

**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 **MEC SERIES AUS SERIES** Designed for highly abrasive liquids, Designed to run under the severest, even with high concentrations of highly acid liquids, and highly acid where flow is intermittent. Suitable to liquids with abrasive suspensions. operate in dry running condition. abrasive particles. **CAPACITY CAPACITY CAPACITY** 20 to 6,600 gpm 20 to 6,600 gpm 5 to 1,500 m³/hr 20 to 6,600 gpm 5 to 1,500 m<sup>3</sup>/hr 5 to 1,500 m<sup>3</sup>/hr **HEAD HEAD HEAD** 160 ft (50 m) 160 ft (50 m) 115 ft (35 m) MAX DISCHARGE PRESSURE MAX DISCHARGE PRESSURE MAX DISCHARGE PRESSURE Up to 100 psig (7 bar) Up to 100 psig (7 bar) Up to 70 psig (5 bar) **KEY FEATURES KEY FEATURES KEY FEATURES** • Type of seal: Rubberized shaft · Type of seal: None • Type of seal: Rubberized shaft bushing and Hardalloy sleeve bushing and Hardalloy sleeve Low maintenance · Low maintenance Low maintenance • Pump-motor coupling: V-belts or Flexible coaxial joint • Pump-motor coupling: V-belts Pump-motor coupling: Flexible or Flexible coaxial joint coaxial joint Can operate in dry condition, · Standard lengths of pump under since there is no mechanical seal · Custom built to customer base are 3 - 5 - 7 ft or soft packing specifications Using a sleeve bushing sealing system, cannot run dry under a • Length of pump under base can reach 20' max • Fluid inlet normally above the



Always supported above the baseplate

· Using a sleeve bushing sealing system,

cannot run dry under a certain level

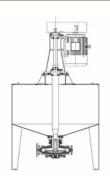
by bearings inside the base



certain level

Standard flex coupled or

standard lifting cage



casing, but also located at bottom

· Can be installed inside or outside

• Height of suction up to 5' (1.5 m)

of tanks

for units with double-sided impellers



PEMO

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



# **JOLLY SERIES**

The Jolly Series vertical centrifugal pumps have a robust design with the shaft supported above the base plate by up to three bearings. This design supports the suspended pump end allowing it to operate bearing free.

All pump end materials are rubber lined or hardalloy (700 - 800 bhn). Optional materials for the shaft and column pipe are 316 SS, Duplex SS, Hastelloy, etc.

The pump shaft is designed to minimize shaft wear utilizing a combination rubber bushing and shaft sleeve bearing close to the pump end. This arrangement creates a natural seal and the designated wear parts can be easily replaced during a repair cycle.

The Jolly Series pumps can be flex-coupled or belt driven. The main advantage of the belt driven option is that the correct operating speed can be determined or corrected based on the customer's application requirements.



# MEC SERIES

The MEC Series pumps are basically the same as the Jolly Series, except they are designed to operate suspended from a cable or chain inside tanks or wet wells.

MEC pumps are available only in flex-coupling configurations in three lengths of 3, 5 and 7ft (water level to centerline of pump volute casing).



#### **AUS SERIES**

The AUS Series vertical pumps are also basically the same as the Jolly series, but have "Run Dry" capability for minimizing routine maintenance. This "run dry" design also allows the pump to operate in multiple suction conditions, such as flooded suction or dry suction (no available fluid), and run continuously without damage.

### PEMO HARDALLOY VERTICAL PUMP ENDS

PUMP MODEL	POWER (hp)	SPEED (rpm)	MAX FLOW (gpm)	MAX HEAD (ft)	DISCHARGE (in)
S-FP	5.5 to 25	1750 - 3500	260	190	2.5
603-H	15 to 40	1750 - 3500	550	165	3
K125-H	15 to 50	1150 - 1750	660	165	3
1004-H	25 to 60	880 - 1150	1300	165	4
1706/99-H	40 to 75	880 - 1150	1600	165	6
M280	100 to 200	550 - 880	5400	165	8

#### PEMO RUBBER LINED VERTICAL PUMP ENDS

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

PUMP MODEL	POWER (hp)	SPEED (rpm)	MAX FLOW (gpm)	MAX HEAD (ft)	DISCHARGE (in)
33	1.5 to 4	1750 - 3500	80	65	1
302	3 to 4	1750 - 3500	100	65	1.5
403	5.5 to 12	1750 - 3500	180	100	2
503	5.5 to 25	1750 - 3500	220	150	2.5
533	5.5 to 25	1750 - 3500	400	150	3
603	15 to 40	1750 - 3500	480	165	3
804	15 to 40	1750 - 3500	660	85	3
K125	25 to 50	880 - 1150	660	165	3
1004	25 to 60	880 - 1150	1000	150	4
1706/99	40 to 75	880 - 1150	1600	150	6
G230	40 to 100	550 - 880	2400	150	8
l-270	60 to 150	550 - 880	3200	150	8
C300	75 to 250	550 - 880	6600	150	10

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.

