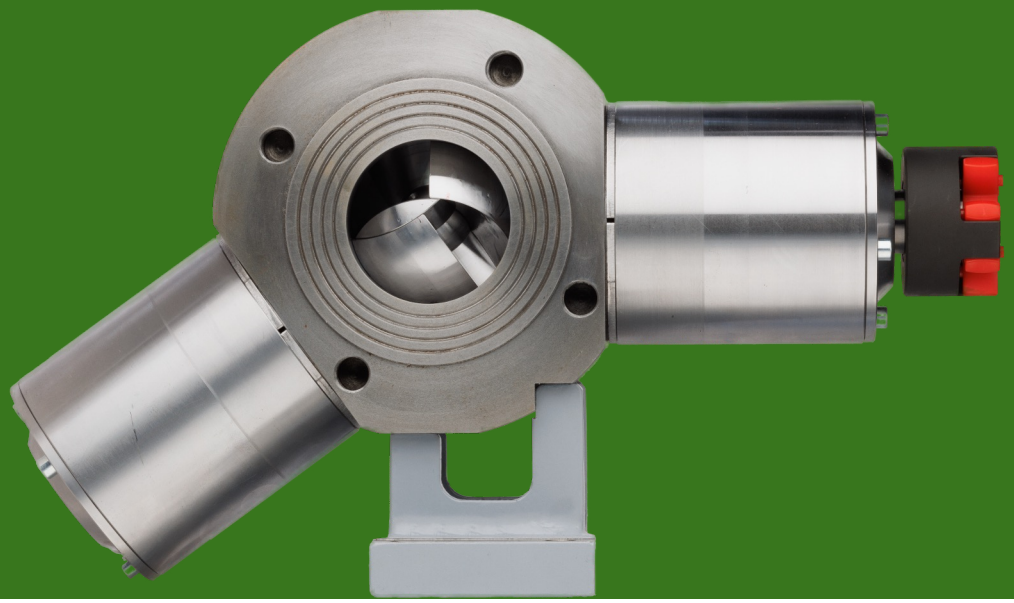
TWISTERPUMP

Positive displacement pump that can handle gentle liquids at low gear

INNOVATIVE & EFFICIENT PUMPING SOLUTIONS FOR THE FOOD PROCESSING INDUSTRY



- Compact size and lightweight design
- Versatile mounting
- In-line installing
- High efficiency
- Effective handling of highly viscous media
- Gentle handling of shear-sensitive media
- Self-priming capability
- Bidirectional operation
- High pressure handling
- High resistance to wear
- High resistance to abrasive products
- Ease of repair and maintenance
- Low maintenance costs

TWISTERPUMP STANDARD RANGE

Capacity: **up to 250 m3/h ***

Fluid temp: **up to 180°C ***

Design pressure: **16 bar ***

Ambient temp: **-30 to 70°C**

Vacuum: **- 0.92 bar**

Particle size: **max. 2.5 mm**

Rotational speed: **30-1,000 RPM**

Viscosity: **max. 250,000 mPa·s**

* Custom-built pumps with off-standard capacities up to 1,000 m³/h can be delivered. TwisterPump can also be customized to accommodate pressure up to 60 bar and fluid temperatures up to 450°C.

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TwisterPump by Scandic Technologies

Scandic Technologies is a private EU-based company specializing in the development and production of **high-quality, cost-efficient** TwisterPump **positive displacement pumps**. TwisterPump is based on a **unique patented rotary type technology** that offers **major advantages over conventional pump designs**. TwisterPump has been used successfully in **hundreds of installations**.

TwisterPump's **capability of handling well viscous and shear-sensitive liquids** at **low rotation speeds** combined with **low energy consumption** and **strong wear resistance** make it a **smart and reliable choice for the food processing industry**. TwisterPump can be used for pumping actual food products and their ingredients, liquid or solid, as well as other mediums used in food processing.

The TwisterPump product range is **designed and manufactured taking into account the globally recognized hygiene standards** set for the design and production of equipment used in food processing. We also carry **CE** marking, whereas the **ISO 9001:2015** Quality Management System assures the reliability and quality of our products.

Thanks to its low energy consumption and minimal maintenance requirements, TwisterPump offers highly competitive
Total Cost of Ownership

TWISTERPUMP

Features & Benefits

UNIQUE DESIGN
TwisterPump's **unique mechanism** consists of two halves of housing and a rotary piston group. The housing forms a cavity which is overlapped by the mobile parts of the rotary piston group. The rotary piston group is comprised of a central rotor and two pistons, forming four chambers which change their volume during rotation, being larger on the intake side, and smaller on the outlet side. The pumping action is achieved on the account of volume differences.

COMPACT SIZE AND WEIGHT
TwisterPump's **compact size** makes its **footprint smaller**, which enables its installation into **tight-fit locations**.

VERSATILE MOUNTING OPTIONS
TwisterPump can be mounted either **vertically or horizontally**.

IN-LINE INSTALLING CAPABILITY
TwisterPump's **small footprint** enables mounting it **into existing pipelines and systems**, making it a **perfect replacement pump**.

HIGH EFFICIENCY
TwisterPump's unprecedented and proven high efficiency means **substantially smaller electricity bills**.

EFFECTIVE HANDLING OF HIGHLY VISCOUS MEDIA
TwisterPump's unique construction allows **effective pumping of highly viscous substances** which many conventional pump types are either unable to handle at all, or handle with low efficiency. This difference becomes more pronounced as viscosity increases.

GENTLE HANDLING OF SHEAR-SENSITIVE MEDIA
TwisterPump is capable of **handling sensitive products** at low rotation speeds **without transforming their viscosity**.

SELF-PRIMING CAPACITY
Due to the rigid bearing assemblies and very small clearance between the rotary piston group and the housing, TwisterPump is able to create **over 0.9 bar of negative pressure on the intake**. This ensures **excellent self-priming capability**.

BIDIRECTIONAL PUMPING
TwisterPump's unique design allows it to be **operated in either direction without loss of performance**, eliminating the need for complex pipe/valve systems needed for reverse pumping with unidirectional pumps.

DIRECT DRIVE
TwisterPump is **directly connected to the driving electric motor**. This increases efficiency and reduces both the cost and time for maintenance. Direct drive also reduces the space needed for installing one of our pumps, thus making it easy to fit it into both new and existing installations.

HIGH PRESSURE HANDLING
Because of its innovative construction, TwisterPump is capable of generating high pressure and managing elevated pressure conditions with ease.

HIGH RESISTANCE TO WEAR
With TwisterPump the movement of working surfaces is sliding rather than opening and closing. Thanks to this unique construction, TwisterPump operates at significantly **lower gears** compared to conventional pumps, and the **wear resistance** of the rotating elements and housings **is considerably higher** than by any other existing pump technology even in demanding environments with abrasive materials. This leads to **longer life, lower maintenance costs and exceptional reliability**.

HIGH ABRASION RESISTANCE
Due to the **advanced materials** used and **latest surface treatment technologies** applied, TwisterPump is capable of handling a wide range of **abrasive products and environments**.

EASE OF REPAIR AND MAINTENANCE
TwisterPump's construction allows replacement of bearings and seals without disconnecting the pump from the pipeline which means that **all maintenance operations** can be performed **quickly and with ease**. Long service intervals and ease of maintenance also help to keep the overall operating costs low.

LOW MAINTENANCE COSTS
TwisterPump's innovative design involving less moving components as well as the use of advanced materials and special surface protection processes lead to **minimal maintenance costs.**

GUARANTEED DELIVERY QUALITY
All produced **pumps** are **factory tested**.

SUSTAINABLE CONSTRUCTION
Designed to allow **reusing or retrofitting of over 50%** of its components, supporting environmentally conscious practices.

Our main pump models have been tested by VTT (Technical Research Centre of Finland) using edible oils as medium. All produced pumps are factory tested before delivery.

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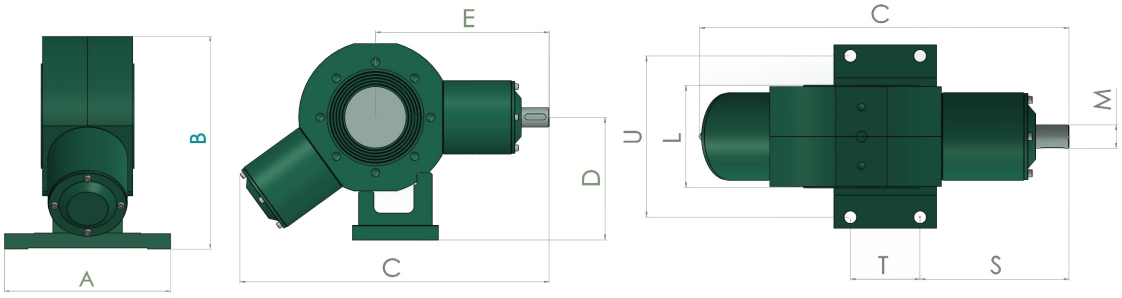
Technical specifications

TwisterPump Standard Models



Parameter	TP 065	TP 092	TP 116	TP 130	TP 195	TP 260
Capacity [m³/h]	3	10	20	30	60	120
Design pressure [bar]:	16	16	16	16	16	16
Rotational speed [RPM] min. / max.:	30 / 1,000	50 / 1,000	50 / 1,000	50 / 1,000	50 / 600	50 / 500
Volume [l] per revolution circle:	0.05	0.17	0.33	0.50	1.67	4.00
Port size:	2" BSP	DN 65 PN16	DN 100 PN16	DN 100 PN16	DN 150 PN16	DN 200 PN16
Weight [kg]:	25	33	64	65	159	315
A [mm]:	175	175	250	250	250	390
B [mm] - Height:	220	248	320	320	426	517
C [mm] - Length:	383	426	512	512	712	931
D [mm] - Port/shaft centre height:	140	158	200	200	265	327
E [mm]:	221	242.5	288	288	394	530
L [mm] - Width:	100	106	140	140	200	270
M [mm]:	22	28	32	32	40	60
S [mm]:	166	184	208	208	300	423
T [mm]:	65	65	95	95	120	165
U [mm]:	150	150	220	220	220	340

TwisterPump can be delivered as a bare shaft pump or as a full pumping solution. TwisterPump casings and rotor contact surfaces are made of stainless steel wherever required for hygiene reasons. The standard solution comes with single-stage component seals. Cartridge single and double seal versions are also available. Custom-built pumps with off-standard capacities and other parameters can be provided.