



# BHS-Filtration Inc.

## BHS FEST Rotary Pressure Filter

Print-Friendly Version

### Rental Filter for On-Site Testing

The Fest Rotary Pressure Filter technology provides for thin-cake production in a single vessel. Continuous process steps are tailored to meet your specific requirements. For example, filtration is conducted via gas pressure of up to 90 psig. Positive displacement washing or counter-current washing follows filtration. Of course, multiple washing steps as well as solvent exchanges, steaming and extraction can also be accomplished. Finally, the cake is dried by blowing hot or ambient-temperature gas through the cake.

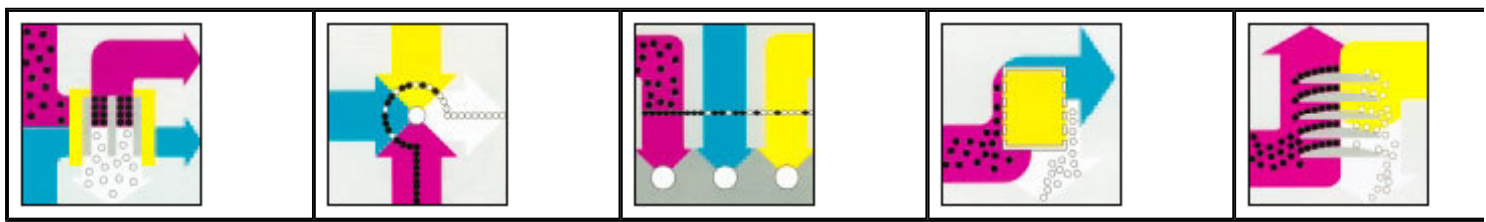
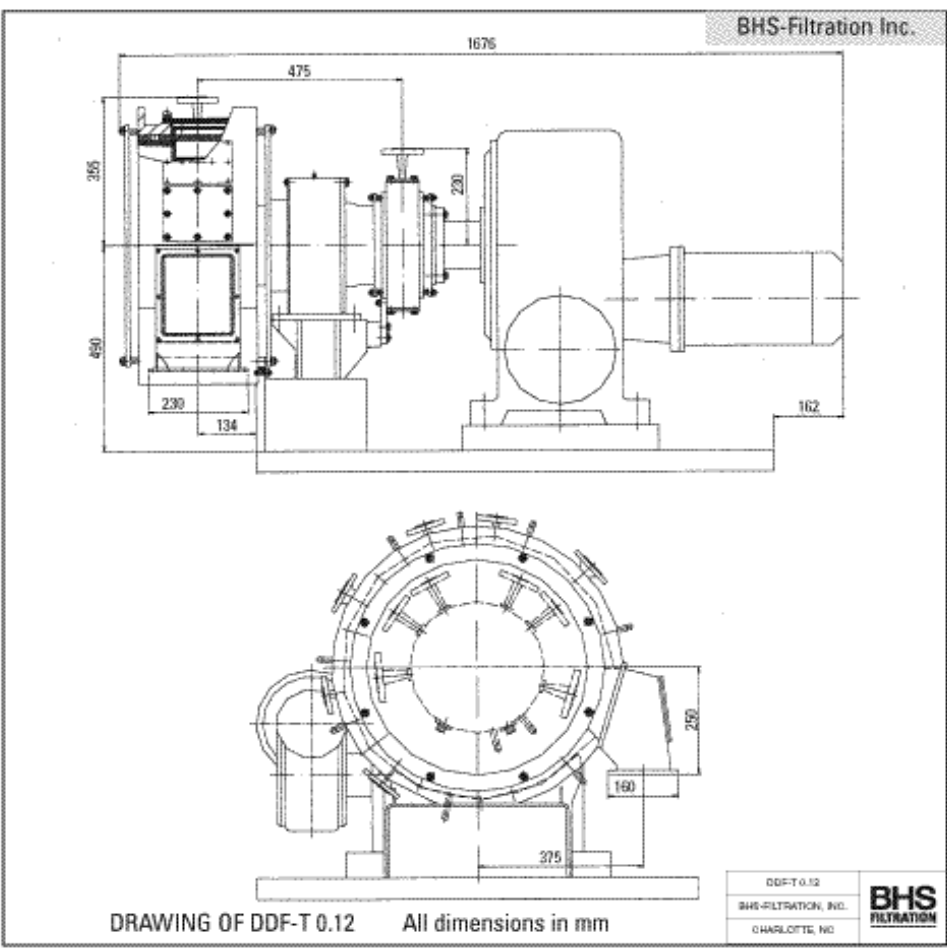
The uniquely designed discharge system provides for atmospheric discharge from pressure filtration, which eliminates the need for storage tanks, vents or vacuum locks to be installed on downstream equipment. The FEST Filter is an ideal replacement for solid-bowl centrifuges, rotary vacuum filters and other process equipment where solids, solvents and hazardous materials are being handled continuously.

OPERATION DATA	
Operation pressure	3 barg (maximum)
Operation temperature	<150° and > -20° C
Flow rate suspension	< 1000 l/h
Flow rate / Cake wash liquid	<500 l/h
Flow rate filter cake	<250 l/h
Flow rate clothrins	<100 l/h
Cake thickness	<15 mm and > 5 mm
Product Filter quality	depending on test solid free
Specific flow rate	< 8000 l/m <sup>2</sup> h
Compressed air consumption	< 25 Nm <sup>3</sup> /h (3 barg)

DESIGN DATA	
Filter Type	DDF-T 0.12
Filtration area	0.12 m <sup>2</sup>
Total dimensions L/W/H (m)	1.0 / 1.5 / 2.0
Drum diameter	500 mm
Filter cells	Possible zone division in steps of 27°
Total weight	900 kg (approximate)
Product side material	1.4571 (similar 316 Ti)
Drive motor	1.5 HP, 60 Hz/3 phase, XP
Reduction gear	Contrate worm gear

BHS is a manufacturer of filtration, solid-liquid separation, cake washing and drying technologies for the chemical, pharmaceutical and process industries. AUTOPRESS filter dryers, FEST rotary pressure filters and specialized belt filters as well as other technologies allow

BHS to provide single-source solutions for your difficult filtration, washing and drying operations. BHS complete installation with vacuum packages, solids handling and containment systems, tanks, instrumentation, PLC control and on-site startup and preventative maintenance program. Pilot-scale units are available for on-site testing.



**BHS-Filtration Inc.***Filter Systems for the Chemical & Pharmaceutical Industries.***Specializing in Thin-Cake Filtration, Cake Washing & Drying Technologies**

Test in the BHS Laboratory or at Your Plant for the Optimum Process Technology

**BHS FEST Rotary Pressure Filter**

- Continuous thin-cake (0.25-6 inches) production
- Filtration is conducted via pressure of up to 90 psig
- Positive displacement washing or counter-current washing
- Multiple washing steps as well as solvent exchanges, steaming and extraction
- Cake drying by blowing hot or ambient-temperature gas
- Atmospheric discharge from pressure operations for direct discharge to downstream equipment

**BHS-Autopress**

- The Autopress is installed in potent compound and active pharmaceutical ingredient (API's) facilities as well as for specialty chemical applications
- Thin-cake, typically 0.25-1.0 inches, production
- Filter plates are contained in a pressurized filter housing for complete containment
- Batch pressure filtration and forward or reverse flow washing
- Vacuum or hot-gas drying or pre-drying without agitation or tumbling
- Mechanical compression to 600 psig to eliminate cake cracking
- Fully automatic, heel-free and contained product discharge
- CIP systems with documented performance based upon Riboflavin tests

**BHS Belt Filter**

- Continuous filtration, washing and drying
- Thin-cakes between 0.25-4 inches
- Multiple washing zones for forward or counter-current washing to 99.99% purity
- Drying to 0.1% moisture with heated trays and mechanical compression
- Materials include stainless steel, Hastelloy and synthetic materials
- Gas-tight and pressurized housings

**BHS Pressure Plate Filter**

- Horizontally designed for stable cakes
- Possible pre-coating of the media with activated carbon or diatomaceous earth
- Vibrating plates, along with gas-assist pulsing, provide for automatic discharge
- Effective solids discharge without spinning-plates
- No rotating or mechanical seals

**BHS Candle Filter & Inverting Filter**

- Pressure filtration, clarification and heel filtration
- Specialized candles with perforated metallic or synthetic cores
- Filter media to less than 1 micron
- Cake washing produces a uniform cake for drying
- Cake discharge via gas blowback
- Possible pre-coating of the media with activated carbon or diatomaceous earth
- Cake discharge by inverting filter cloth for heel-free discharge and final moisture content to 1%

## BHS-Filtration Inc.

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