

## Smart Filter Press Test Unit 0,18 m<sup>2</sup>

### ➤ For Filter Selection

Testing the slurry is essential before choosing the correct filter type and size. In this way, we can ensure the best possible process performance and most cost-efficient solution for each application. Filtration testing can be done on site or in Flowrox filtration laboratory.

### ➤ Optimizing Filtration Process

Typically, filtered slurry or process conditions keep changing over time. Filters are often not running in the most optimal way and process performance drops. To improve the situation, filter parameters need to be reset and performance of auxiliary equipment checked. This small-scale test unit (0,18 m<sup>2</sup>) makes it easier and faster to test the slurry on site, without disturbing the production.

### ➤ Testing gives insight into slurry's filtration characteristics:

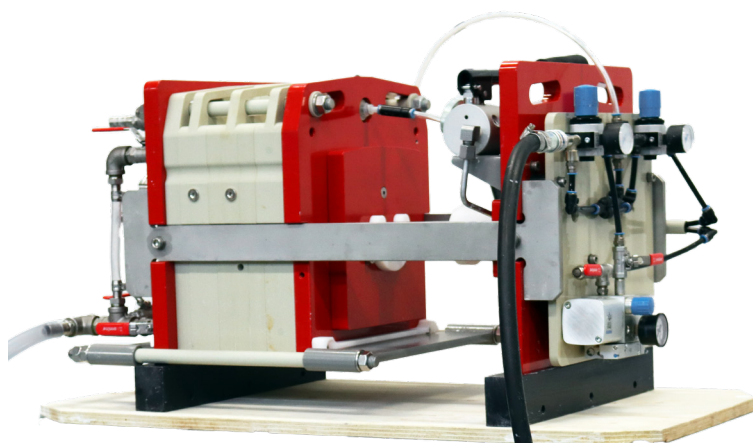
- Filtration capacity, kg DS/m<sup>2</sup>h
- Cake moisture, % w/w
- Cake washing results
- Filter cloth selection
- Filtrate clarity
- Optimal filtration cycle



*The small-scale test unit makes it easier & faster to test slurry on site, without disturbing the production.*

### Specifications

Filtration area	0,18 m <sup>2</sup> (1 plate measures 0,045 m <sup>2</sup> )
Chamber depth	32 mm
Shipping weight	120 kg
Shipping size	97 x 48 x 59 cm (length x width x height)



*Filter press test unit simulates the operation of the full-size industrial filter.*

### YOUR BENEFITS

Full understanding of the slurry's filtration characteristics



Most suitable filter for the duty



Optimized process performance



# Testing requirements

## Testing facility requirements

- Working space: 4 x 4 m space
- Test unit requires 6 bar air supply
- Clean water with hose connection is needed to clean the unit and filter cloths
- Drain needed for washing liquids
- Slurry feed tank 100 litres with mixing (also heating if required)
- Mixer for the slurry (not included)
- Cakes & filtrate buckets (usually 3 pieces of 50 litres capacity will do)
- 100 kg scale for measuring filtrate flow

## Required sample

- Test sample: 100 liters minimum
- Solids content: preferably 40 - 65 % (also lower concentrations can be tested)

## Required analysis

- Feed temperature & pH
- Feed solids content w/w %
- Feed density g/l
- Cake moisture: measured by dry weight determination method
- Filtrate analysis: 100 ml is tested using filter paper & vacuum bottle
- Cake washing analysis: based on specified requirements in certified laboratory
- Particle size distribution: should be done for the feed sample
- Cake density: based on volume change

## Flowrox Smart Filter Press Cloth Selection

Wide selection of filter cloths enables you to choose the right type of cloth for individual application, minimizing costs and maximizing production.

Flowrox type code	Material	Warp	Weft	Liters/dm <sup>2</sup> min 200Pa	Weight g/m <sup>2</sup>	Thickness mm
W-FA157	PP	Multi	Multi	1,2	580	0,9
W-FA160	PP	Multi	Multi	3,6	465	0,73
W-FA162	PP	Mono	Multi	7,8	330	0,41
W-FA164	PP	Mono	Multi	15	345	0,51
W-FA366	PP	Mono	Mono	67	275	0,4
W-FA368	PP	Mono	Mono	72	447	0,61
W-FA469	PP	Mono	Mono	498	234	0,45



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