

## Bench Scale Crossflow Filtration System

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For most liquid filtration and separation applications, pilot plant trials are essential in order to determine whether the properties of the filtrate, or indeed the retentate, are of the desired quality.

Such trials are also crucial to optimise the filtration / separation process are an important precursor to scale-up. To facilitate such trials, Mantec Filtration offers a bench scale filtration system.

Often a two-step process, trials generally begin with a simple small-volume feasibility test, in order to generate samples for lab analysis and first-pass system economics. If this looks promising, then larger scale pilot plant trials can be undertaken to enable the specification and design of the full-scale plant.

Mantec has the expertise and all the necessary plant and equipment to carry out extended continuous product trials.



When customers require a pilot plant to carry out their own evaluation and trials, Mantec is able to offer a range of trial plants, filters and equipment for rental – with full training and support.

The system has been designed to facilitate the production of small batches (between 1 and 5 litres of feedstock) and for lab trials to optimise filtration parameters for scale-up.

Incorporating 1 x filter housing, filtration takes place through a Star-Sep ceramic filter. The system is supplied fitted with an air operated (AODD) pump as standard. Alternatively, a variable speed centrifugal pump can be supplied.

The Star-Sep ceramic filters are available in various pore sizes from 0.2 microns to 1.2 microns.

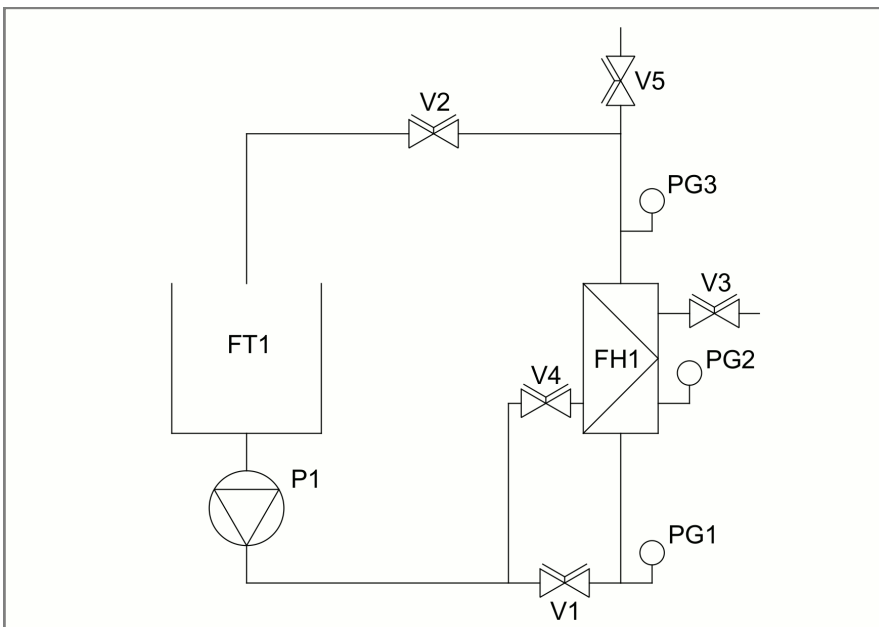
System Dimensions: 100 x 50 x 45 cm



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Incorporating 1 x Filter Housings to suit a 7 channel 600mm Star-Sep ceramic filter having an area of 0.06 m<sup>2</sup> and comprising the following components:

FT1	Feed Tank, Polypropylene construction with a capacity of 7.5 litres
P1	AODD type pump. (Centrifugal pump can be supplied optionally)
FH1	Filter Housing to suit a single Star-Sep ceramic filter 600mm x 7 channel.
PG1, 2, 3	Pressure Gauges - stainless steel, 0-6 Bar, glycerine filled.
V1, 2, 3, 4, 5	Valves - stainless steel ball valves
Pipe	Stainless steel / polypropylene



For more information, please contact Mantec Filtration with details of your application.

