

SolidPumps



When forwarding is a challenge



1 Starting position.
Piston in front position, slide valve in closed position.
The inlet chamber of the pump is filled with pumping media by the product feeder (PROFEE) or by gravitation.



2 Piston moving forward.
The piston moves so far that the cylindrical portion of the liner closes off (at "middle" position). All the bulky material left between the piston and the edge of the cylinder liner/cutting ring is sheared off.



3 Opening of the slide valve.
The slide valve moves up and the piston pushes the pumping media out of the pump into the conveying pipeline.



4 Closing of the slide valve.
The slide valve closes after the piston reaches the front position.
Note: The slide valve doesn't cut but scrape the pumping media from the front of the piston head.

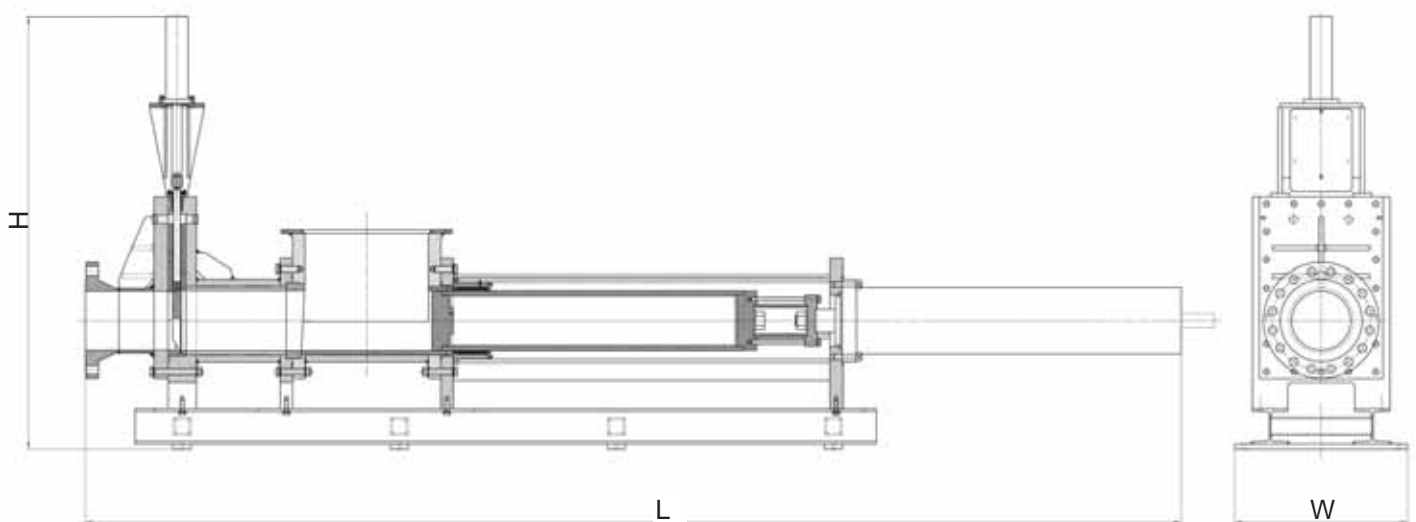


5 Reversing of piston.
After the slide valve closes the piston reverses and induces a vacuum in the cylinder liner.



6 The inlet casing can be filled again with the piston out of the closed cylindrical part of the liner, for a new cycle.

- SolidPumps Piston Pumps are suitable for transporting highly viscous media with solid particle contamination such as steel sheets, glass, slaughterhouse waste with bones, ropes, wire, wood, gravel, etc.
- SolidPumps Piston Pumps have low maintenance costs and all parts exposed to the medium, such as the cylinder liner, piston, piston tube, slide gate valve, seals, etc. are easily replaceable.



Pump Type	Output (m ³ /h)	Pistondiameter (mm)	Stroke (mm)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
SPPs10	1,5	100	325	1820	240	950	600
SPPs15	5	150	625	2880	410	1320	1150
SPPs20	10	200	750	3420	570	1600	2200
SPPs28	20	280	900	5100	630	2050	3850
SPPs35	30	350	1420	6400	980	2450	7100
SPPs50	40	500	1420	6400	1130	2950	9800

(Technical data for other types of valves or pumps available on request)

Single Piston Pumps by SolidPumps HHE AG

The SPPs is a Single Piston Pump with a Slide gate (SPPs), designed to convey "difficult" products; with a high percentage of dry-solid materials and/or of foreign objects (drum stripes, glass, wood, bones etc.).



Piston Pump SPPs
with product feeder (PROFEE)

Applications

- Hazardous waste treatment plants
- Food industry
- Chemical industry
- Slaughterhouse waste extraction plants
- Heavy industry
- Coal industry
- Clarification and other treatment plants

Advantages

- High pumping pressure (160 bar)
- Easy integration in complete plants - main parameters are controlled and can be regulated
- Modular design in well defined sections (for easy maintenance)
- Restricted tolerances in the cutting area which bring an outstanding cutting effect
- The hydraulic cylinder is clearly separated from the pumping piston. Therefore no oil contamination is possible in the hydraulic circuit.
- The inlet opening can be rotated by 180°, allowing feeding from the top, from the left or from the right side

SolidPumps HHE AG

Zone Industrielle
CH-2123 - St SULPICE
Switzerland

Phone +41 32 623 15 65

Fax +41 32 622 14 66

Email: getsolid@solidpumps.ch