

- Impeller with large, unobstructed flow ways to ensure non-clogging and non-stringing operation-considering the media to be pumped.
- Capable of pumping activated sludge and oil water mixtures.
- Steep performance curve.
- High efficiency.
- Casing with replaceable wear liner.
- Pump and motor on common base frame.
- Pump shaft supported in anti-friction bearings with grease lubrication.
- Pump with stuffing box packing.
- Leaks seals shall be provided

Materials

The materials given below are the minimum requirements.

- Volute casing : min. GG-25
- Impeller : min. GG-25 Cast iron or stainless steel 1.4301 (AISI 304) or higher.
- Pump shaft : min. C45 carbon steel or stainless steel 1.4301 (AISI 304) or higher.

Drive

The drive unit shall have to the following features:

- Dry-running three-phase asynchronous motor according to IEC-standard
- Protection type IP 55
- Insulation class F
- Thermo element in coil for motor protection.

7.8.19.5 Progressive cavity pumps (Eccentric screw pump)

The eccentric-screw pump for conveyance of sludge shall have the following features:

- Design according to DIN 19569, where applicable
- Self-priming, rotary, valve less screw pump
- Direction of rotation reversible
- Suction chamber with venting and flushing attachment
- Performance in excess of actual demand by at least 10 % for flow as well as head.
- Anti-friction bearings with grease and/or oil lubrication
- Type of seal: mechanical seal
- Shaft at mechanical seal position to have wear resistant coating or wear sleeve
- Sensor on suction side to prevent dry running
- Pressure switch on discharge side