

Smart Filter Press Test Unit 0,18 m²

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 Roxia filtration laboratory.



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

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 \mbox{m}^2) makes it easier and faster to test the slurry on site, without disturbing the production.



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Testing gives insight into slurry's filtration characteristics:

- × Filtration capacity, kg DS/m²h
- × Cake moisture, % w/w
- × Cake washing results
- × Filter cloth selection
- × Filtrate clarity
- × Optimal filtration cycle

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

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

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

Roxia 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.

Roxia type code	Material	Warp	Weft	Liters/dm² min 200Pa	Weight g/m²	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