

GEHO®

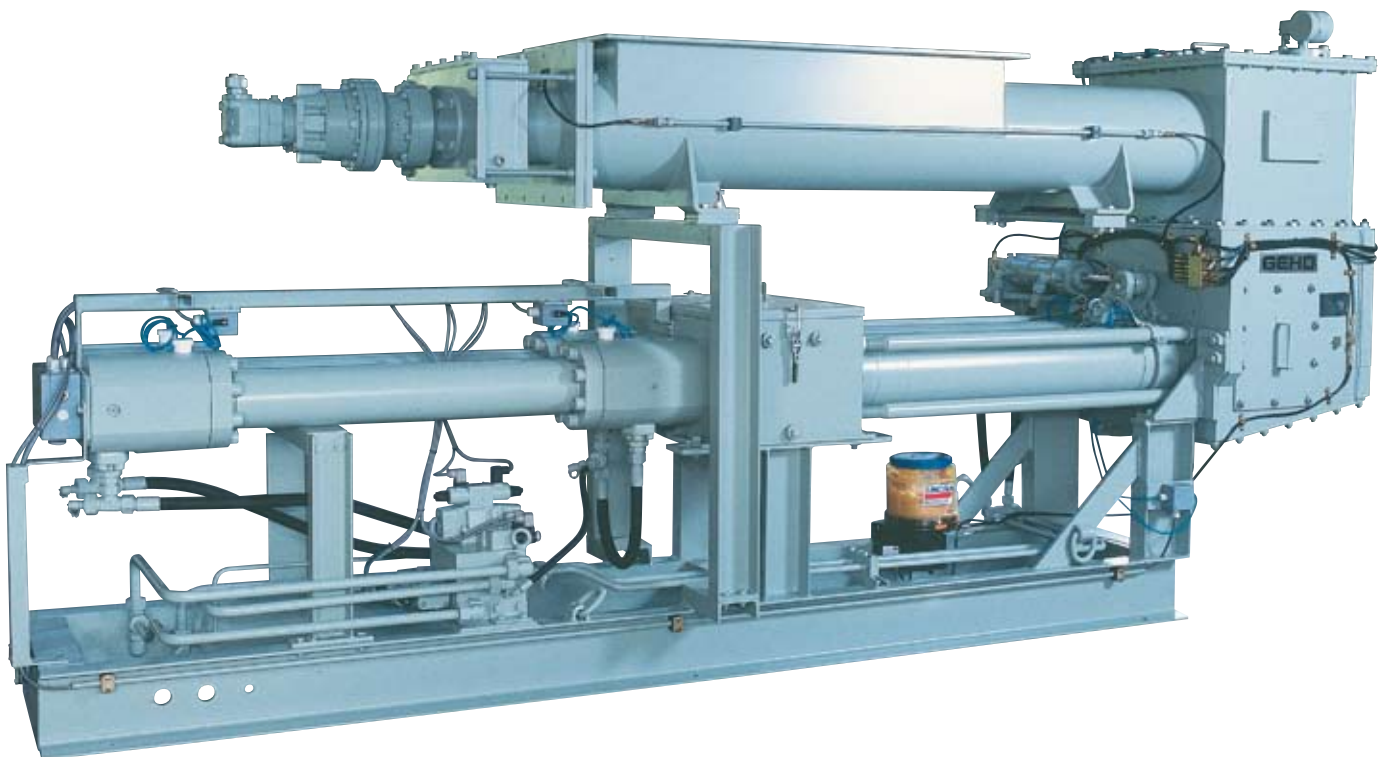
PD Slurry Pumps

Excellent
Minerals
Solutions

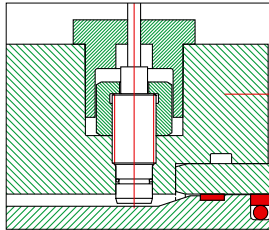
WEIR
MINERALS

Key features of the GEHO hydraulic driven piston pumps

For highly concentrated slurries, sludges and pastes

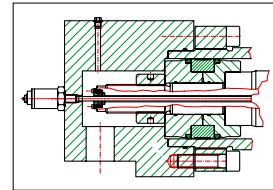


Key features and benefits of the GEHO hydraulic driven piston pumps



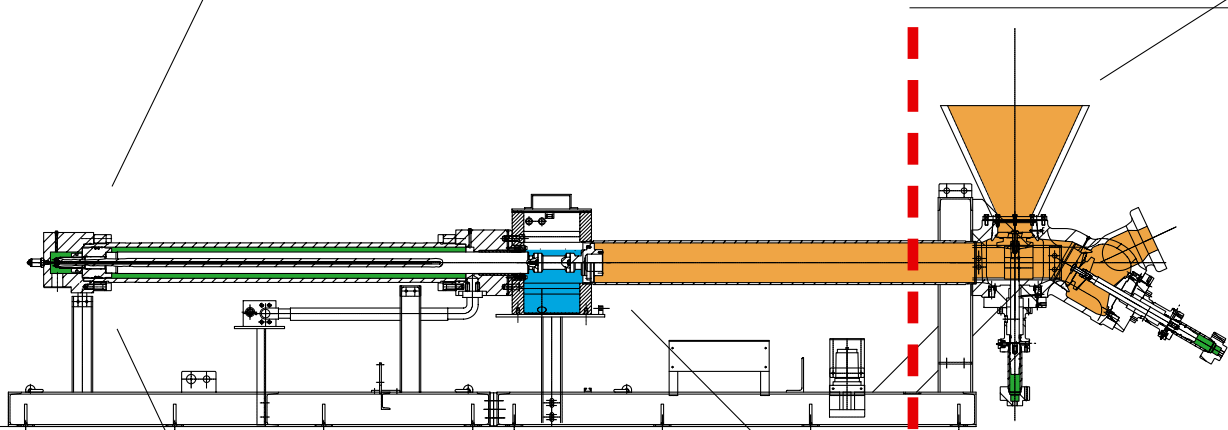
Initiator: hydraulic cylinder position measurement

- Ensures full use of stroke length,
- allows for electronic monitoring
- and soft stop and start-up due to sensors located at the end of suction and discharge stroke.

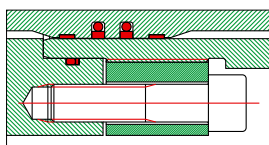


Linear transducer: hydraulic cylinder position measurement

Allows at high speed a soft stop and start-up – due to a slender bar mounted in the piston rod.

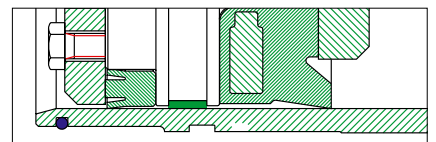


Option 1: DHC



Hydraulic cylinder piston seal

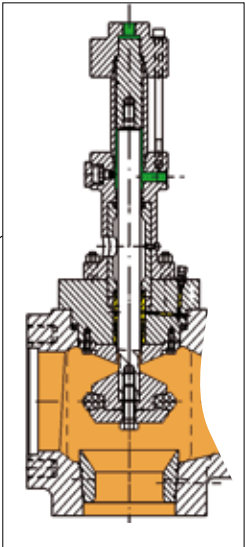
No leakage/higher efficiency, accurate control at low capacity – due to use of standard hydraulic seals because of absence of bore holes.



Sludge cylinder liner and piston

Long wear life of cylinders – due to 0,4 mm chrome plating.

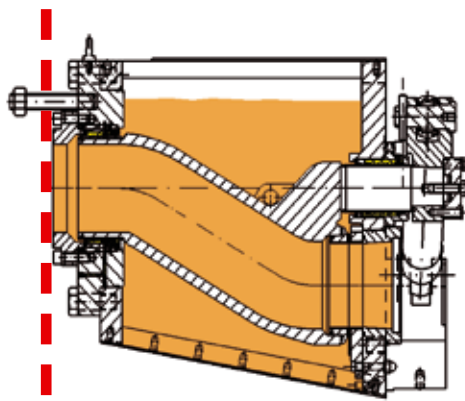
Reduced wear, energy consumption and lowest friction losses – due to hard chrome plated and precision machined liner, allows for flexible lip seal and guide ring design.



Cone valves

- Reduced maintenance costs – due to valve and valve seat replacement without disconnecting piping, hydraulic hoses or moving the pump.
- Reduced pressure pulsation - due to the valve opening and closing sequence, prevents back flow from discharge to suction.
- No oil contamination – due to stuffing box between sludge and hydraulic cylinder.
- Quick maintenance – due to hydraulic valve seat release.

Option 2: DHT



Transfer tube

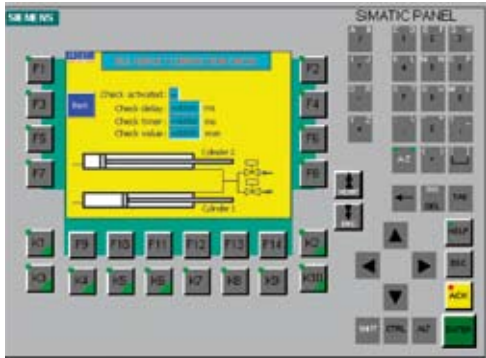
Type SR1

High volumetric efficiency – the tube nozzle may slide and provide sealing against the wear plate through the slurry pressure.

Type SR2+3

Automatic wear compensation/less maintenance. The nozzle is mounted flexibly. The swivel cylinder is mounted at an angle to maintain sealing. Long term reliability - the lever is mounted on a tapered polygon to provide a clearance-free fit without mechanical looseness.

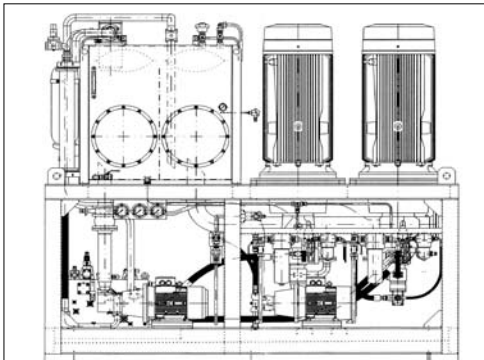




PLC control

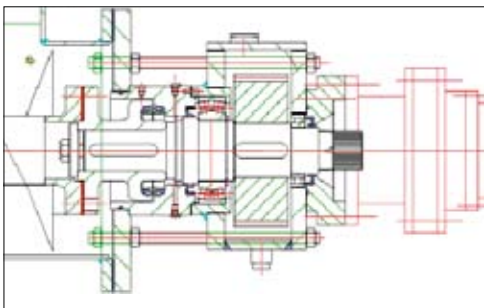
Supervisory PLC control panel with touch screen

- Remote control
- Maintenance support with signal recording
- Easy pump control with visualization of pump components



GEHO hydraulic power pack

- Easy pump flow adjustment and controlled stroke reversal through use of axial piston/swash plate hydraulic oil pump.
- Long hydraulic component life as a result of hydraulic pressure limited to approx. 250 bar and use of oil filters on all return lines.
- Reputable component suppliers only with worldwide services.
- Designed for soft start/stop reducing pipeline vibrations and noise.



GEHO screw feeder seal

- Screw feeder for high viscous sludges.
- Flexible mounted mechanical seal for ultimate lifetime without sludge leakage.

GEHO system components

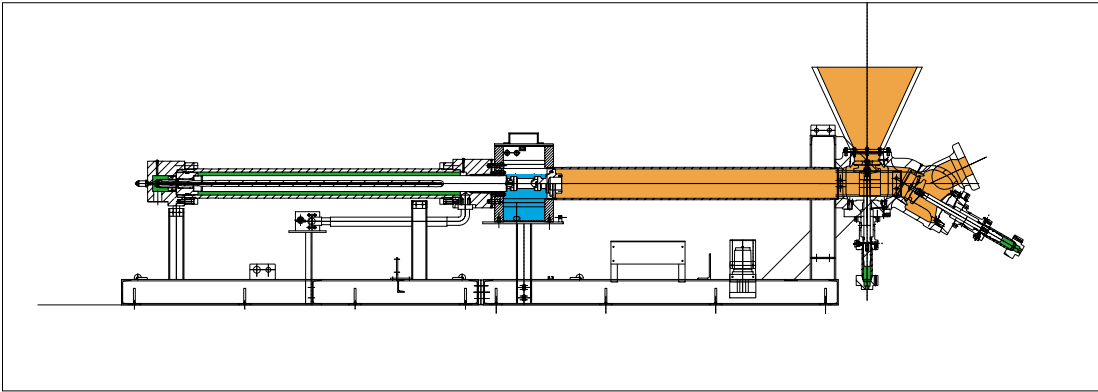
- Non-return valves for DHT pumps.
- Level controlled air over slurry pulsation dampener vessel, including automatic slurry level control system.
- Intake hoppers with level measurement.
- Hydraulically operated switch-over S-tube for remote switch over from one to the other pipeline.
- Pump related system support.

General features

- Designed for heavy duty 24 hrs/day service in industrial environments.
- Electronic stroke control.
- 0,4 mm hard chrome slurry cylinder liners.
- Optional: VZ 'nearly pulsation free' system.
- Pistons with cup seal and guide ring.
- Automatic grease system.
- PLC controlled.
- Soft start/stop during switch over.

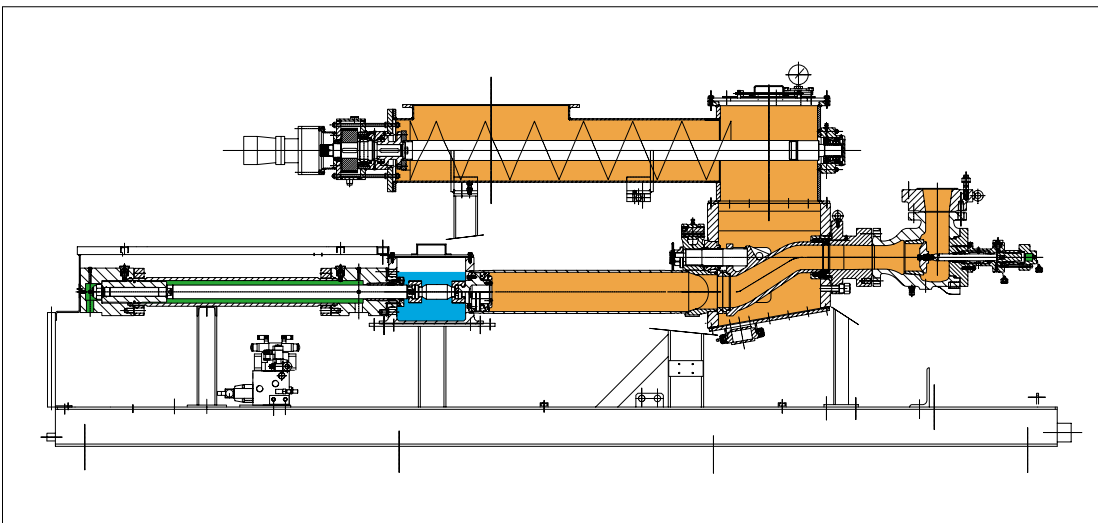
GEHO DHC pump

GEHO DHC pump: hydraulic driven piston pump with cone valves.
Variety of valve designs and different metals and elastomers available.



GEHO DHT pump

GEHO DHT pump: hydraulic driven piston pump with transfer tube.
A variety of material selections for nozzle and wear plate available.



Typical references



RSG90, Denmark: tube reactor feed,
PVC recycling



RWZI Dordrecht, the Netherlands:
sewage sludge transport



Tarong Power Plant, Australia: fly ash disposal



Tochigi (Utsunomiya), Japan:
sewage sludge transfer



Kali + Salz, Germany: mine backfilling,
brine and fly ashes



Hyougo, Japan: sewage sludge transfer



Northwich, UK: mine closure, corrosive fly ashes
and cement



OCI Wyoming, USA: mine backfilling

Weir Minerals Netherlands b.v.

P.O. Box 249, 5900 AE Venlo, the Netherlands
Egtenrayseweg 9, NL-5928 PH Venlo
4495
Registration No.: 12032525

Tel: +31 (0)77 389 52 00
Fax: +31 (0)77 382 48 44
Email: weir@weirminerals.com
www.weirminerals.com

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