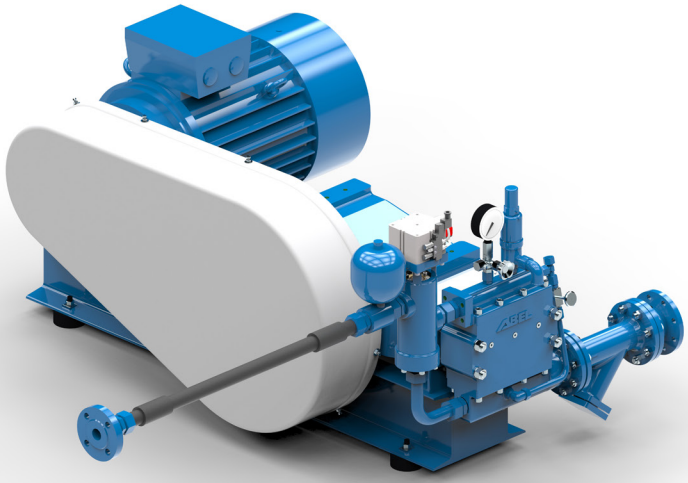
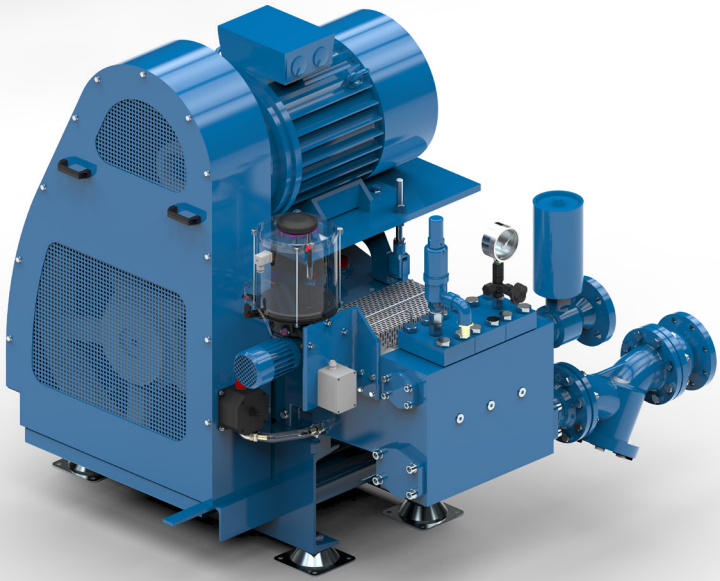
ABEL®
Pump Technology

ABEL HP & HPT

High Pressure Pumps

Powerful Pumps for clean Media





Diaphragm Pumps
Solids Handling Pumps
High Pressure Pumps
Marine Pumps

www.abelpumps.com

HP - High Pressure Pump

HP Pump Technology

The ABEL HP pumps are durable triplex plunger pumps designed for pumping clean media. With three plungers operating 120° out of phase, they deliver a continuous, low pulsation flow.

Sealing can be achieved through groove ring or stuffing box packing, supported by efficient lubrication for smooth performance.

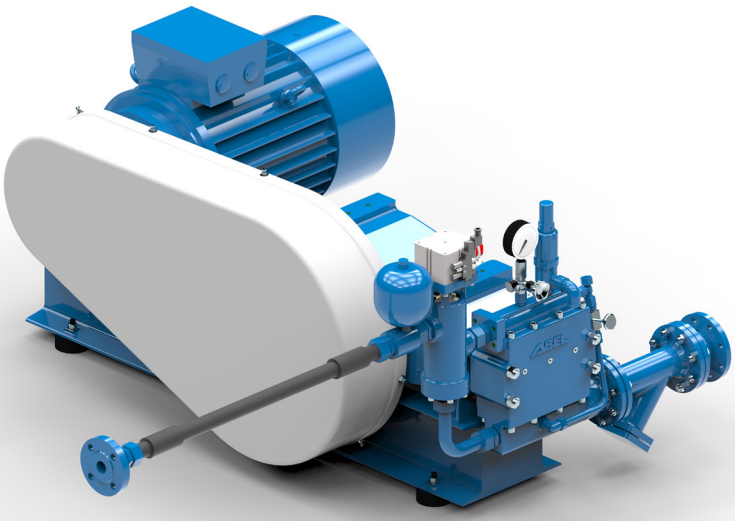
For process flexibility, the integrated ABEL 3/2 way circulation control valve allows fast switching between pressurized operation and bypass mode without stopping the pump - ideal for tasks like filter cloth washing. The system includes a pneumatic 5/2 way solenoid valve with adjustable throttle check valves for precise switching control.

The result: robust, continuous, and controllable high pressure pumping for demanding clean media applications.



Plate valve in stainless steel/bronze

Optimized plate valves in stainless steel/bronze ensure high reliability and compatibility with various clean media.



ATEX
Available in an explosion-proof design

HP Pump Performance

up to 29 m³/h (127 GPM);
up to 16 MPa (2320 psi)

Housing Materials

- Nodular cast iron
- Steel
- Stainless steel

Plunger Material

- Stainless steel ceramic-coated

Plunger Seal

- NBR groove ring
- Stuffing box packing

Valve

- Plate valve in stainless steel/bronze

HPT - High Pressure Pump

HPT Pump Technology

The ABEL HPT plunger pump is a robust triplex pump designed for long-term high pressure operation. Safety features such as a pressure side safety valve and a pulsation dampener provide reliable operation and steady flow.

Built for demanding process applications, the HPT handles a wide range of media - from salt water and acids to chemicals and lightly contaminated fluids.

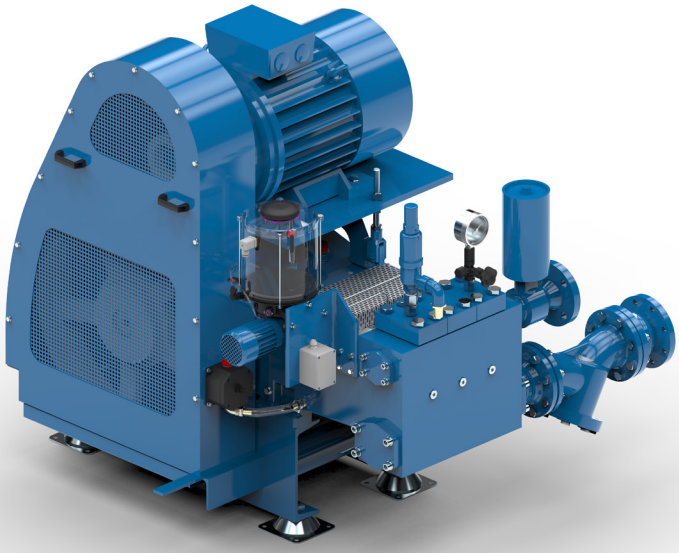
Driven by an electric motor and a left or right mounted reduction gear, the HPT offers flexible installation. A frequency converter enables simple flow rate adjustment. Its easily accessible valves and plungers ensure quick maintenance.

The HPT bellow-type seals of the crossheads offer an optimal protection against the penetration of dust into the crank housing.



ABEL HPT as ready-to-use container solution

For maximum mobility, HPT pumps can also be supplied as turnkey container units for changing operating locations.



HPT Pump Performance

up to 50 m³/h (220 GPM);
up to 25 MPa (3625 psi)

Housing Materials

- Steel
- Stainless steel

Plunger Material

- Stainless steel ceramic-coated

Plunger Seal

- Stuffing box packing

Valve

- Spherical cone valve in stainless steel

HP & HPT - High Pressure Pump

Applications

Cleaning Applications

- Filter cloths
- Tanks
- Pipes

Further Applications

- Gland Seal Water Supply
- Gas washers and gas dryers
- Reverse osmosis systems
- Reactor feed
- High pressure injection on gas and oil fields

Products being pumped

- Potable water/clean water
- Process water
- Desalted/demineralized water
- Salt Water/-solutions
- Chemical liquids
- Alcohol (spirits, methanol, ethanol, etc.)
- Acids
- Oil

...and many more.



HPT pumps for supplying centrifugal pumps in parallel with gland water in a phosphate mine



Pneumatically actuated 3/2-way bypass valve for filter cloth wash pumps

When intermittent operation is required, the pneumatically operated ABEL bypass valve ensures trouble-free interruption of the flow. Hydraulically operated bypass valves may also be used.

Suitable Accessories

- Discharge side safety valve
- Pulsation dampener
- Suction/discharge side pressure gauges
- Shock absorbing installation
- Sound control cabins
- Suction filters
- Compensators
- Plunger lubrication and flushing

HP - High Pressure Pump

Filter Cloth Cleaning

In applications such as the dewatering of slurries with chamber filter presses or membrane filter presses, apart from facilitating the achievement of an excellent filtration with short cycles, the pump and all its components must also ensure a high degree of reliability.

This applies to the filter cloth cleaning system as well. HP pumps achieve a high level of cleanliness at the due to a superior design and pressure control management system.

Used for a cleaning system with spray nozzles to clean filter plates, ABEL HP pumps have operated in several high-pressure applications around the world in the toughest environments for years. Like all ABEL pumps, the HP series is very robust and built for high efficiencies for many years of service.



HP pump for filter cloth cleaning

3/2-Way Valve

When changing the washing system from one filter plate to another, the 3/2-way valve is changed over to bypass. This ensures that the washing water is not pumped back to the nozzles until the washing system spray reaches the next filter plate. A manually operated control valve is also used for fine adjustment of the required nozzle pressure.



HP pump - compact design

Advantages

- The 3/2-way bypass valve, specially developed for cleaning filter cloths, acts as a bypass valve when switching from one filter plate to the next. This avoids wasting water.
- Control valve for fine tuning of the required spray-off pressure
- Optimum rating of pump type to filter press size
- Space-saving version with top mounted motor available



Filter press and HP cleaning pump

ABEL®
Pump Technology

The pumping solution for your industry:

- Mining
- Water and Wastewater
- Ceramics
- Chemical
- Oil and Gas
- Energy Industry
- Corrugated Board
- Paint and Varnish
- Petrochemical

Diaphragm Pumps
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