

# 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 m <sup>3</sup> /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)