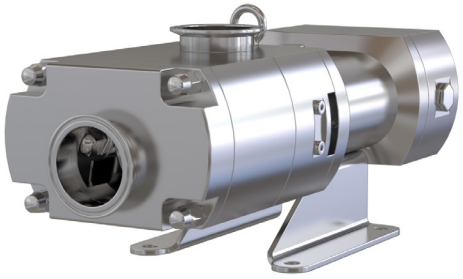
PRODUCT CATALOG

TMXFLOW

STS TWIN SCREW PUMP



STS Twin Screw Pump



Application

The STS is a twin screw pump, with a hygienic design, suitable for use in the food, dairy, beverage and cosmetic industries.

The flow is uniform and in an axial direction, so there are no changes in the volume or physical properties of the product. Therefore, it is an ideal pump for handling shear-sensitive fluids.

It has a high suction lift capability with very low NPSH values. It is capable of pumping liquids with high viscosity, but also with low viscosity, so it can be used a CIP-supply pump. The design ensures full cleanability and drainability.

Operation

Twin screw pump is a positive displacement pump what means that the pump is transferring a certain volume of product in accordance with the speed and pitch of the screws. While turning, the two screws are forming closed chambers that are moving in an axial direction. This movement creates a vacuum at the inlet side and pressure at the outlet. Due to this double chamber technic, there is an almost pulsation free working with high and low viscosity product.

User Benefits

100% CIP running at high speeds
Single and double mechanical seal options
Even when running at high pressures, there is no
Rotor/rotor/body contact
Speed up to 3,500 rpm
Ideal for abrasive products
Gentle handling of cut-sensitive product
Totally drainable
Bidirectional: It is possible to recover the product
from the line due to being
Ideal for products with high air or gas content
Perfect for vacuum application with high and low viscosity products

Materials

Pump casing	AISI 316L Diffusion hardened
Screws, front cover, seal housing	AISI 316L Diffusion hardened
Inside surface finish	Ra <0.8
Gear box	Stainless Stell / Cast Steel
Base plate	Stainless steel
Product wetted elastomers	EPDM
Other elastomers	FPM
Shaft seal	Single / Double
Rotary seal face	Silicon Carbide / Tungsten
Stationary seal face	Silicon Carbide / Tungsten

Operating Limits

Maximum flow	110m³/h
Max working pressure	20 Bar
Temperature range	-40C to 150C
Max Cip Temperature	150°C
Max Speed	3000 rpm / 50hz
Max speed	3600 rpm / 60hz

STS Twin Screw Pump

TMXFLOW let it flow

Operating Data

Model	Screw Spacing (mm)	Flow per rotation (L/r)	Max Flow (L/m)	Max Flow (m³/h)	Max speed (rpm)	Max solid (mm)	Max pressure (bar)	Net Weight (kg)
STS1 N	18	0,09	324	19,4	2900	8,5	20	
STS1 M	26	0,13	468	28,1	2900	12,5	20	30,2
STS1 L	48	0,22	638	38,3	2900	23,5	15	
STS2 N	26	0,20	580	34,8	2900	12,5	20	
STS2 M	36	0,29	841	50,5	2900	17,5	20	59,3
STS2 L	60	0,46	1334	80,0	2900	29,5	15	
STS3 N	32	0,53	1537	92,2	2900	15,5	20	
STS3 M	48	0,79	2291	137,5	2900	23,5	20	154,6
STS3 L	80	1,40	4060	243,6	2900	39,5	12	

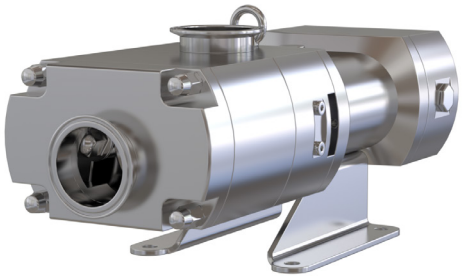


Double Mechanical Seal



Helis

Information



Twin Screw pumps are designed for precision, abrasive, high, and low viscosity use.

These pumps are built on a robust and reliable platform that meets stringent hygiene standarts.

It can perform both product transfer and CIP transactions.

Low vibration properties and excellent solids handling increase product quality by reducing the risk of product damage.

Maintenance has been simplified and uptime has been increased.

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