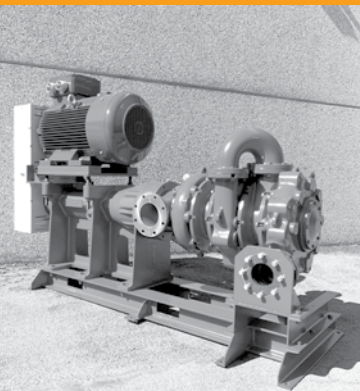


# PEMO PUMPS

## Horizontal Slurry Pumps





# HORIZONTAL PUMPS

## MAIN APPLICATIONS

- Power Plants and FGD
- Mining, Quarries and Aggregate materials washing
- Coal & Slurry Transfer
- Mill Scale & Ash Pits
- Seawater Sand Slurry
- Lime Slurry
- Underground Mines
- Pulp & Paper
- Chemical Industry

## COMMON FEATURES

- **Type of seal:** Double Elastomer Bellow mechanical seal in back to back configuration
- **Bearings:** Oil Lubricated, reinforced design for higher bearing life in the most severe conditions
- **Low maintenance**
- **Pump-motor coupling:** V-belts or Flexible coaxial joint
- **Custom built:** According to customer specifications
- **Not self-priming:** the inlet of the pump must be always flooded

### AO/TD SERIES

Designed for heavy duty slurry and/or acid applications. Suitable for pumping acid and liquids with high concentrations of abrasive particles.

#### CAPACITY

5 to 1,500 m<sup>3</sup>/h (20 to 6,600 gpm)

#### HEAD

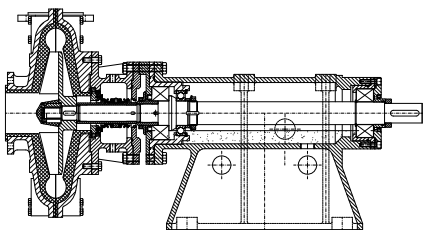
30 m (100 ft)

#### MAX DISCHARGE PRESSURE

Up to 5 bar (70 psi)

#### KEY FEATURES

- **End Side Suction**
- **Mechanical Seals:** Work under the discharge pressure and must be flushed at a high pressure, 2÷3 bar higher than the outlet pressure



### AO/AB SERIES

Designed for slurry and/or acid applications. Suitable for pumping acid and liquids with high concentrations of abrasive particles. Not recommended where particle size is higher than 2mm.

#### CAPACITY

5 to 1,500 m<sup>3</sup>/h (20 to 6,600 gpm)

#### HEAD

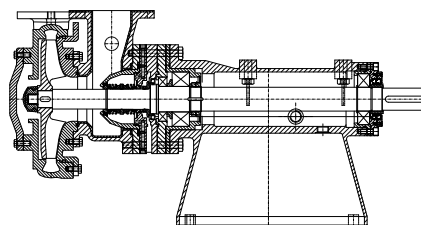
50 m (160 ft)

#### MAX DISCHARGE PRESSURE

Up to 7 bar (100 psi)

#### KEY FEATURES

- **Special AB Side Suction:** To prevent problems to the mechanical seals that work only under the suction pressure
- **Mechanical Seals:** Work under the discharge pressure and must be flushed at a high pressure, 2÷3 bar higher than the suction pressure.



### AO/AB/DC-TC SERIES

Multi Stage versions suitable for pumping liquids with high concentrations of abrasive particles in applications where the required discharge pressure is up to 20 bar (290 psi), not recommended where particle size is higher than 2mm.

#### CAPACITY

5 to 1,100 m<sup>3</sup>/h (20 to 4,800 gpm)

#### HEAD

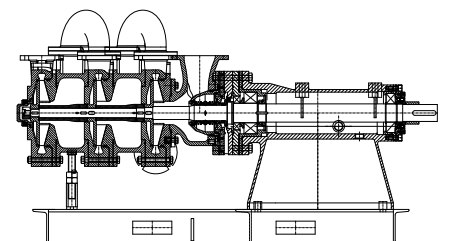
150 m (480 ft)

#### MAX DISCHARGE PRESSURE

Up to 20 bar (290 psi)

#### KEY FEATURES

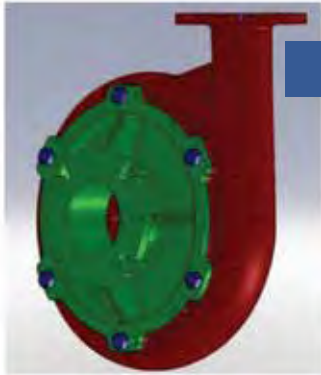
- **Special AB Side Suction:** Same as AB design but in multi stage version
- **High Pressure:** Heavy duty design, with oversized shaft and increased bearing L10
- **Mechanical Seals:** Work under the discharge pressure and must be flushed at a high pressure, 2÷3 bar higher than the suction pressure.



**Custom Designed for Heavy-Duty Slurry and Acid Applications**



HORIZONTAL PUMPS, RUBBER LINED OR HARDALLOY DESIGN,  
ARE THE HARDEST AND MOST RUGGED IN THE INDUSTRY TODAY



### AO/TD SERIES

The horizontal pumps **AO/TD Series** are designed for heavy duty slurry and/or acid applications. Suitable for pumping acid and liquids with high concentrations of abrasive particles.

The AO/TD Series are the "Heavy Duty" horizontal pumps with end-suction (frontal inlet). AO/TD are designed to operate in many applications, where the operating conditions and the fluid properties, are very aggressive and with big solid particles.

These pumps type, install two mechanical seals in back to back configuration, due to increase the safety of the pump and avoid leakages on site.

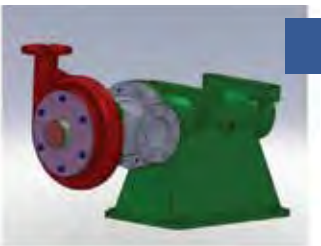
Flushing system shall be with clean liquid from external source, with pressure 1 bar (15 Psi) higher than the slurry outlet pressure.

The pump casings and the impeller, are rubber lined or Hardalloy (700÷800 HB).  
If needed, the shaft can be manufactured in special alloys (AISI 316, Duplex, Hastelloy, etc.)

The bearings are reinforced and the bearing life is increased due to guarantee a safe and long operation of the pump before maintenance.

AO/TD Series pumps can be driven by a flexible coaxial joint or V-belts, with the latter coupling allowing a perfect calibration of the rotational speed of the pump: in this way it's easier to adequate the working characteristics of the pump itself to the need of the Customers.

Motor power up to 160 kW.



### AO/AB or AO/AB/DC or AO/AB/TC SERIES

The horizontal pumps **AO/AB Series** are designed to handle at high pressure, highly concentrated abrasive particle fluids and/or acids or other high corrosion liquids.

The AO/AB Series are horizontal pumps with side suction and top discharge.

AO/AB are designed to operate in many applications, where the operating conditions and the fluid properties, are very aggressive and with high solid concentration.

These pumps type, install two mechanical seals in back to back configuration, due to increase the safety of the pump and avoid leakages on site.

Flushing system shall be with clean liquid from external source, with pressure 1 bar (15PSI) higher than the slurry inlet pressure.

The pump casings and the impeller, are rubber lined or Hardalloy (700÷800 HB).

If needed, the shaft can be manufactured in special alloys (AISI 316, Duplex, Hastelloy, etc.)

All shafts are oversized and with increased shaft diameter in order to increase the reliability of the pumps against the severest operating conditions.

The bearings are reinforced and the bearing life is increased due to guarantee a safe and long operation of the pump before maintenance.

AO/AB Series pumps can be driven by a flexible coaxial joint or V-belts, with the latter coupling allowing a perfect calibration of the rotational speed of the pump: in this way it's easier to adequate the working characteristics of the pump itself to the need of the Customers.

Motor power up to 250 kW.



## SINGLE STAGE HORIZONTAL PUMPS

PUMP MODEL	POWER (kW)	SPEED (rpm)	MAX FLOW (m <sup>3</sup> /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
S-FP	up to 18,5	1500-3000	60	68	65
533	up to 18,5	1500-3000	90	45	80
603	up to 30	1500-3000	110	50	80
603-H	up to 30	1500-3000	125	67	80
804	up to 30	1500-3000	150	25	80
K125	up to 37	750-1000	150	50	80
K125-H	up to 37	1000-1500	150	78	80
1004	up to 45	750-1000	230	45	100
1004-H	up to 45	750-1000	300	75	100
1706/99	up to 55	750-1000	380	45	150
1706/99-H	up to 55	750-1000	380	75	150
G230	up to 75	500-750	550	45	200
P200-H	up to 110	750-1000	600	75	175
M280	up to 160	500-750	1250	75	200
I-270	up to 110	500-750	750	45	200
C300	up to 200	500-750	1500	45	250

## MULTISTAGE HORIZONTAL PUMPS

2 Stages 3 Stages

PUMP MODEL	POWER (kW)	SPEED (rpm)	MAX FLOW (m <sup>3</sup> /h)	MAX HEAD (m)	DISCHARGE (mm)
503	up to 37	1500-3000	50	90	65
S-FP	up to 45	1500-3000	60	115	65
S-FP	up to 75	1500-3000	60	140	65
603	up to 37	1500-3000	110	90	80
603-H	up to 45	1500-3000	125	110	80
603-H	up to 75	1500-3000	125	140	80
K125	up to 55	750 - 1000	150	90	80
1004	up to 75	750 - 1000	230	90	100
1004-H	up to 110	750 - 1000	300	110	100
1004-H	up to 160	750 - 1000	300	140	100
P200-H	up to 160	750 - 1000	600	110	175
M280	up to 315	500-750	1150	110	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.



Via Pascoli 17  
20090, Vimodrone (MI), Italy