

# TopWing

ULTRA-HYGIENIC ROTARY LOBE PUMPS



## >Johnson Pump<sup>®</sup>

The TopWing pump is designed for ultrahygienic applications and is very easy to clean both by CIP and by SIP. The pump is extremely rigid built for long durable operation and easy maintenance.

The complete pump is made of stainless steel with smooth surface on all product-contact parts.

The pump range is approved for EHEDG, 3-A and a variety of other certificates or validation documents are available for the most demanding needs.

With less agitation and shear TopWing can handle delicate liquids containing both soft and hard particles without product degradation.

TopWing is the most modern and strongest rotary lobe pump in the market today without compromising hygiene.

Based in Charlotte, North Carolina, SPX FLOW (NYSE: FLOW) is a multi-industry manufacturing company with operations in more than 35 markets worldwide. SPX FLOW's innovative, worldclass products and highly-engineered solutions are helping to meet the needs of a constantly developing world and growing global population. You'll find our innovative solutions in everything from dairy plants and power plants to oil and gas pipelines, and the power grid. SPX FLOW is really everywhere you look.

We help our customers around the globe expand and enhance their food and beverage, power and energy and industrial production processes. For more information, please visit www.spxflow.com

### TopWing Ultra-Hygienic Rotary Lobe Pumps

#### **ULTRA-HYGIENIC DESIGN**

- Self-draining rotor case in vertical position
- Self-draining mechanical seals inside the rotor case
- Clean O-ring position
- 316 L stainless steel body and cover
- Smooth standard surface. Electro-polished finish as option
- Easy to clean CIP, SIP or manually
- Withstands rapid temperature changes and accommodates harsh CIP/SIP-cycles.
- EHEDG and 3-A options

#### VALIDATED AND CERTIFIED

- Easy to validate for Ultra-hygienic applications
- Package of certificates available as option, as example:
  - Flow and pressure tests
  - Cleanability certificates as EHEDG and 3-A

Material certificates as 3.1, FDA, USP Class VI and AFO

Certificates of surface roughness, welding, electro- polishing

ATEX certificates (hazardous zone)

Quality (ISO 9001) and environmental (ISO 14001) certificates

#### TROUBLE-FREE OPERATION

- Duplex stainless steel in rotors, shafts and retainers Strong assembly
  - Low thermal expansion

High corrosion resistance

- Harder material
- Complete pump in stainless steel Designed for difficult external environments
  Easy to clean externally without risk for corrosion
- Heavy-duty construction Maximized duplex shaft and bearing diameter/tight bearing position Increased lifetime on bearings and seals

#### EASY MAINTENANCE

- Change of shaft seal without disassembling the rotorcase
- Heavy duty bearing design pre-loaded taper roller bearings without shimming







#### SPECIAL APPLICATION OPTIONS

- Rectangular inlet for high viscosity products and considerably improved inlet conditions
- Thermal jacket to provide a constant temperature level within the pump
- Relief valve to secure against too high pressures. Options for automated CIP cycles are available

#### DESIGNED FOR DIFFICULT EXTERNAL ENVIRONMENTS

- Water resistant gear case with special seals to minimize water intrusion
- Air breather of stainless steel with back valve and labyrinth
- Complete pump manufactured in stainless steel – no corrosion, no painting

#### **ROTOR OPTIONS**

- Bi-wing rotors
  - Smooth performance with minimal damage of pumped media having soft particles such as fruits
  - Low or no pulsation when pumping viscous liquids
- Multi-lobe rotors

Low noise level at higher speeds

Low pulsation when pumping low viscous liquids

Low NPSHr

Reduced friction and power losses





#### **TECHNICAL DATA - STANDARD CLEARANCE CLASS**

РИМР ТҮРЕ	DISPLACEMENT (DM <sup>3</sup> /REV)	MAX CAPACITY (M³/H)	NOM INTERNAL DIA OF CONNECTION (MM)	MAX WORKING PRESSURE (BAR)	MAX Speed (RPM)
TW1/0041	0.041	3.4	25	15	1400
TW1/0082	0.082	6.9	25	7	1400
TW2/0171	0.171	12.3	40	15	1200
TW2/0343	0.343	24.7	50	7	1200
TW3/0537	0.537	32.2	50	15	1000
TW3/1100	1.100	66.0	80	7	1000
TW4/1629	1.629	78.2	80	15	800
TW4/3257	3.257	156.3	100	7	800

### Typical product applications

#### DAIRY

Milk, Yogurt, Cream, Curds and whey, Skimmed milk, Butter, Cottage cheese, Melted cheese



#### DRINKS & BEVERAGE

Fruit juice, Yeast, Cider and wine, Liquid sugar, Glucose, Spirits, Extracts, Beer



#### FOOD & CONFECTIONERY

Fruit preserves, Baby food, Soups and sauces, Chocolate, Sausage meat, Vegetable oils, Batter, Dough, Jam, Egg products, Prepared food, Soups, Syrup, Liquid sugar, Fondant, Ketchup, Mustard, Candy paste



#### PHARMACEUTICAL, MEDICINE AND BIOPROCESSING

Ultra filtration, Blood, Plasma, Enzymes, Buffers, Coating solutions, Fermentation circulation, Alcohol, Sugar solutions,Pill paste, Dragee solutions, Nutrients

COSMETICS & PERSONAL CARE

Toothpaste, Shampoos, Gels, Creams, Soap, Lotions, Cosmetics, Hair conditioners, Extracts

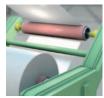
#### CHEMICAL

Paint, Resins, Oil additives, Polymer, Glue, Ink, Gelatine

#### PULP & PAPER

Pine oil, Soap, Starch, Lignin, Coating, Slurry, Clay, Green liquor mud, Sludge





## SPXFLOW

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FOR YOUR LOCAL REPRESENTATIVE:

http://www.spxflow.com/en/johnson-pump/where-to-buy/

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