EVEREST - HYBRID VARIABLE PITCH DRY SCREW VACUUM PUMP

EVEREST
PRESSURE & VACUUM SYSTEMS

SuperScrew Series

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Frequently Asked Questions

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1 **What do you mean by HYBRID SCREW DESIGN? In what way it is different from the variable pitch screw manufactured by other Screw Pump Manufacturers?**

Ans) Hybrid Screw design offer advantages both single pitch and variable pitch. Hybrid screw was designed with two constant pitches and one variable pitch. The overall performance of **EVEREST ESP-H** Series is comparable to that of the variable In processing a polymer and/or polymer by-product, and we have noticed maintenance interval of the variable pitch is shorter than that of hybrid. This short service interval comes from small pitch length of screws at the final stage of discharge in case of only variable pitch designs. Further, Continuous compression along the flow path introduces reverse leakage flow along clearance between screws and casing. This reverse flow of leakage prevents the proper discharge of the solid particles from the vacuum pump. Hybrid pitch screw pumps however have the benefits of both.

2. **What is the basic design difference between ESP-H and SuperVac Series of EVEREST ?**

Ans) EHVP stands for Everest Hybrid Variable pitch Dry Screw Vacuum Pumps where as SuperVac series are complete vacuum systems which include Vacuum Boosters of EVEREST. The entire range of Screw Pumps are PFA coated (40 micron thickness) with Kalrez O-rings and mechanical Seals. The mechanical seals shall be having provision for Seal-Gas Purge of N2. For the option of complete Pump with standard accessories – EVEREST also offers * Solvent flushing with Solenoid valve and solvent tank , N2 purging with Rota meter and solenoid , Inlet Strainer Filter , Electric Motor (FLP/STD) as per classification , Electric panel with VFD , Suction mesh filter , Base Frame , Coupling and coupling guard , Borden Type Vacuum Gauge , Oil Fill (T-46 Grade) and Water Cooled Discharge silencers.

3. **Do you recommend use of VFD with our dry pumps? If yes, Why ?**

Ans) Yes, We also recommend use of VFD if budget is allowed.

Many fixed-speed motor load applications that are supplied direct from AC line power can save energy when they are operated at variable-speed, by means of VFD. Such energy cost savings are especially pronounced in variable-torque centrifugal fan and pump applications, where the loads' torque and power vary with the square and cube, respectively, of the speed. This change gives a large power reduction compared to fixed-speed operation for a relatively small reduction in speed.

4. **Whether the maintenance issues can be solved at site. Do you recommend any special tools?**
Ans) Yes, We have special tools for assembly and dis-assembly for each model of pumps.
EVEREST has a very experienced team of Technicians and Engineers in the after sales department. We can send our engineers, located in all parts of the country to take care of the damage/ breakdown within short span of time. They are all well trained to take care of the problems and in majority of the cases – the problems can be resolved at site.
However, in some peculiar cases which cannot be repaired at site – it is done under supervision of the higher officials at EVEREST factory.

Under: a typical model of Hybrid Variable Pitch Dry Screw Vacuum Pump.