

# Heavy Slurry Lift Submersible Pump “ssew” Series



*Heavy Slurry  
Up to 2.8 g/cm<sup>3</sup>*



[www.hetpump.co.in](http://www.hetpump.co.in)



[info@hetpump.co.in](mailto:info@hetpump.co.in)



+91 - 91738 00343

+91 - 95108 02043



# HEAVY DUTY SLURRY SUBMERISBLE PUMP "SSEW" SERIES

**LIFTING HOOK**  
Four Nos. Heavy duty Lifting Hook provided for easy to move and easy to proper handling the pump set.

**ROTOR**  
The "HET" pump uses high quality copper end plates and bars in their rotor that are brazed together where the melting point of the braze is 787°C. its very high compare to other aluminium rotor rings and is susceptible to porosity if die-cast leading to premature rotor failure under severe conditions.

**MOTOR**  
The "HET" pump motor is "H" Class wire with "H" Class insulation and also motor submerged in oil bath that lubricates and cool the bearing & mechanical Seal also. Due to Higher Class winding wire and insulation & Oil cooled motor can give premature motor failure as would be the case if it was standard without oil filled.

**COOLING JACKET**  
The "HET" pump Cooling Jacket work forced convection cooling by the pumped fluid passing around the motor housing before discharge pumped liquid. Due to that reason pump to run for extended periods of time even if it is run dry in fresh air (when other pumps would overheat and burn out) or even if it is only semi-submerged without over heating. This is an integral part of the design and makes the option of additional motor cooling a redundant expense.

**SEMI OPEN IMPELLER**  
This feature assists the breakdown of large particles in the impeller that might ultimately lead to a blocked pump. There is little if any chance of the impeller becoming blocked as opposed to closed vane impellers which are often blocked and tend to stay blocked.

**AGITATOR/INDUCER**  
"HET" use Agitator / Inducer for mixing and breakdown settle solid and easy to suction from casing. Also we care about reduce the bending of shaft when its come with large particle or settle particle we kept close as possible the lower bearing.

**CABLE**

The cable has a double sheathed Heavy duty Armoured/ Unarmoured with water proof rubber with more resistant against damage. The IP 68 rated cable with gland seal against both inner & outer sheaths. So even if the cable is damage it is almost impossible insert water inside the motor.

**BEARING**

Double Ball Bearing at Non-Drive End to give more life when pumping high-specific gravity slurry handling the pump.

**DISCHARGE OUTLET**

"HET" PUMP 100 mm, 150 mm and 200 mm discharge outlet provided with various model 150 mm & 200 mm outlet are supplied with removable discharge elbow, which are available with rubberliner, Ceramic coating as per customer requirement for improved abrasion resistance.

**NON-PRESSURISE MECHANICAL SEAL**

"HET" Provided Non-Pressurise Mech. Seal. Pressure from the submergence depth only, not the discharge on the seal, due to that more life getting of mech. seal. Also Mech. Seal in oil bath & The seal is positioned directly below the lower bearing to give it maximum support and protection from vibration. Additional we provided one more oil seal & strainer for prevent small dust particle to mech. seal.

**TWIN VOLUTE**

To balance the hydraulic load and reducing vibration and extending of life of all parts like pump shaft, mech. seal "HET" use twin casing volute. Also improving performance in slurry application.

\* On Request provided Suction Strainer, Thermal Protection inbuilt with pumpset.

"HET" Non-Clog Submersible Slurry Pumps are designed to handle raw water maximum up to 2.8 kg/cm<sup>2</sup>. It can handle solids up to 40 mm. Submersible Bottom Suction Pump Range is used in applications where the solid particles in the liquid has already settled out and needs to be agitated before being pumped. The all metal pump construction with High Chrome hydraulic design as standard contribute durability and high efficiency. The "HET" pump range can be fitted with wide variety accessories to accommodate the client's requirements.

**SPECIAL FEATURE**

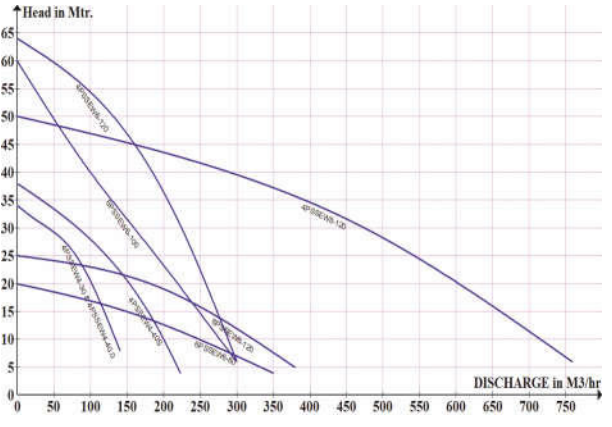
- "HET" Motor enclosure prevent electrical motor heating burnout.
- "HET" Motor with reserve power for direct online starting when its settled slurry solids.
- "HET" Pump equipped with non-pressurise mechanical seal due to that no effected pump media pressure.
- "HET" Pump equipped with Armoured / Unarmoured Cable as per customer requirement.
- "HET" Pump equipped with agitator / Inducer to break-down and resuspend settle solids at suction area.
- "HET" Pump equipped with motor cooling jacket & "H" Class winding & Copper rotor due to that more efficient and perform better in heavy slurry application.
- "HET" Pump casing is twin volute design due to that pump perform well and due to that avoid vibration effect and run smoothly in heavy slurry application.
- "HET" Pump provided additional feature on request like Thermistor Sensor for against heat protection of motor in dry run condition, Moisture Protection for water ingress in motor.
- "HET" Pump equipped with non-drive end double ball bearing and drive end also double ball bearing or angular contact bearing oversize for extend the motor life in slurry application.
- "HET" Pump wetted part are offer with Ni-Hard material of casing or Tungsten /Ceramic coating (as per application) with Semi open Impeller material with Ni-hard or Hi-Chrome which better perform and better life in Slurry application.

**MATERIAL OF CONSTRUCTION**

- Motor Part : C.I. FG 260 /S.G.Iron/ As per Customer Requirement.
- Impeller : Hi-Chrome / S.S. 410 Hardan/ Ni-Hard As per customer requirement.
- Agitator / Inducer : Hi-Chrome / S.S. 410 Hardan/ Ni-Hard As per customer requirement.
- Casing : S.G. Iron/ Ni- Hard/ C.I. FG 260 With 3 to 5 % Nickel / As per customer req.
- Shaft : S.S. 431/ S.S. 410
- Mechanical Seal : Tungsten Carbide/ Tugsten Carbide
- Rubber Part : Viton / Nitrile /Silicon or As per req.
- Fastner : All faster S.S. 304 or As per req.
- Cable : Unarmoured/ Armoured type Double Sheathed Heavy duty water proof.
- Motor Winding : "H" Class
- Rotor : Copper Rotor or As per req.

**APPLICATION**

- Mining Area - Coal, Stone, Copper Etc.
- Steel Plant - CHP & AHP Area & Other where slurry above 1.5 SG. and thick sludge
- Power Plant -CHP & AHP Area & Other where slurry above 1.5 SG. and thick sludge
- Industrial Slurry
- Sugar Industries, Stone Industries, Other Chemical & Fertilizer Industries where thick Sludge transfer require.
- Jetty area, Sea water application
- River Sand lifting application
- All other application where slurry particle solid up to 25 to 35 mm & S.G. Gravity above 1.5 and up to 2.8 Kg/cm<sup>2</sup>.
- Coal Mill, Slag Mill, Blast furnace, Salting Plant



**ACCESSORIES CONTROL PANEL**

"HET" Provided fully automatic control panel with protection of Earth Leakage, Overload Protection, Single Phase protection, Short circuit Protection, Thermal Protection (optional), Dry run protection, Phase failure, Under, Over voltage protection with Indoor & outdoor both option are available. Additional feature also provided on request.

**HEAVY DUTY HOSE PIPE**

Heavy Duty Slurry Discharge Hose with operating pressure 7 kg/cm<sup>2</sup>, Synthetic Fabric embedded with Double Helical Wire Coils of 12swg2 standard length - 05 mtr.

**TOOL KIT**

"HET" Provided tool-kit on request for preventive & Break down maintenance at site.

**Quick Release Couplings**

Manufacturer By :

**HET Engineering & Pump Industries Pvt. Ltd.**

53, Sahitya Industrial Hub, Nr. Shivbhumi - 04, Bakrol- Kujad Road, Nr. Ahmedabad - Indore Highway, Ta. Daskroi, Dist. Ahmedabad. Pin Code -382430 Gujarat India.  
Call :- +91- 91738 00 343, Email :info@hetpump.co.in, sales@hetpump.co.in  
Web :- www.hetpump.co.in www.hetpump.com

**ACCESSORIES PICTURE**



**Dealer / Dristibutor :**