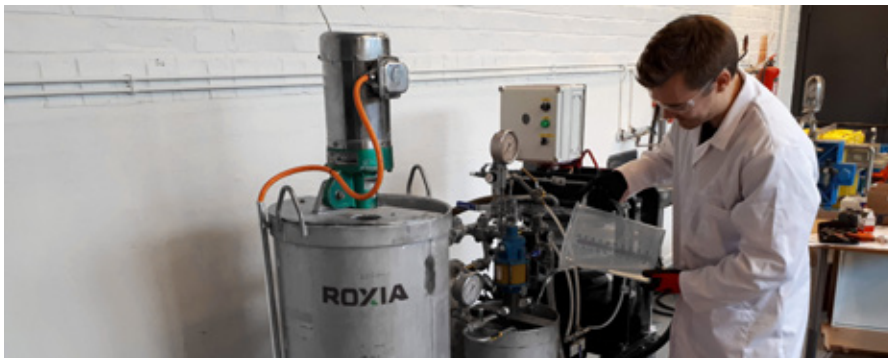


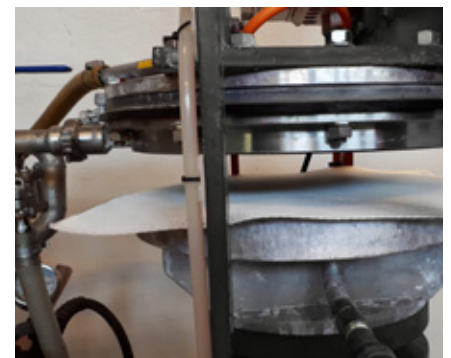
# Tower Press Test Unit 0,1 m<sup>2</sup>

## 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.



Roxia filtration specialists know how to optimize your filtration process.



Tower 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 (0,1 m<sup>2</sup>) makes it easy and fast 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	0,1 m <sup>2</sup>
Chamber depth	45 or 60 mm
Shipping size	190 x 84 x 199 cm (length x width x height)
Shipping weight	607 kg

## BENEFITS

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

## Testing facility requirements

Working space: 4 x 4 m

Test unit requires 6 bar air supply & 230 V power

Clean water with hose connection is needed to clean the unit and filter cloths

Drain needed for washing liquids

Cakes & filtrate buckets (usually 3 pieces; 2 x 50 litres and 1 x 100 litres capacity)

100 kg scale for measuring filtrate flow

Heater for the slurry (if needed)

## Required sample

Test sample: 100 liters

Solids content: 40–65 % preferred (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 Filter Cloths for Tower Presses

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

### Roxia Light-Duty

Cloth Type	m <sup>3</sup> /m <sup>2</sup> min 200Pa	g/ m <sup>2</sup>	mm	Tensile strength kN/m length-wise
W-TA117L	1,4	990	1,7	340
W-TA220L	3,0	940	1,6	350
W-TA221L	7,0	960	1,7	340
W-TA301L	19	960	1,7	310
W-TA410L	25	960	1,7	310

### Roxia Standard

Cloth Type	m <sup>3</sup> /m <sup>2</sup> min 200Pa	g/ m <sup>2</sup>	mm	Tensile strength kN/m length-wise
W-TA115	0,2	1100	1,8	370
W-TA117	1,0	1100	1,8	370
W-TA220	2,6	1100	1,8	370
W-TA221	5	1100	1,8	350
W-TA223	5	1100	1,8	350
W-TA300	6	1000	1,8	350
W-TA301	7	1100	1,8	340
W-TA302	10	1100	1,8	340
W-TA302	16	1100	1,8	340

### Roxia Heavy-Duty

Cloth Type	m <sup>3</sup> /m <sup>2</sup> min 200Pa	g/ m <sup>2</sup>	mm	Tensile strength kN/m length-wise
W-TA221H	4	1200	2,05	440
W-TA301H	12	1200	2,05	430
W-TA410H	14	1200	2,05	400