

PEMO PUMPS

Vertical Slurry Pumps





VERTICAL 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

JOLLY SERIES

Designed for pumping acid liquids even with high concentrations of abrasive particles.

CAPACITY

5 to 1,500 m³/hr
20 to 6,600 gpm

HEAD

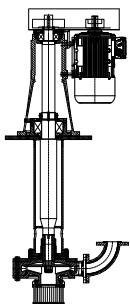
50 m (160 ft)

MAX DISCHARGE PRESSURE

Up to 7 bar (100 psi)

KEY FEATURES

- **Type of seal:** Rubberized guiding sleeve and Hardalloy bush
- **Low maintenance**
- **Pump-motor coupling:** V-belts or Flexible coaxial joint
- **Custom built to customer specifications**
- Length of pump under base can reach 6m max
- Always supported above the baseplate by bearings inside the base
- Using a sleeve bushing sealing system, cannot run dry under a certain level.



MEC SERIES

Designed for highly abrasive liquids, highly acid liquids, and highly acid liquids with abrasive suspensions.

CAPACITY

5 to 1,500 m³/hr
20 to 6,600 gpm

HEAD

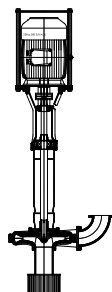
50 m (160 ft))

MAX DISCHARGE PRESSURE

Up to 7 bar (100 psi)

KEY FEATURES

- **Type of seal:** Rubberized guiding sleeve and Hardalloy bush
- **Low maintenance**
- **Pump-motor coupling:** Flexible coaxial joint
- Standard lengths of pump under base are 1 - 1,5 - 2 m
- Using a sleeve bushing sealing system, cannot run dry under a certain level
- Only has direct transmission by means of an elastic joint. There is always a metallic structure around the motor with a lifting eyebolt at the top.



AUS SERIES

Designed to run under the severest, where flow is intermittent. Suitable to operate in dry running condition.

CAPACITY

5 to 1,500 m³/hr
20 to 6,600 gpm

HEAD

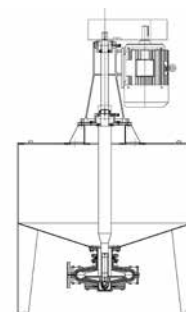
50 m (160 ft)

MAX DISCHARGE PRESSURE

Up to 7 bar (100 psi)

KEY FEATURES

- **Type of seal:** None
- **Low maintenance**
- **Pump-motor coupling:** V-belts or Flexible coaxial joint
- Can operate in dry condition, since there is no mechanical seal or soft packing
- Max length of pump under base is 1,5 m
- Fluid inlet normally above the casing, but also located at bottom for units with double-sided impellers
- Can be installed inside or outside of tanks
- Height of suction up to 1.5 m.



Custom Designed for Heavy-Duty Slurry and Acid Applications



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



JOLLY SERIES

The robust Jolly Series pumps are built for strength. All shafts are supported above the baseplate by two or three bearings so that the lower part is suspended and works without other bearings or supports. All submersed parts, besides the internal parts of the casings and the impeller, are rubber lined or Hardalloy (700-800 HB). If needed, the shaft and the extension can be manufactured in special alloys (AISI 316, Duplex, Hastelloy, etc.).

Jolly pump shafts are designed and designed as a function of the length of immersion and of the head of the plant, so that it works without any vibration; this means also that, in the lower part of the pump, the rubberized guide bush that holds the rotating anti-wear sleeve doesn't stand any lateral thrust, and works only as an anti-abrasive seal.

This means that basically the shaft will never wear, and it will be only necessary to change the guide bush and the sleeve that are worn by the abrasive liquids at time intervals that are depending on the size of the particles in the liquid to be pumped and on the operating total head of the pump.

Jolly 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.

Jolly pumps are designed for fixed installation or suitable for barges. They have a heavy mounting plate with bolt holes, and eyebolts for lifting.



MEC SERIES

MEC Series pumps are basically similar to the Jolly series, but they are not mounted on cantilever brackets since they have at their top a strong metallic structure with one lifting eyebolt, through which a metallic rope, chain or any other suspension device keeps them in a vertical position inside tanks or wells: in this way, it is also eventually very easy to move them from one position to another.

They only have one flexible coaxial joint between the electric motor and the shaft, and they are manufactured with three standard heights of suction, which are about 1m, 1,5m and 2m.

Motor power up to 160 kW.



AUS SERIES

Mechanically, the AUS Series pumps are basically very similar to the ones of the jolly Series. Their main feature is the special design of the casings-impeller assembly, which allows them to run dry (without liquid).

Moreover, the only maintenance required is the greasing of the bearings.

The result is a pump that can work under the severest conditions: in wells with poor access, where flow is intermittent, or where level controls or flow switches cannot be installed. In all such cases the pump is merely left running continuously and will handle liquid as it reaches the well. If the flow stops, the pump continues to run dry without damages, and when the liquid reaches again the well the pump primes itself automatically.

SINGLE STAGE HARDALLOY VERTICAL PUMPS

PUMP MODEL	POWER (kW)	SPEED (rpm)	MAX FLOW (m ³ /h)	MAX HEAD (m)	DISCHARGE (mm)
S-FP	4 to 18,5	1500-3000	60	60	65
603-H	11 to 30	1500-3000	125	50	80
K125-H	11 to 37	1000-1500	150	50	80
1004-H	18,5 to 45	750-1000	300	50	100
1706/99-H	30 to 55	750-1000	360	50	150
M280	37 to 160	500-750	1250	45	150

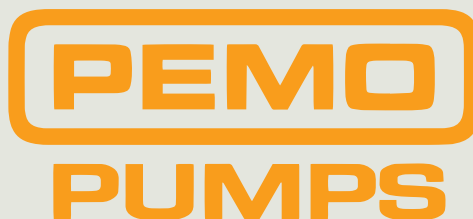
SINGLE STAGE RUBBER LINED VERTICAL PUMPS

Can be used on any vertical pump design series (Jolly/MEC/AUS)

PUMP MODEL	POWER (kW)	SPEED (rpm)	MAX FLOW (m ³ /h)	MAX HEAD (m)	DISCHARGE (mm)
33	1.1 to 3	1500-3000	18	20	25
302	1,5 to 3	1500-3000	22	20	40
403	4 to 11	1500-3000	40	30	50
503	4 to 18,5	1500-3000	50	45	65
533	4 to 18,5	1500-3000	90	45	80
603	11 to 30	1500-3000	110	50	80
804	11 to 30	1500-3000	150	25	80
K125	18,5 to 37	750-1000	150	50	80
1004	18,5 to 45	750-1000	230	45	100
1706/99	30 to 55	750-1000	380	45	150
G230	30 to 75	500-750	550	45	200
I-270	45 to 110	500-750	750	45	200
C300	55 to 200	500-750	1500	45	250

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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