





NON CLOG SEWAGE SUBMERSIBLE PUMPS









About Us:

JASCO the name of quality and prompt Service since 1988 in Ahmedabad, we understand the customer application, needs at the core of all activities at **JASCO PUMP** with experienced Qualified Hydraulic and Electrical design team.

Our modern manufacturing facilities assure dimensionally consistent high quality fully machined parts produced on a volume basis to bring down the cost. From design to pattern shop to foundry to manufacturing to warehousing "JASCO" is a completely integrated Manufacturer and Giving Quality assurance of all Products.

JASCO are committed to prompt sales after service, we offer ready availability of complete pump sets, we are continually improving and expanding our "JSE" products warehouse network with locations in key areas.

The Application and the Customer's needs have been at the core of all the activities at JASCO PUMPS. We listen and Understand customer's specific needs better than other Manufacturer, Every Pump supplied by JASCO PUMPS is selected (after) by studying the site condition and quality of liquid being pumped. We offer customised pumps for specific requirement of the clients for different application also.

@MOTOR:

JSE pump sets Motor are Dry Type Squirrel Cage, Continuous Duty (SI) Induction Motor, as per 1S/IEC: 60034-1:2014 & as per IS: 12615:2011

Standard design with Submersible Motor below the Bowl assembly for low cost.

TOTALLY ENCLOSED WASH DOWND (TEWD):

Designed to withstand high pressure wash-downs or other high humidity or wet environments.

DEGREE OF PROTECTION:

The Difference being Degree of Protection i.e. IP68 as per IS/IEC 60034-5:2000, to ensure Hermetic sealing during

submergence in the sewage/effluent/clear water, even under water Immersion.

CLASS OF INSULATION:

All motors are vacuum impregnated System Varnished by polyesterimide based Elmotherm H 71 A Varnish.

All motors are wound with High grade Dual Coated (PEI+PAI) enamelled copper wire of Class-200 Grade 2 as per IS:13730 Part-13("H" Class Insulation) for achieving Higher Efficiency & Protection against high Temperature,



also Higher Rating Motor Winding are resulting in a lower Temperature, Due to Lower temperature of the Shaft and thus increase performing Bearing & Mechanical Seal Life.

SHAFT:

Pumpsets shaft are Robust & Oversized common between motor & pump, without any couplings. It is made from high grade stainless steel & designed without any sleeves below the mechanical seals thereby reducing maintenance cost.

STAMPING

Motors stamping are manufactured from silicon steel Grade 50C1000 CL" A" as per BIS-IS-648-2006 having 0.5 mm thickness Measured Watt Loss at 1.5 Tesla and 50 Hz.

BALL BEARING/THRUST BEARING:

All Thrust are absorbed by Heavy duty Ball Bearings Lubricated by the grease of High Quality, which can with stand High temperature. Grease Lubricated anti friction bearings from the motor & inherently isolated from pump media, makes the bearing fail proof even in case of increase silt levels.

@PUMP:

CASING:

Pump set Casing are Volute Casing, Side Delivery Type, and high Graded Cast Iron having UTS 260MPamin. & Hardness 180-230 HBW. If required for any specific typical effluents, our design team can suggest and provide a special suitable MOC for different effluents with high quality casings. Special MOC can be provided for different type of liquid on request.

SHAFT SEALING:

Pump & Motor are sealed with two High Quality separate Both Directional Mechanical seals permitting Reverse Running due to accidental backflow.

The primary seals are Silicon Carbide faces to withstand erosion due to increase silt content in the pumping liquid.

PROTECTIONS:

- "JSE" Pumpsets are protected from various Types of Protections:
- (a.) Winding Overheating protection by bimetallic Thermistor/ PTC Sensor in Winding.
- (b.) Mechanical Seal Leakage Detector, as well as water leakage detector from cable connection.

- (c.) Winding are coated by Gel Coating of Dr. beck Hardener, it avoids failure of winding.
- (d.) In these pumps every Joints/ Faces are sealed with High Grade Nitrile/Viton "0" rings.
- (e.) Cables are sealed with Epoxy Sealant to avoided leakage/Insert of water into the Motor.

JASCO Non-Clog Dry Motor Sewage Submersible pumps are designed to handle raw sewage. It can handle up to 125 mm soft solids. It can handle fibrous materials, plastics sheets & soft solids. It can also be provided with cutter/agitator arrangement. It can handle slurry, sludge effluents etc. It can be installed either with guide rail system or portable arrangement. These pump sets are Suitable for moderate heads, more efficiently and economically better than any other type of pump. Precision balancing of all factors in their design provides smooth and efficient operation along with mechanical dependability and low cost maintenance.

JASCO Non-Clog Sewage Submersible pumps are designed to ensure long, efficient unit life and minimum power consumption; all parts are standardized and accurately machined for true alignment, increasing overall durability.

ADVANTAGES

- > No Line Shaft Coupling & Line Shaft Bearinge Arrangement Required.
- > No Gland Sealing & External Cooling Requirements.
- > Minimum Noise, Vibration & Heat Emulsion.
- > Reduction In Pump House Space, Constrction Cost.
- > Reduction In Suction Piping/ Foot Valve.
- > Installation: Either In Sump Or Directly In Drainage Pit With Auto Guide Rail System (single Guide Rail System Or Double Guide Rail System), Portable & Flexible Arrangement.
- > No Break Down Even In High Silt Levels, Safe Design & Smart Protection System Results In High Reliability.
- > Weather Proof: No Pump Room Requires, No Risk Of Cavitation, No Damage Due To Flood or Rains.
- > Low Energy Cost: Motor Efficiency Are Substantially Higher Than Water Filled Submersible Motor.
- > Commissing: Minimum Civil Structure Requirement And Can Be Commissioned Much Faster.
- > Low Life Cycle Cost: Minimum Maintenance & Better Efficiency.

Applications

- > Sea Water.
- > Ports & Docks.
- > Paper Pulps, Paper Mills.
- > Drainage & Sewage System.
- > Transfer Of Suspended Solids.
- > Unscreend Stores Tanks, Airport.
- > Raw Water Pumping Applications.
- > Large Stores Tanks With Stable Silt.
- > Disilting In Laguns, Sugar Cane Mills, Distilaries..
- > Sewage Treatment Plant& Effluent Treatment Plants.
- > Sludge, Waste Water, Storm Water Effluent With Slurry & Solids.
- Water In Take Like Restaurant, Railway,
 Factory, Housing Complex, Tannery and Power Plants.



RANGE

PUMP	DISCHARGE NOZZEL SIZES	50 TO 500 mm	
	FLOW RATE CAPACITY	Up to 3500 m3/Hr.	
	HEAD CAPACITY	Up to 85.0 Mtr.	
MOTOR	RATING	Up to 373 KW / 500 H.P.	
	SPEED	750 / 1000 / 1500/3000 RPM (Synchronous Speed)	
	DUTY / ENCLOSURES	SI / IP 68	
	SUPPLY CONDITION	3Ø, 415V, 690V, 50 Hz. A.C Supply	
		3Ø, 415V, 550V, 60 Hz. A.C. Supply	
		1Ø, 230V, 50 Hz. A.C. Supply	

MATERIALS OF CONSTRUCTION

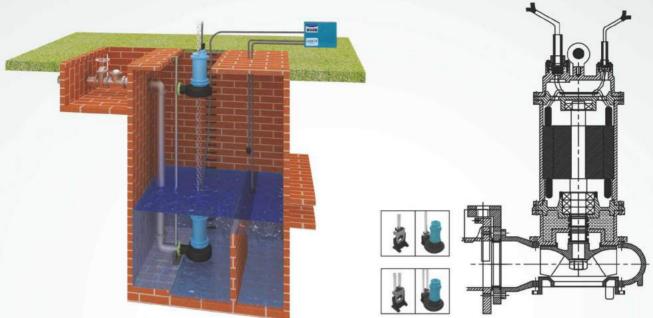
PUMP CASING	CASTIRON/NICI	C.I.FG: 260 As Per IS:210-09
IMPELLER	BRONZE	LTB-2As Per IS:318-1981
	HIGH GRADE STAINLESS STEEL	CF8M, ASTM A351-2012 [SS-316]
SHAFT	STAINLESS STEEL	AISI-410 AS Per ASTM, A479-2013b
MOTOR BODY	CAST IRON	C.I.FG:260 As Per IS:210-09
MOTOR HOUSING	CAST IRON	C.I.FG260 As Per IS:210-09
TOP COVER	CAST IRON	C.I.FG:260 As Per IS:210-09
PUMP BASE/STAND	MILD STEEL	With Epoxy Painting
AUTO COUPLING/BRACKET (Guide Rail System)	CAST IRON	C.I.FG:260 Asper IS:210-09
MECHANICAL SEAL	PRIMARY (Pump Side)	Silicon Carbide Vs Silicon Carbide with Viton / Nitrile Elastomer
	SECONDARY (Motor Side)	Carbon Vs Chrome Steel with Viton / Nitrile Elastomer
FASTNERS / STRAINER	STAINLESS STEEL	High Tensile Bht Steel / SS-304 2 mm Thick Sheet
OIL	ANTI OXIDANT ADDITIVES	20W40., HYLUBEX-40
CABLE	COPPER MULTI STAND ENAMELLED PVC INSULATED & PVC DOUBLE SHEATED	As Per IS:694-1990
SEAL COVER	CAST IRON	C.I.FG: 260 As Per IS:210-09
BALL BEARING	BALL BEARING	Anti Friction Heavy Duty Silicon Grease Lubricated

Note: Due to continuous R&D, MOC & Design are subject to change without Prior Intimation.

INSTALLATION

Permanent installation

This is most user friendly pumping station design. The pump is installed directly at the bottom of the wet pit using our automatic coupling system. This system ensure that the pump is proper & easily installed and easy for removal. This system includes guide rails till its discharge flange matches that with that of the auto coupling pedestal. The pump is kept in place by its own weight. The weight of the pump compresses an inbuilt rubber gasket to ensure a leak free joint. There is no need for any bolting for connecting delivery pipe. No necessity to enter the pit for removal of pump, just pull it up; there are no bolts to removal. No necessity to enter the pit once the system is fitted.



Our other Products



Desilting Submersible Pumps / Slurry Submersible Pump

For, Dredging, Drainage of Dry Slurry, Desilting, Fly Ash, Power Plant, Slurry Water, Silt Water, Cement Plant, Building & Construction, Paper & Pulp, Underground Tunnel, Etc.



Horizontal/Vertical Submerged Centrifugal Pump

For Water Supply Scheme, Lifting Raw Water From Different Sources Like Canal, River, Dam or Check Dam, French Well or Jack Well, Large Lakes, Water / Effluent Treatment Plants, Steel & Cement Plants, Port & Docks.



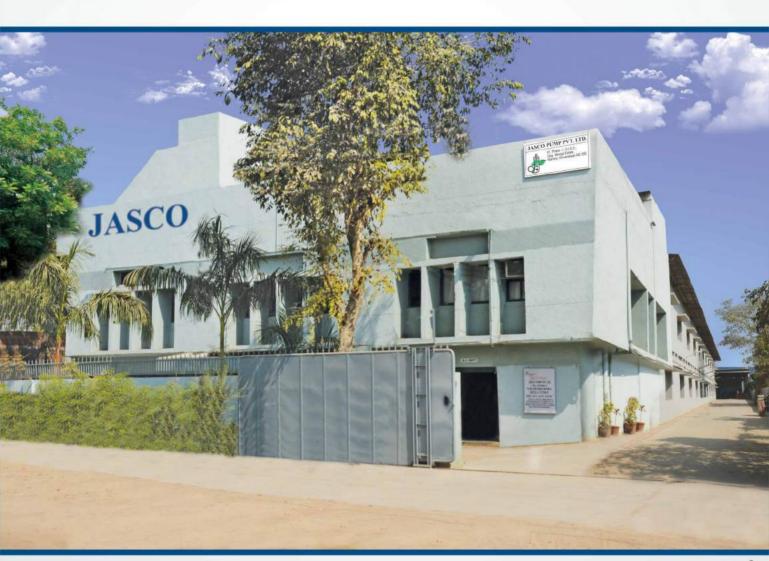
Portable Sewage Submersible Pump

For, Cleaning Main hole, Construction Site & Basement, Handling Industrial waste water, kitchen waste in hotels, Drainage of Reservoir, Ditches & Trenches etc.



Portable Dewatering Submersible pump

For, Cleaning Main Hole, Construction Site & Basement, Handling Industrial Waste water, Kitchen Waste in Hotels, Drainage of Reservoir, Rain Water, Ditches & Trenches etc.





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