

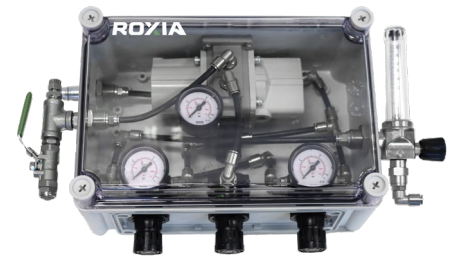
# Tower Press Test Unit 0,01 m<sup>2</sup>

## 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 Roxia filtration laboratory.



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



Compact control unit enables exact system management.

## 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 (0,01 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

Specifications	
Filtration area	0.01 m <sup>2</sup>
Filter plate	1 plate with 0.01 m <sup>2</sup> surface
Chamber depth	45 or 60 mm

## BENEFITS

- ✓ Full understanding of the slurry's filtration characteristics
- ✓ Most suitable filter for the duty
- ✓ Optimized process performance

## Testing facility requirements

Working space: 1 x 2,5 m table 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 20 litres with mixing (also heating if required)

Cakes & filtrate buckets (usually 3 pieces of 10-20 litres capacity will do)

10 kg scale for measuring filtrate flow

## Required sample

Test sample: 20-30 liters

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

Particle size distribution: should be done for the feed sample

Cake density: based on volume change

## Roxia Tower 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	m <sup>3</sup> /m <sup>2</sup> min 200 Pa	g/m <sup>2</sup>	kN/m lengthwise	mm
W-TA115	PP	0,3	1100	370	1,8
W-TA117	PP	1,0	1100	370	1,8
W-TA220	PP	2,6	1100	370	1,8
W-TA221	PP	5	1100	360	1,8
W-TA223	PP	5	1100	350	1,8
W-TA300	PP	6	1000	350	1,8
W-TA301	PP/PET	7	1100	350	1,8
W-TA302	PP/PET	10	1100	350	1,8
W-TA410	PP/PET	16	1100	350	1,8