PEMO PUMPS

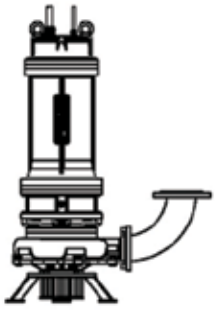
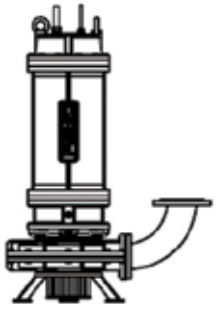
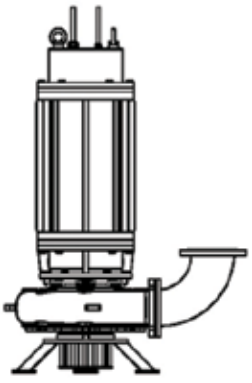
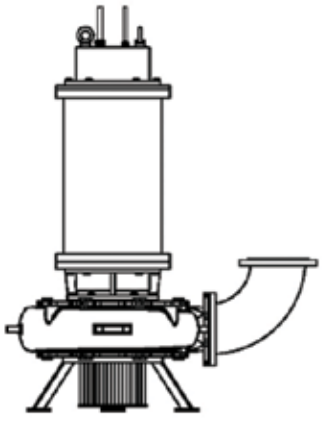
Submersible Slurry Pumps







PEMO HARDALLOY SUBMERSIBLE PUMPS

S-FP	603-H	K125-H	1004-H	1706/99-H
Designed for severe duty submersible applications with abrasive, corrosive slurries. **Power plants.** **Underground mines.**	Designed for submersible low solids content applications requiring high heads. **Power plants.** **Seawater sand slurry.** **Lime slurry.**	Used in submersible application with large, clogging or stringy material. **Mining.** **Coal and slurry transfer.** **Mill scale and ash pits.**	For submersible low solids content applications requiring high heads. **Barge clean-out.** **Tank sludge cleanout.**	Designed for severe duty submersible applications with abrasive, corrosive slurries. **Power plants.** **Deep or inaccessible wells.**
CAPACITIES 7 to 60 m^3/hr 30 to 260 gpm	**CAPACITIES** 15 to 120 m^3/hr 60 to 550 gpm	**CAPACITIES** 20 to 180 m^3/hr 90 to 800 gpm	**CAPACITIES** 45 to 280 m^3/hr 200 to 1,250 gpm	**CAPACITIES** 45 to 400 m^3/hr 200 to 1,800 gpm
HEADS 6 to 50 m 20 to 165 ft	**HEADS** 6 to 50 m 20 to 165 ft	**HEADS** 6 to 50 m 20 to 165 ft	**HEADS** 6 to 45 m 20 to 150 ft	**HEADS** 6 to 42 m 20 to 135 ft
WEIGHT 300 kg 660 lb	**WEIGHT** 430 kg 950 lb	**WEIGHT** 500 kg 1100 lb	**WEIGHT** 650 kg 1430 lb	**WEIGHT** 1000 kg 2200 lb
				

The Hardest, Most Rugged Submersibles in the Industry Today.

PEMO RUBBER LINED SUBMERSIBLE PUMPS

All metal, the PEMO submersible pumps are designed with long life and low maintenance as a priority. The wetted parts of the pump, (volute(s), impeller(s), inlet flange(s), and shaft sleeve(s) are made of an extremely hard iron alloy called, "Hardalloy" which has a hardness rating of over 800 HB. The hardness of the pump components is the key to reliable performance in rugged applications ranging up to 70% solids, with max size of particles up to 20mm in diameter.

Flows can range from 5 to 700 m^3/h, with heads up to 50 m TDH.

PEMO's Submersible Pump design includes:

- Hardalloy or rubber lined pump ends
- Rubber lined design includes Hardalloy impellers
- Volutes and impellers are abrasion resistant coated
- Double mechanical seals, (hard faced)
- Double row ball bearings, (top and bottom)
- High efficiency, air filled motors, (IE3) (10 meter long power cord)
- Motor thermal probes for over heat protection of the motor stator
- Seal leak detection probes, (mechanical seal oil chamber)
- Pump stand for free standing bottom mount pump operation
- Optional mechanically or hydraulically driven agitators
- Optional float switches for level sump level control

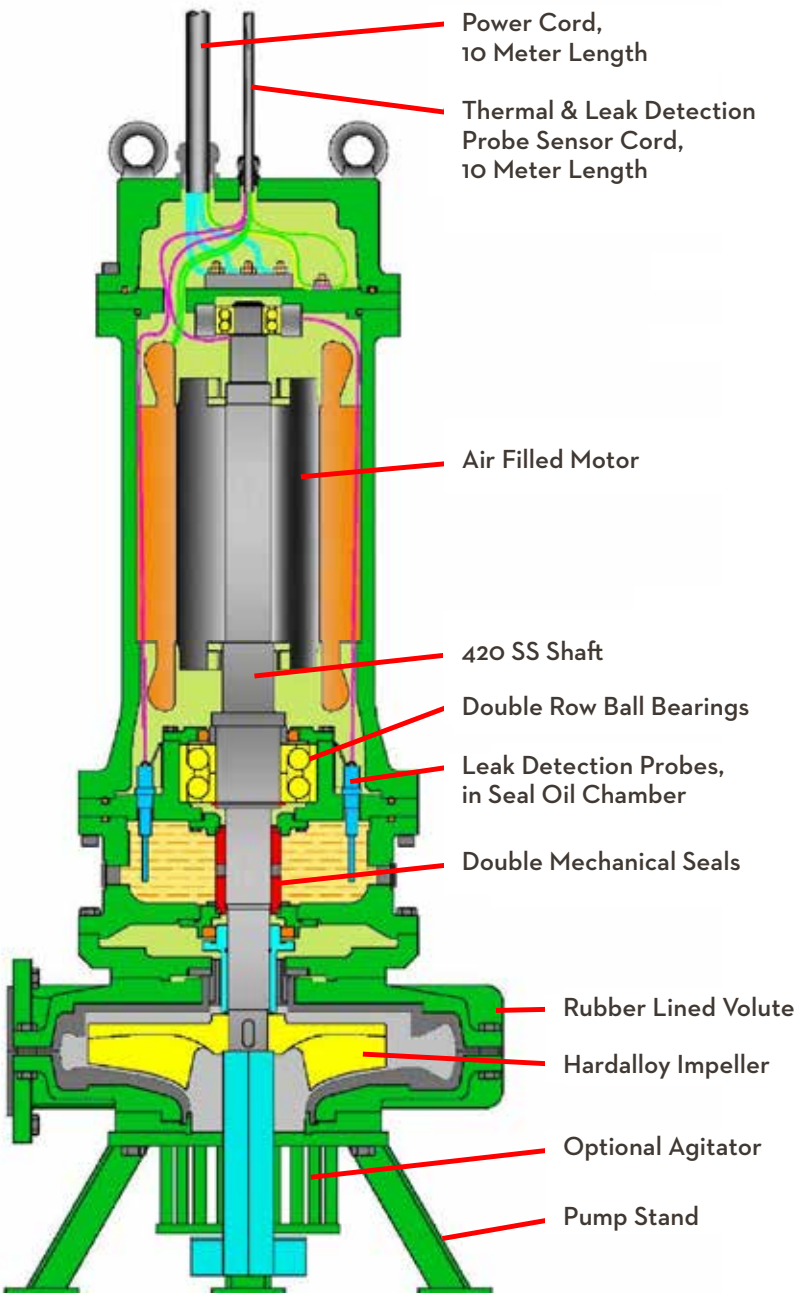
PEMO Submersible Pumps will provide years of trouble free service.

Coupled to the heavy-duty waterproof electric fully submersible motor through a coupling cage containing the dual opposed seal with independent permanent lubrication.

They are ideal for use in deep wells where a vertical pump would be too costly or impossible to install.

Pemo Submersible Pumps are installed without masonry or special structures. They can be set on the bottom of the well or hung from a rope, chain or other suspension devices.

A float switch controls the pump, keeping it constantly covered with fluid.



SINGLE STAGE HARDALLOY SUBMERSIBLE PUMPS

- Impeller, volutes, sleeves, suction covers and discharge elbows all Hardalloy
- Built-in thermal overload protection
- Double mechanical seals
- Moisture detection
- Heavy-duty lip seals
- Heavy-duty thrust bearings
- Shafts made of 420 SS
- Custom designed pumps can be provided for specific applications
- Can be operated at higher temperatures and longer cycle times

PUMP MODEL	POWER (kW)	SPEED (rpm)	MAX FLOW (m^3/h)	MAX HEAD (m)	DISCHARGE (mm)
S-FP	up to 18,5	1500 - 3000	60	55	50
603-H	up to 30	1500 - 3000	125	55	80
K125-H	up to 37	1000 - 1500	160	55	80
1004-H	up to 45	750 - 1000	300	55	100
1706/99-H	40 to 75	750 - 1000	450	45	150

SINGLE STAGE RUBBER LINED SUBMERSIBLE PUMPS

- Rubber lined versions with Hardalloy-impellers
- Designed for heavy-duty slurry applications with rubber lined casings
- Power ranging from 1 to 100 hp, and speeds from 735 to 3,500 rpm
- Capacities up to 1,585 gpm (360 m^3/h)
- Maximum available pressures from 88 to 103 psi (6-7 bar)
- Mechanical seals are of Silica or Tungsten Carbide
- Bearings are grease lubricated to deliver long-life
- Thermal probes (for the control of motor temperature) and oil level probes (for slurry leak detection inside the oil chamber)
- Electric device for the analysis of the signals from the thermal probes

PUMP MODEL	POWER (kW)	SPEED (rpm)	MAX FLOW (m^3/h)	MAX HEAD (m)	DISCHARGE (mm)
33	up to 3	1500 - 3000	18	20	25
302	up to 3	1500 - 3000	25	20	40
403	up to 11	1500 - 3000	40	30	50
503	up to 18,5	1500 - 3000	50	45	65
533	up to 18,5	1500 - 3000	90	45	80
603	up to 30	1500 - 3000	110	50	80
804	up to 22	1500 - 3000	150	25	80
K125	up to 37	1000 - 1500	150	50	80
1004	up to 45	1000 - 1500	230	45	100
1706/99	up to 55	750 - 1000	380	40	150
G230	up to 75	750 - 1000	550	40	200
I-270	up to 110	750 - 1000	750	40	200

PEMO Pumps, headquartered in Vimodrone, Italy, is world renown for designing and manufacturing customized centrifugal pumps for the most difficult abrasive and/or acid applications in the mining, utility, aggregate, quarry, ceramics and chemical processing industries.

Since opening doors in 1947, PEMO has built and shipped over 39,000 pumps, and has representatives and agents selling PEMO pumps around the world including United States, Spain, Portugal, France, Holland, Poland, Brazil, Egypt, Singapore, Peru and Chile.

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