

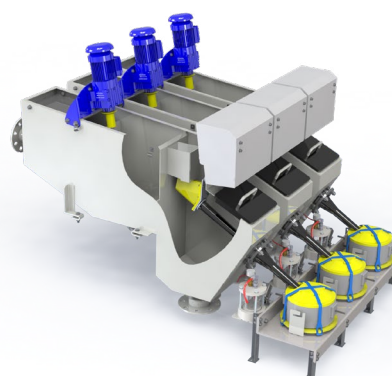


Thermo Scientific VacFilt Vacuum Filter

The Thermo Scientific™ VacFilt Vacuum Filter is an automated solution for slurry sample dewatering that eliminates the manual handling issues associated with transporting large volume, dilute samples to the metallurgical laboratory. By automating the filtration of shift composite samples at the point of collection it reduces the manual input associated with routine sampling while at the same time minimizing health and safety concerns.

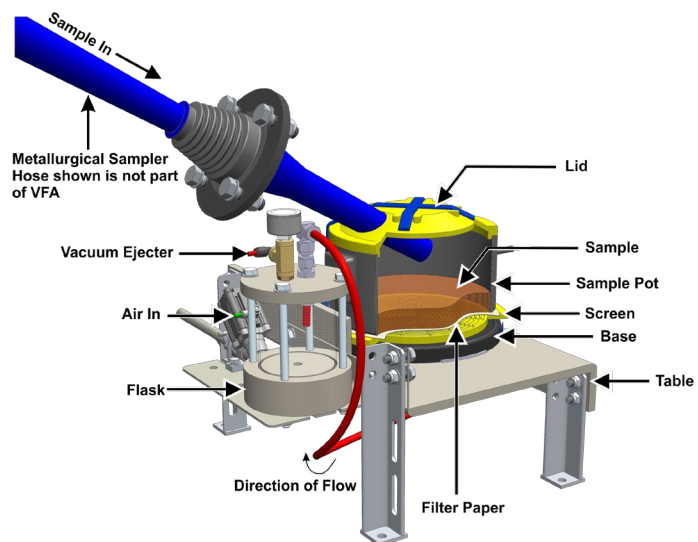
Key features:

- Produces a dewatered filter cake under configurable conditions for easy composite sample handling.
- Suitable for use with any Thermo Scientific sampling system or online elemental analyzer.
- Available in 1, 2, 3 or 6 stream configurations, offering the flexibility to match with different analyzers and samplers to meet plant requirements and layout constraints.
- Choice of controller units – VacFilt3 and VacFilt6 – for up to 3 and 6 streams respectively.



6- and 3-stream Thermo Scientific™ MSA 330 Multi-Stream Slurry XRF Analyzer with VacFilt vacuum filters

The VacFilt provides a de-watered sample from one or more slurry sampling streams. Filtering is automatic and fully customizable using the VacFilt controller. At the end of a shift simply remove the filter cake sample and replace the filter paper.



VacFilt assembly

A VacFilt single stream unit can be used with a Thermo Scientific™ X-Cut Linear Cross-Cut Sampler, Thermo Scientific™ SamStat 30 Representative Slurry Sampling Station or Thermo Scientific™ AnStat 330 Online Sampling and Elemental Analysis Station.

In addition, VacFilt 3- or 12-stream units are available for use with the Thermo Scientific™ GS Omni Analyzer (up to 8 streams) or MSA 330 Multi-Stream Slurry XRF Analyzer (up to 12 streams).



VacFilt 3- and 12-stream unit (two 6-stream units combined)

VacFilt unit general specifications

Parameter	Specification
Average air consumption	Variable, filter cycle set by controller
Theoretical max air consumption	46 litres per minute per Controller at 500kPa (less at higher kPa)
Construction material	PU, PE, PC, UHMWPE, SS-316
Sample capacity	5 litres
Maximum working vacuum pressure	-88 kPa
Filter paper size	290 mm
Valve actuation	Pneumatic
Configuration	1-stream, 2-stream, 3 stream and 6 stream
Extraction rate	Sample and Particle size dependent
Weight	18 kg (single unit)

VacFilt controller specifications

Item	Specification
Configuration	3 stream VF3, and 6 stream VF6
Enclosure dimensions	VacFilt-3: 500 wide x 500 high x 240 mm deep overall plus mounting brackets, RH hinged door VacFilt-6: 600 wide x 800 high x 300 mm deep overall plus mounting brackets, RH hinged door
Weight	VacFilt-3: 10 kg VacFilt-6: 18 kg
Environmental operating temperature	0-50 °C Must be shaded from direct sun in high temperatures
Noise	<80 dBA at 1 metre
Air supply pressure	Nominally 700 kPa (87 psi) minimum 500 kPa, maximum 1000 kPa
Air quality	Instrument quality air (clean and dry to 0.1 microns with dewpoint < 2 °C)
Power (in-plant requirement)	Standard factory selectable 200-500 Volts AC + 10% 1-phase or 3-phase, 48-62 Hz + 2 Hz
Maximum power consumption	< 50 W
Isolators	Main padlockable isolator switch, interlocked with door also acts as overcurrent protection
Cable entries	One 20 mm entry at the bottom of the enclosure for mains in
Connecting pneumatic hoses	All hoses between Controller and VacFilt unit supplied by Thermo Fisher Scientific
Water	No permanent water feed is required
Enclosure material	316 stainless steel rated IP65 to AS/NZS 60529-2004
Operation modes	Local, Auto, Manual
Controls (HMI)	Sealed (IP65) panel with LCD display
Remote outputs	8 potential free relay contacts for status/alarm