

# Transpumpserv Global Pvt. Ltd.

## Sludgemax (TsludX) – Screw Pumps for Sludge Handling

### Description

Sludgemax (TsludX) is a series of progressive cavity screw pumps engineered for reliable pumping of sludge, thick slurries, and dewatered effluent. Designed for continuous, low-pulsation flow, these pumps provide superior handling of viscous, shear-sensitive, and abrasive fluids encountered in sewage treatment plants, effluent plants, and industrial sludge processing.

The rotor-stator design ensures uniform, gentle conveying without clogging, making it ideal for sludge transfer and dewatering operations.

### Key Design Features

- Progressive cavity / screw pump principle for continuous, low-pulsation flow
- Capable of handling viscous, abrasive, and shear-sensitive fluids
- High solids content handling without clogging
- Modular design with replaceable rotor and stator
- Low operating speed → reduced wear, longer service life
- Self-priming capability with strong suction lift
- Energy-efficient operation for continuous duty
- Option for hopper feed design with bridge breaker for dewatered sludge

### Seal and Shaft Technology

- Mechanical seals: single, double, cartridge options
- Gland packing arrangements for abrasive sludges
- Shaft protection sleeves to minimize wear
- Seal flushing and barrier fluid systems for harsh sludge conditions

### Bearings and Certifications

- Heavy-duty bearing housing for continuous sludge duty
- Grease or oil bath lubrication depending on service
- ATEX certified for explosive sludge environments
- Complies with API 676 standards (on request)

### Suitable Applications

- Sewage Treatment Plants (STP) – raw sludge transfer, digested sludge, dewatered sludge

- Effluent Treatment Plants (ETP) – industrial sludge, oily sludge, scum handling
- Dewatering Systems – sludge feed to filter press, centrifuge, belt press
- Industrial Applications – food waste slurry, biogas slurry, mining thick slurries
- General Sludge Handling – high-viscosity, solids-laden, and abrasive media

## Technical Specifications

Casing Materials	Cast Iron, Stainless Steel 316, Duplex options
Rotor Materials	Stainless Steel, Alloy Steel, Duplex with coatings
Stator Materials	Nitrile Rubber, EPDM, Viton, HNBR
Max. Capacity	Up to 500 m³/h
Max. Pressure	Up to 24 bar (multi-stage)
Max. Solids Content	Up to 40%
Max. Temperature	Up to 120°C (higher with special elastomers)
Speed Range	200 – 600 rpm (low speed for longer life)

## **Downloads & Resources**

- Technical Data Sheet
- Installation & Operation Manual
- Sludge Pumping & Dewatering Guide
- 3D Pump Drawings (on request)