



BHS-Filtration Inc.

BHS-Autopress

Print-Friendly Version

Rental Filter for On-Site Testing

The Autopress technology provides for thin-cake, multipurpose production in a single vessel. Process steps are tailored to meet your specific requirements. For example, filtration is conducted via gas pressure of up to 150 psig. The cake can then be mechanically compressed up to 600 psig to eliminate cracking. This provides for maximum cake washing efficiency in either the forward or counter-current direction. Of course, multiple washing steps as well as solvent exchanges or cake steaming can be accomplished. Finally, the cake can be dried either by vacuum or blowing gas through the cake. This gentle drying without agitation or tumbling is important for fragile crystals.

The Autopress is easily cleaned with CIP/SIP systems. The uniquely designed discharge system eliminates product heels, which is a significant advantage over "nutsche" type filters. The Autopress also provides for more filtration area and is more easily installed and controlled than peeler or inverting-basket centrifuges. The Autopress eliminates product handling to tray or shelf dryers where containment is critical due to the nature of the product or solvents.

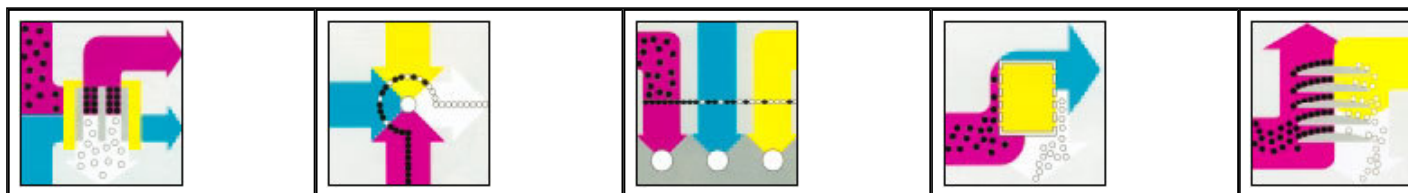
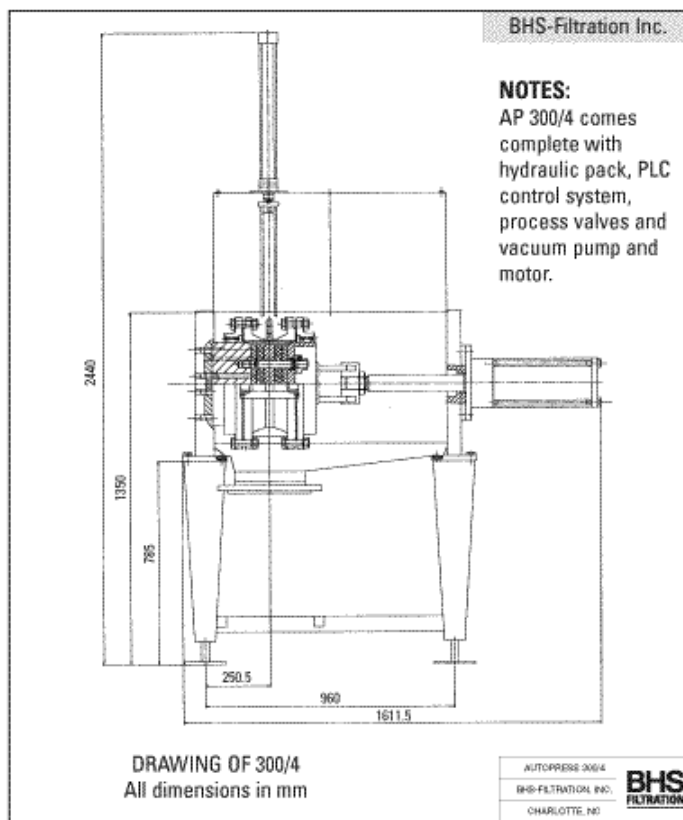
OPERATION DATA	
Operation temperature	<150° and > -20° C
Flow rate / Suspension	< 1.5 m ³ /h
Flow rate / Filter cake	< 5 liters / cycle
Cake thickness	<15 mm and > 5 mm
Products Filtrate quality	depending on tests solid free
Specific flow rate	< 5000 l/m ² h
Compressed air consumption	6 Nm ³ /h at 6 barg
Cake compression	40 barg (maximum)
Operating pressure	6 barg (maximum)

DESIGN DATA

Filter Type	AP 300/4
Filtration area	0.5 m ²
Effective filter area	0.5 m ² 1+4+1 plates, one filtering surface 0.05 m ²
Filter plates	300 mm, clearance between plates
Filling volume cake	5 liters at 20 mm clearance between plates
Filling suspension	6.5 liters at 20 mm clearance between plates
Material	
Product side material	1.4571 (similar 316 Ti)
Scraper knife	RCH 1000
Membrane	PTFE or EPDM
Spacer	PTFE or EPDM
O-rings	PTFE or EPDM
Total weight	1500 kg (approximate)
Total dimensions (L/W/H)	2200x1000x2400 mm
Electrical	5 HP 460 V 60 Hz

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

BHS to provide single-source solutions for your difficult filtration, washing and drying operations. BHS completes the installation with vacuum packages, solids handling and containment systems, tanks, instrumentation, PLC controls on-site startup and preventative maintenance programs. Pi 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%

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