-30/P benchtop single-screw extruder

For running the DIN Norm EN 13900-5 filter test

20 mm diameter screw
30:1 L/D
3.75:1 compression ratio
Plain screw
Non-vented barrel
**Extruders used for the Filter Test:**

2. The LE25-30/C single-screw extruder
   Used with the LFT44-GP filter tester

   **Standard:**
   25 mm diameter screw
   30:1 L/D
   Screw has Maddock mixing section and pineapple mixing section
   Non-vented barrel

   **Options:**
   Plain screw
   Modular mixing sections
   Vented barrel

   Can also be used for running the DIN Norm EN 13900-5 filter test -- after converting the filter tester head (using our conversion kit) for using 34 mm dia screen packs.
Conversion Kit to Convert the LFT44-GP Filter Tester to LFT34-GP for Testing According to DIN Norm EN13900-5
The LE25-30 Extruder Control Panel

- Drive motor power (% max)
- MAN/AUTO selector switch
- Extruder screw speed adjusting knob (for manual control only)

Extruder screw speed (rpm)
The filter tester unit is detachable from extruder (C-clamp) and portable. The extruder can be used for other downstream equipment.

- Extruder has MAN and AUTO controls.
- Extruder is 20 mm or 25 mm, 30L/D, non-vented, plain screw.
- 44 mm-size filter tester can also be used for DIN EN 13900-5 test. Need to modify head with our conversion kit for 34 mm screen pack.
End of Filter Testers