

Pumps and grinders for sludge transfer and treatment



Sulzer in wastewater treatment

Sulzer is recognized for excellent product quality, performance, reliability and technical innovation required for a wide range of applications in municipal and industrial wastewater treatment plants.

As a global leader, our know-how and competitiveness is based on many years of experience in manufacturing pumps and mixing equipment for sludge transfer and treatment, within biological, anaerobic digestion sludge process applications.

Sulzer offers a broad range of products and aftermarket services for all types of wastewater and sludge handling applications:

- Primary and secondary process sludge
- Sludge dewatering and transfer
- Sludge thickening and transfer
- Sludge blending and holding
- Controlled flocculent pumping
- Mixing and dosing conditioning agents
- AD sludge recirculation and transfer
- Heavy sludge cake transfer
- Imported and tankered in sludge transfer
- Shear sensitive processes
- Sludge maceration and grinding

Progressing cavity pumps and grinders

Sulzer submersible pumps, mixers and agitators are used to transfer, blend and handle sludge, within biological, secondary and anaerobic digester recirculation processes. Our two-shafted, low speed and high torque grinders will slice through rags, wipes and tough solids producing a consistent sludge for processing.

For more demanding sludge processes, with high viscosity and high % dry solids (DS) our progressing cavity, positive displacement pump range, provide a near constant flow rate with suction lift capability, for handling wastewater sludge, slurries, and viscous shear thinning non-Newtonian fluids.

PC transfer pump

Features and benefits

- Designed to deliver constant capacity with viscous fluids and shear thinning non-Newtonian fluids
- Selected drives and gearboxes with many low speed options are available to reduce pump wear
- Compact for space saving, can be installed vertically or horizontally and run in either direction
- Competitively priced process pump with integral direct drive and gearbox, baseplate optional

Key characteristics

Capacities	up to 440 m ³ /h / 1'900 USgpm
Pressures	up to 24 bar / 350 psi
Temperatures	-10 up to 100°C / 14 up to 212°F



PC transfer perform pump

Features and benefits

- Saves time with maintain in place features, easy to de-rag and no need to disconnect the pipework
- Designed for use in sludge plants, where high reliability is essential and downtime is kept to a minimum
- An extension of the PC transfer pump with material variants for a wide range of process applications
- Robust drives and gearboxes with low running speeds form an integral part of the unit design

Key characteristics

Capacities	up to 225 m ³ /h / 990 USgpm
Pressures	up to 12 bar / 170 psi
Temperatures	-10 up to 100°C / 14 up to 212°F



PC cake pump

Features and benefits

- A large auger inlet and screw conveyor to deliver consistent pumping and push the cake to pump
- Saves time with maintain in place features, easy to disassemble, no need to disconnect the pipework
- Feed chamber easily disconnects allowing access for removal of the rotor and screw conveyor assembly
- Designed for use in Sludge plants, where high reliability is essential and downtime is kept to a minimum

Key characteristics

Capacities	up to 225 m ³ /h / 990 USgpm
Pressures	up to 12 bar / 170 psi
Temperatures	-10 up to 100°C / 14 up to 212°F



PC dosing pump

Features and benefits

- For low flow, metering and dosing applications, with continuous and accurate capacity demands
- Gentle pumping action, minimises shear and crush damage to the pumped product
- Dosing pump parts are interchangeable with the PC transfer range, with stock standardization benefits
- An enhanced coupling rod design, gives higher pressure capabilities, up to 72 bar

Key characteristics

Capacities	5 to 1'250 l/h / 0.02 to 5.50 USgpm
Pressures	up to 72 bar / 1'044 psi
Temperatures	up to 120°C / 248°F (stainless steel version)



Muffin Monster™ – In line/open channel grinders

Features and benefits

- Designed to protect pumps and other critical equipment from clogs and damage
- Shred tough solids in wastewater and sludge handling
- The dual-shafted, slow speed and high-torque grinder give a wide grinder capability
- Wipes Ready™ technology prevents materials from forming long stripes and reweaving

Key characteristics

Capacities	up to 1'558 m ³ /h
Connections	100 to 500 mm
Pressures	up to 6 bar
Cutting chamber	up to 1'500 mm



Channel Monster™

Features and benefits

- Designed to protect inlet works and treatment plants from damaging solids
- The rotating screening drums allow fluid to pass through while capturing solids and diverting them to the powerful dual-shafted grinder for shredding
- Can protect or replace headworks screens in pump stations
- Wipes Ready™ technology prevents materials from forming long stripes and reweaving

Key characteristics

Capacities	up to 2'775 m ³ /h
Cutting chamber	up to 1'500 mm
Bearing life	100'000 h



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