

Ceramic Disc Test Unit 0,02 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.



The ceramic disc test unit can also simulate the ultrasonic washing cycle just like the full-size industrial filter



Simple ceramic dip test set fits in a smaller suitcase and requires little space.

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 (0,02 m²) 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/m²h
- × Cake moisture, % w/w
- × Filtrate clarity
- × Optimal filtration cycle

Specifications	
Filtration area	0,02 m ²
Filter element	mini ceramic plate 15 x 10 x 3 cm
Shipping size	56 x 46 x 27 cm (length x width x height)
Shipping weight	20 kg

BENEFITS

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

Testing facility requirements

Working surface: 1 x 2 m table space

Test unit does not require additional vacuum pump or an air supply.

Vacuum is created by water jet vacuum pump included in the unit.

Clean pressurized water: 2 bar (most common)

Water connection: 3/4" threaded male connector or claw coupling

Drain needed for waterflow

Power drill to mix the slurry (not included)

Electricity: 230 V European socket / 110 V USA socket

Containers for slurry, cakes & filtrate: 3 pieces, size ~20 l

Required sample

Test sample: 20–30 liters

Solids content: min. 40 %, preferably 65 %

Required analysis

Feed temperature & pH

Feed solids content w/w %

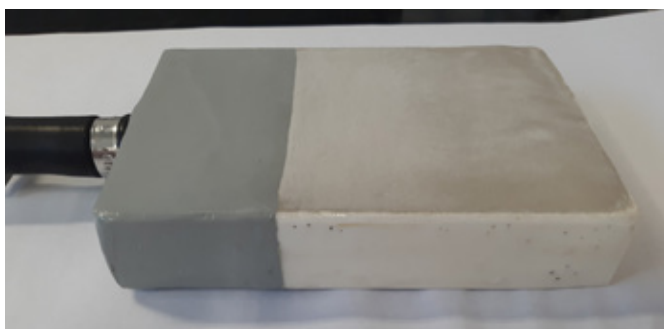
Feed density g/l

Cake moisture: measured by dry weight determination method

Filtrate analysis: usually unnecessary as the filtrate is crystal clear

Particle size distribution: should be done for the feed sample

Cake density: based on volume change



Ceramic plate before (left) and after (right) cake formation. The test simulates the operation of the full-size industrial filter.