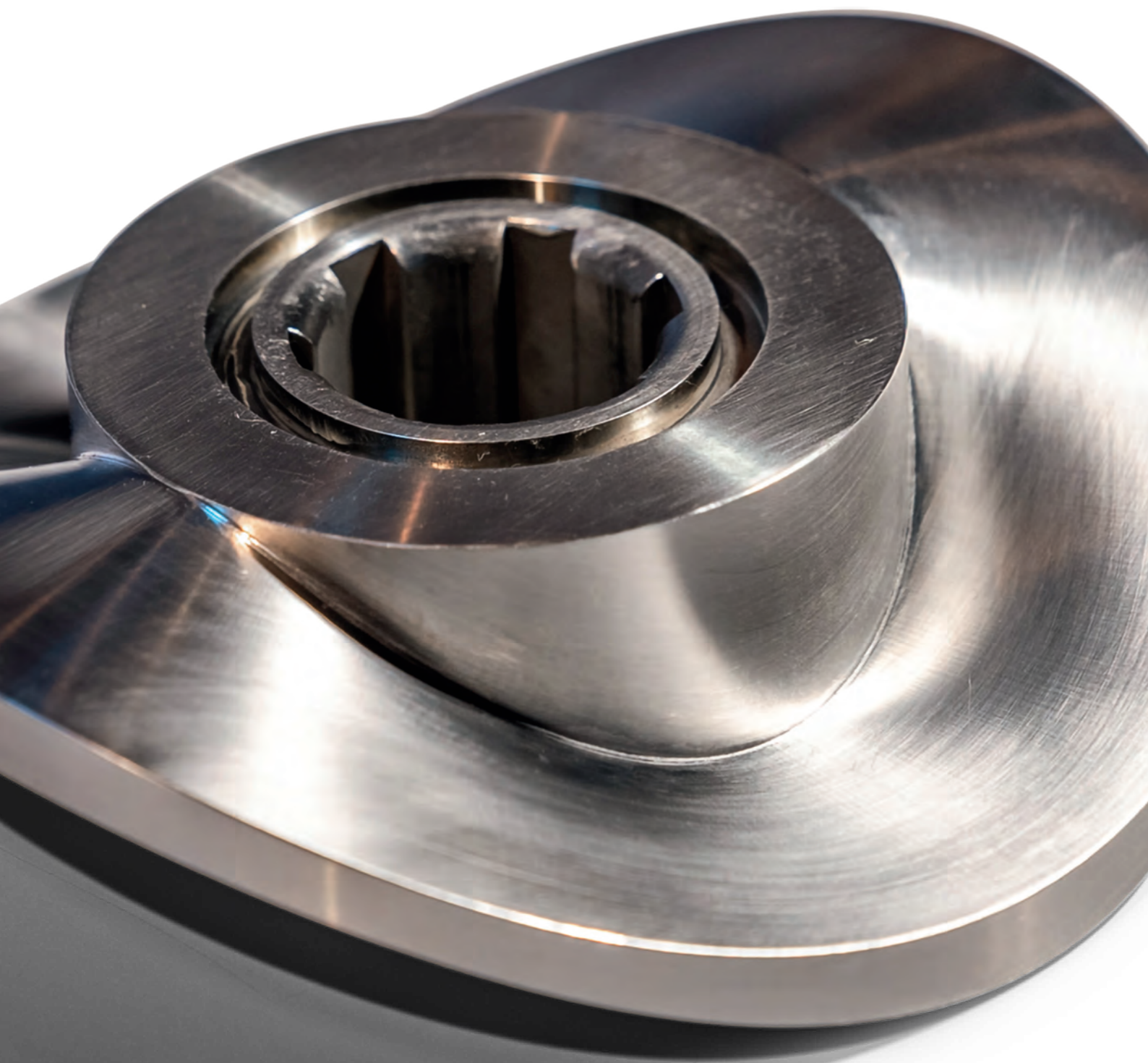




product catalogue

SOMA Pumps GmbH
Your specialist for the
SOMA SINUS SODIAL® Pump



Content

Our company SOMA Pumps GmbH	4
Quality & Service – Made in Germany	5
The operating principle	6
Benefits in the food industry	7
Benefits in the beverage industry	8
Benefits in the cosmetics industry	9
Benefits in the confectionery industry	10
Benefits in the dairy industry	11
SCN20/SCN20-D	12
SCN25/SCN25-D	13
SCN40/SCN40-D	14
Performance curves	15
Spare parts	19
Equipment and advantages	20

Our Company



Quality & Service Made in Germany



SOMA Pumps GmbH is a leading manufacturer of SOMA SINUS SODIAL® pumps with its headquarters in Abstatt (Baden-Württemberg, Germany).

Manfred Sommer, inventor and founder of the former MASO-Prozesspumpen GmbH, developed this revolutionary pump system in 1982. His idea was to design a pump that would convey a product without any damage, absolutely gently and softly. Since 2010, SOMA SINUS SODIAL® Pumps have been

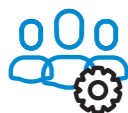
continuously developed by its successors in order to provide the highest level of quality.

SOMA Pumps GmbH offers application-related, competent advice and individual solutions through comprehensive know-how.

This is what sets us apart:



Passion for our product



customer service



flexibility



ISO 9001 certified



Product specialist

The operating principle

SOMA SINUS SODIAL® Pump – SCN series

The SCN series of SOMA Pumps GmbH is a positive displacement pump based on the SINUS principle.

Our SOMA SINUS SODIAL® pumps are used for a flow rate of up to 90,000 l/h. The core of the pump is a sine wave, which is mounted as a disc (rotor) on a drive shaft. It gently and evenly transports the product to be conveyed through four equally divided chambers without any risk of reducing the product quality. This ensures virtually pulsation-free conveying.

A scraper separates the suction and discharge sides of the pump, allowing pressure equalization and thus preventing backflow. Due to the constantly open suction side, the viscosity of the products is

irrelevant. This supports the production of high viscous products, such as silicones or frozen orange juice concentrate, as well as low viscous products, such as water-like products. In addition, the pump avoids potential foaming and liquid separation.



SOMA SINUS SODIAL® PUMPS

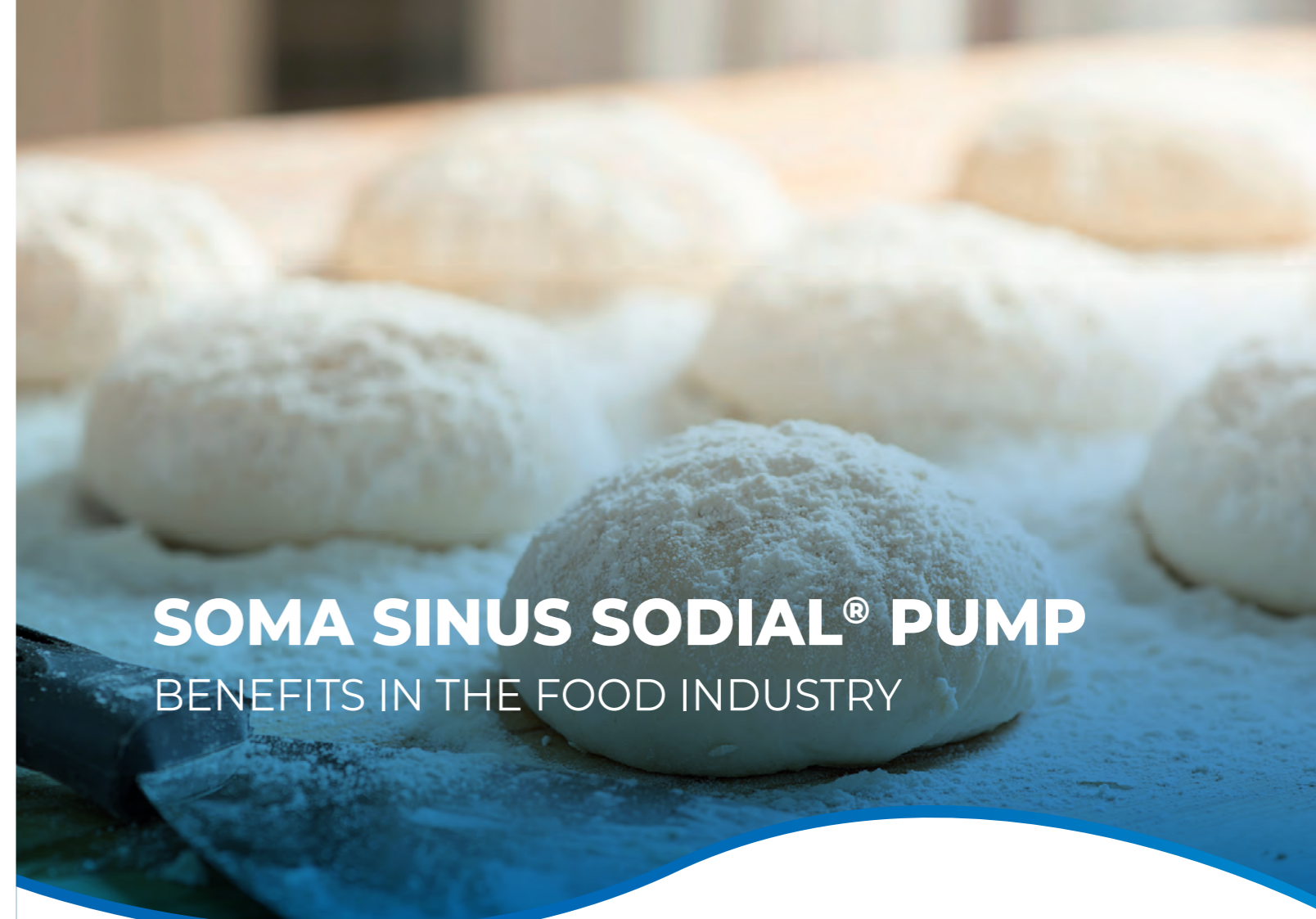
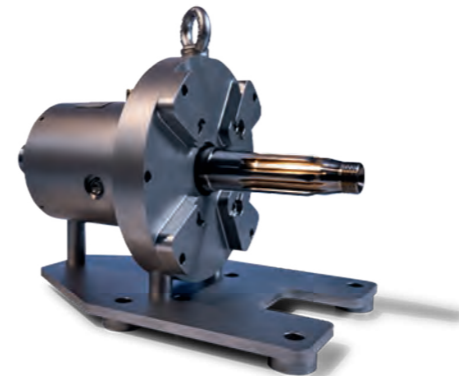
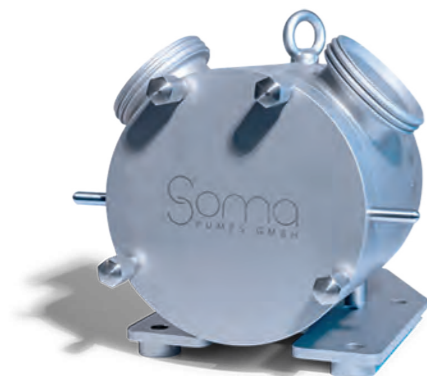
The SINUS rotor operates inside two separate liners so that the pump housing and cover are not subject to wear. Based on this design advantage, we are able to provide a lifetime warranty on the housing and cover.

The main seal of our SOMA SINUS SODIAL® pump is available in different versions, depending on the application. Various mechanical seals and special seals are offered.

Both the maintenance of the pump and the replace-

ment of wear parts can be carried out by the operator himself in just a few minutes. Likewise, the pump can be cleaned in its installed state in just a few minutes by means of CIP cleaning and SIP sterilization.

In order to achieve optimum efficiency and minimize energy costs as well as pump wear, the pump size must be precisely matched to the process requirements. Therefore, benefit from our decades of experience and extensive know-how in the field of sinusoidal pumps and let our experts advise you.



SOMA SINUS SODIAL® PUMP BENEFITS IN THE FOOD INDUSTRY

The SOMA SINUS SODIAL® pump is powerful and extremely effective. Especially in the food sector, as gentle conveying must be ensured.

SOMA SINUS SODIAL® pumps convey fluids with sensitive, soft solids such as pieces of meat, vegetables or fruit, for example in sauces, soups, deli salads or similar products, without destroying them. High flow rates are possible even with products of high viscosity. SOMA SINUS SODIAL® pumps are flexible and can be

adapted to specific customer demands. Customized from the material used in the pump to cooling or heating – there are many options.

In plant CIP cleaning, SIP sterilization and manual cleaning is one of the greatest advantages to save time and money.

Product examples:

Mayonnaise, ketchup, sauces, deli salads, vegetables, fruits, ready meals, meat roast, chicken breast, chutney, pasta and many more.



SOMA SINUS SODIAL® PUMP

BENEFITS IN THE BEVERAGE INDUSTRY

Thanks to the constantly open suction side, the SOMA SINUS SODIAL® pump can convey even highly viscous products, such as frozen orange juice concentrate, without product degradation.

Due to the innovative pump design the product enters the pump chamber without interruption. This means that tanks or silos can be pumped empty much faster than with other positive displacement pumps. SOMA pumps deliver the medium almost without shear. The flow is constant and almost pulsation free.

Pressures up to 15 bar can be generated without any problem. The SOMA SINUS SODIAL® pump can of course also pump products with low viscosity, such as brewer's yeast or apple juice concentrate. All standard spare parts of the pump can be replaced without having to remove the pump from the plant. This saves time, costs and downtime.

Product examples:

Concentrates, syrups, juices, brewer's yeast, smoothies, wine, etc.



SOMA SINUS SODIAL® PUMP

BENEFITS IN THE COSMETICS INDUSTRY

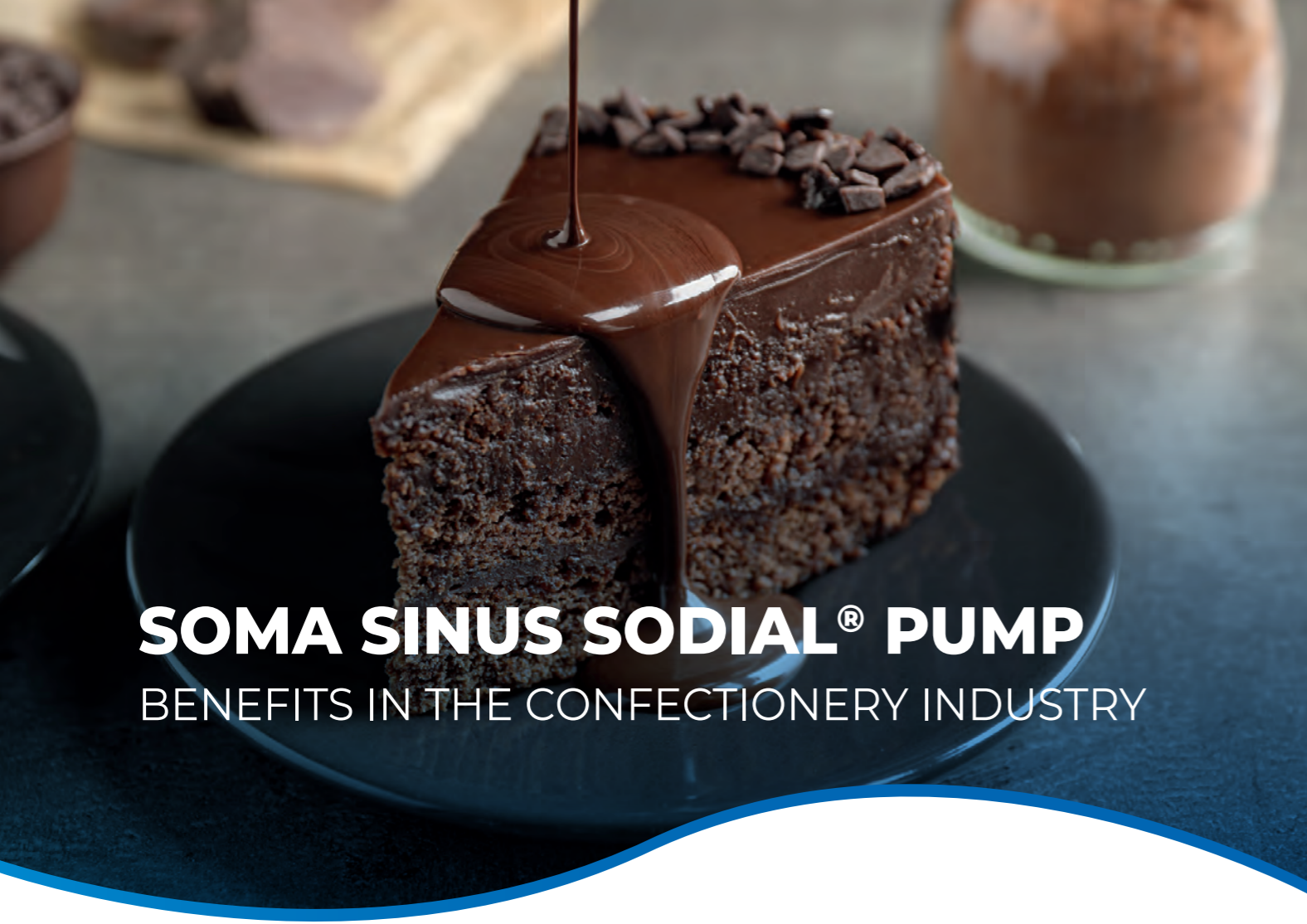
The leading companies in the cosmetics industry use SOMA SINUS SODIAL® pumps for the production of their commercial products such as hair shampoo, skin cream and many other cosmetic products.

Customers appreciate the gentle conveying without foaming and the constant, almost pulsation-free flow, which ensures smooth process and product quality. This is especially important for the cosmetical industry where cream and shampoo are produced. The suction capacity of -0.85 bar is outstanding!

Even highly viscous products can be pumped due to the always open inlet and outlet of the pump. Wearing parts can be easily replaced on site in just a few minutes. The wear parts of a SOMA SINUS SODIAL® pump are only a fraction of the cost of repairing a rotary lobe or screw pump.

Product examples:

Hair shampoo, hair conditioner, hair color, shower gels, skin cream, hair gel, makeup, sunscreen, toothpastes, mouthwash, etc.



SOMA SINUS SODIAL® PUMP BENEFITS IN THE CONFECTIONERY INDUSTRY

SOMA SINUS SODIAL® pumps are an essential part of the confectionery industry. Syrup, caramel, liquid chocolate or various other sugar-containing masses are conveyed gently and evenly.

Renowned confectionery manufacturers benefit from the excellent properties of SOMA SINUS SODIAL® pumps: With an optional additional heating or cooling system for housing or pump cover, the product is processed at optimally controlled temperatures.

Product examples:

Syrup, caramel, chocolate, candy and gumdrops, ice cream, etc.



SOMA SINUS SODIAL® PUMP BENEFITS IN THE DAIRY INDUSTRY

The SOMA SINUS SODIAL® pump is ideally designed for the transfer of shear-sensitive cheese curds and whey.

Gentle and careful conveying of the product prevents both foaming and product separation. Furthermore, a constant and almost pulsation-free flow ensures process and product quality. The SOMA SINUS SODIAL® pump is ideal for the transfer of shear-sensitive curd and whey. Particularly gentle conveying reduces cheese powder and increases the resulting output.

Product examples:

Whey and whey drinks, butter, quark, cream, milk and milk-mixed drinks, yogurt, soft ice cream, frozen yogurt, etc.

Pump characteristics

Displacement volume: 0,11 l/rev

Speed range: 0-1.000 rpm

Pump pressure: max. 10 bar

Temperature: max. 180 °C (with customized software)

 Beverages

 Cosmetics/Pharma

 Dairy Products

 Fine Chemicals

 Confectionery

 Food

Pump characteristics

Displacement volume: 0,45 l/rev

Speed range: 0-600 rpm

Pump pressure: max. 15 bar

Temperature: max. 180 °C

 Beverages

 Cosmetics/Pharma

 Dairy Products

 Fine Chemicals

 Confectionery

 Food

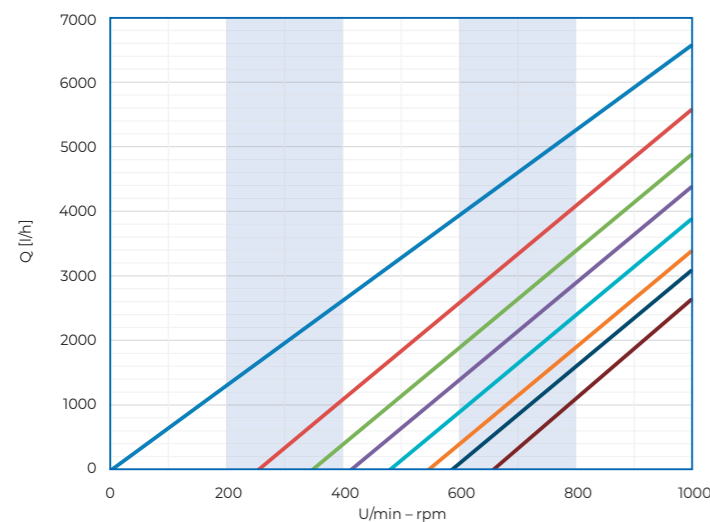
SCN20/SCN20-D

Advantages and benefits

- ✓ Each pump will be individually sized and fitted with the most economical parts
- ✓ Gentle transfer especially when fragile particles are pumped
- ✓ Suitable for low and high viscous products
- ✓ Low pulsation while operating
- ✓ No foaming of the product when it is pumped
- ✓ Heating / cooling available
- ✓ Simple maintenance in plant

Technical data

- ✓ **Performance and features**
 - Capacity: max. 4.000 l/h
 - CIP / SIP capability
 - Particle Size: max. 20 mm
 - Suction Power: -0,85 bar
 - Viscosity: 1cps – 9 Mio. cps
 - 0,11 liter per revolution
 - Pressure: max. 15 bar
- ✓ **Certification**
 - Food and Drug Administration (FDA)
 - EG 1935-2004
 - ATEX
 - 3.1 Stainless Steel
- ✓ **Nozzles available**
 - Flange
 - German Milk Fitting DIN 11851
 - Tri-Clamp
 - RJT
 - SMS



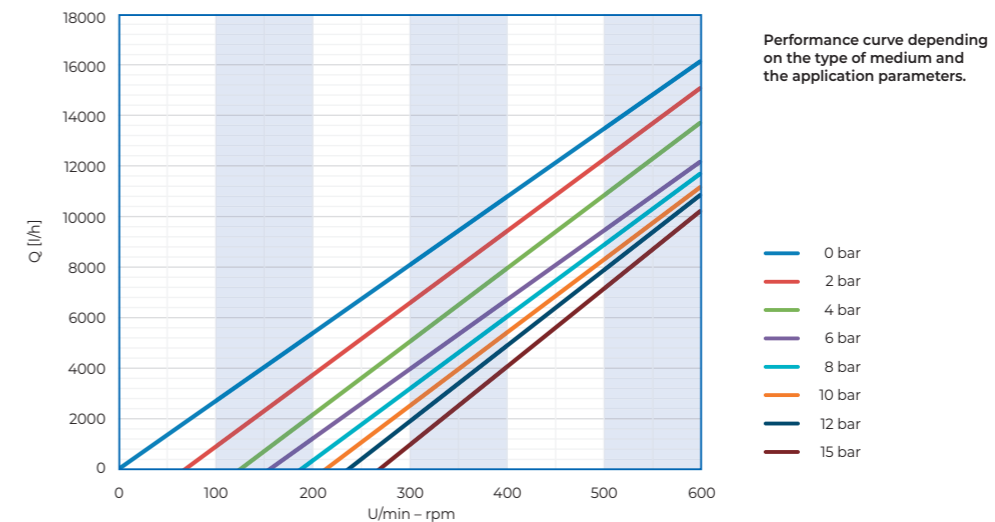
SCN25/SCN25-D

Advantages and benefits

- ✓ Each pump will be individually sized and fitted with the most economical parts
- ✓ Gentle transfer especially when fragile particles are pumped
- ✓ Suitable for low and high viscous products
- ✓ Low pulsation while operating
- ✓ No foaming of the product when it is pumped
- ✓ Heating / cooling available
- ✓ Simple maintenance in plant

Technical data

- ✓ **Performance and features**
 - Capacity: max. 18.000 l/h
 - CIP / SIP capability
 - Particle Size: max. 30 mm
 - Suction Power: -0,85 bar
 - Viscosity: 1cps – 9 Mio. cps
 - 0,45liter per revolution
 - Pressure: max. 15 bar
- ✓ **Certification**
 - Food and Drug Administration (FDA)
 - EG 1935-2004
 - ATEX
 - 3.1 Stainless Steel
- ✓ **Nozzles available**
 - Flange
 - German Milk Fitting DIN 11851
 - Tri-Clamp
 - RJT
 - SMS



Pump characteristics

Displacement volume: 1,15 l/rev

Speed range: 0-600 rpm

Pump pressure: max. 15 bar

Temperature: max. 180 °C

 Beverages

 Cosmetics/Pharma

 Dairy Products

 Fine Chemicals

 Confectionery

 Food

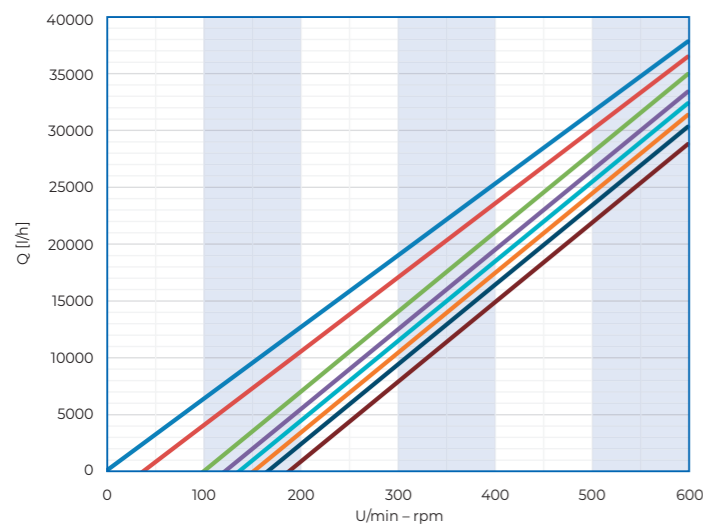
SCN40/SCN40-D

Advantages and benefits

- ✓ Each pump will be individually sized and fitted with the most economical parts
- ✓ Gentle transfer especially when fragile particles are pumped
- ✓ Suitable for low and high viscous products
- ✓ Low pulsation while operating
- ✓ No foaming of the product when it is pumped
- ✓ Heating / cooling available
- ✓ Simple maintenance in plant

Technical data

- ✓ **Performance and features**
 - Capacity: max. 40.000 l/h
 - CIP / SIP capability
 - Particle Size: max. 45 mm
 - Suction Power: -0,85 bar
 - Viscosity: 1cps – 9 Mio. cps
 - 1,15 liter per revolution
 - Pressure: max. 15 bar
- ✓ **Certification**
 - Food and Drug Administration (FDA)
 - EG 1935-2004
 - ATEX
 - 3.1 Stainless Steel
- ✓ **Nozzles available**
 - Flange
 - German Milk Fitting DIN 11851
 - Tri-Clamp
 - RJT
 - SMS



Performance curve depending on the type of medium and the application parameters.

- 0 bar
- 2 bar
- 4 bar
- 6 bar
- 8 bar
- 10 bar
- 12 bar
- 15 bar

Performance curves

Performance curve SOMA SINUS SODIAL® Type SCN20/SCN20-D

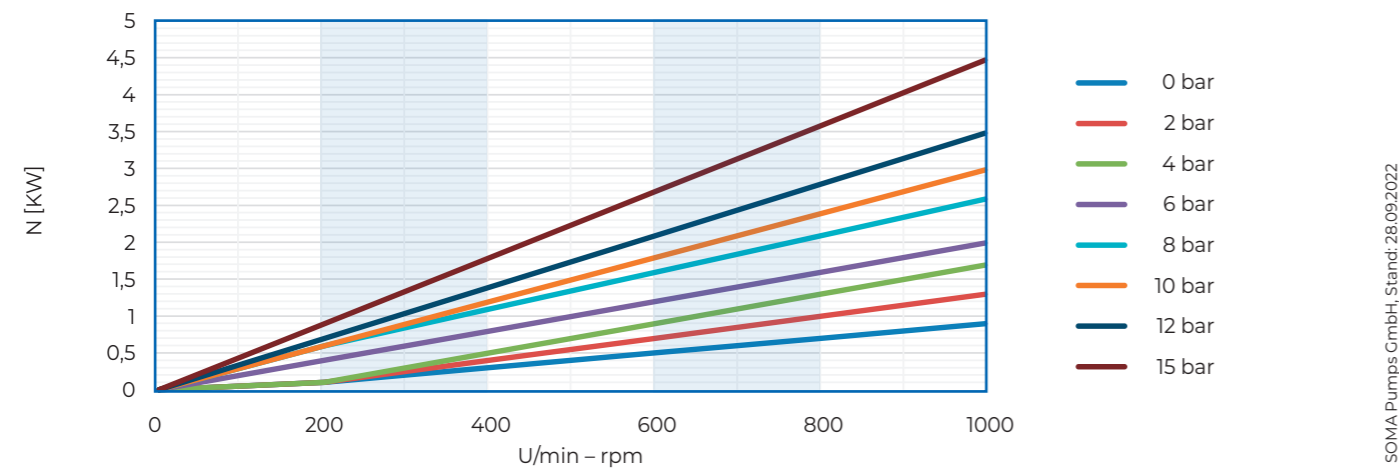
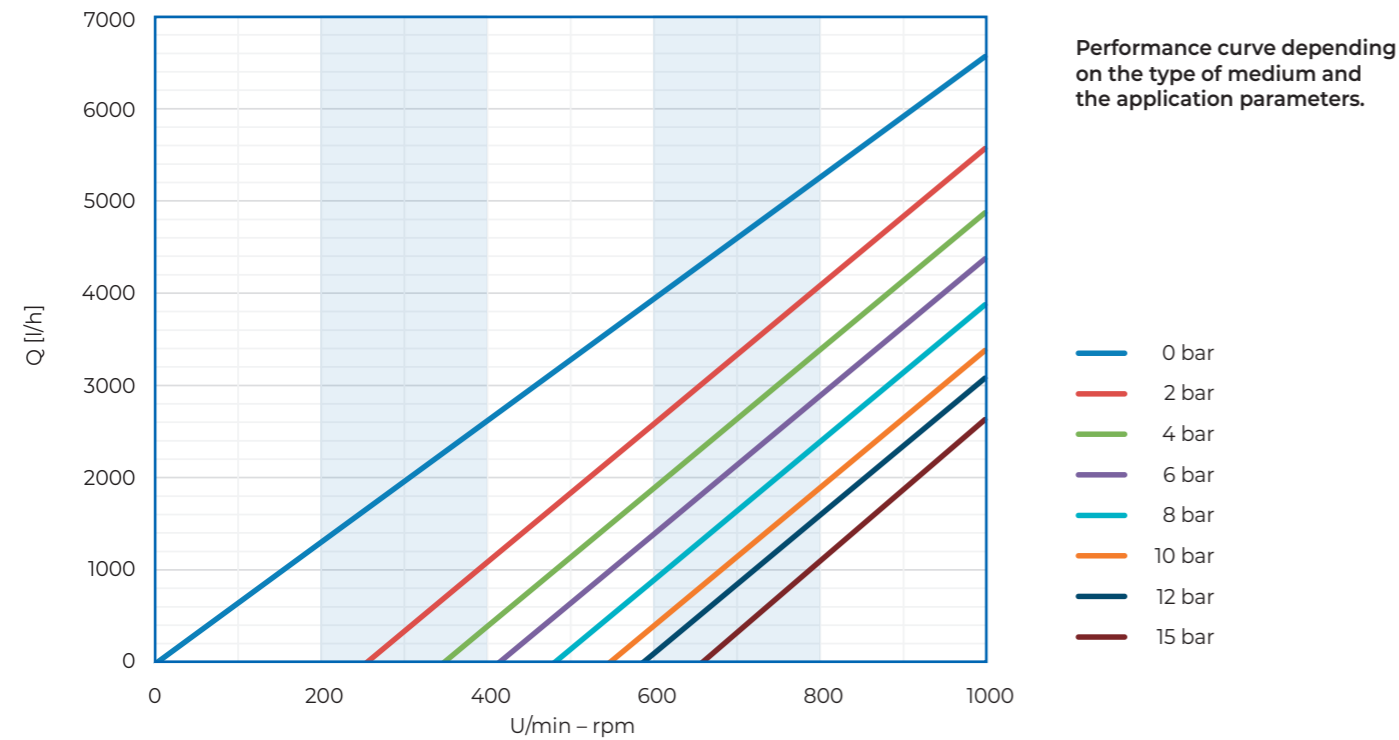
PUMP CHARACTERISTICS:

displacement volume: 0,11 l/rotation
 speed range: 0-1.000 rpm
 pump pressure: max. 10 bar
 temperature: max. 180 °C (with customized software)
 Customization: Each pump is equipped according to customer requirements

PUMP S/N: _____

required performance: _____ kW
 required torque: _____ Nm
 drive speed: min. _____ Upm/rpm
 max. _____ Upm/rpm

Pump curve shows performance with a viscosity of approx. 1.000 cps. With higher viscosities, SOMA SINUS SODIAL® pumps work without slip.



SOMA Pumps GmbH, Stand: 28.09.2022

Performance curve SOMA SINUS SODIAL® Type SCN25/SCN25-D

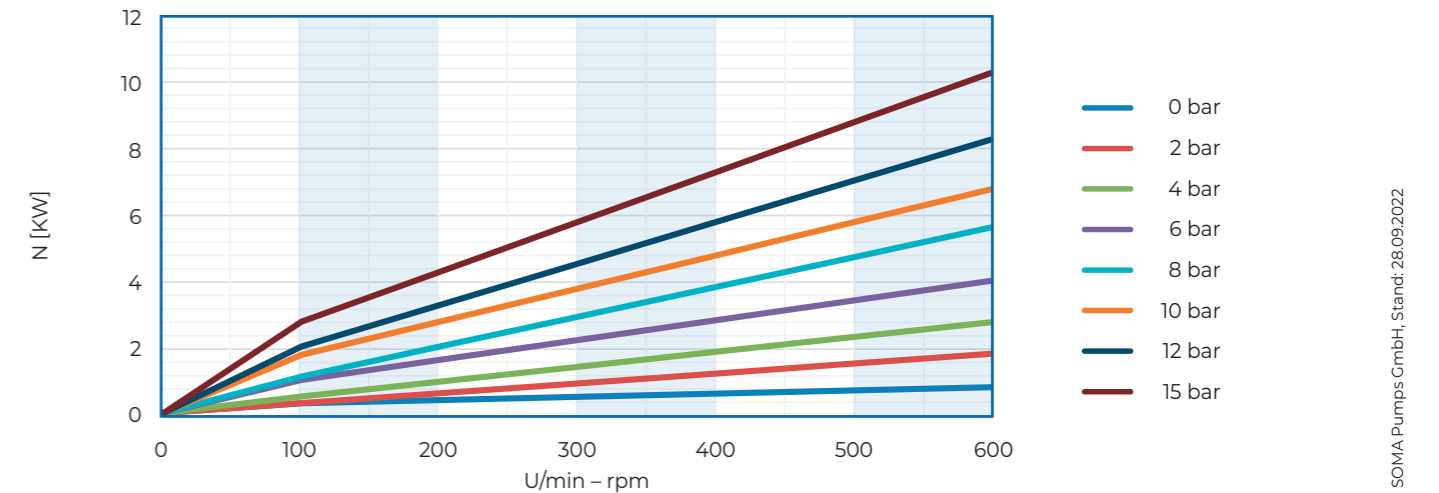
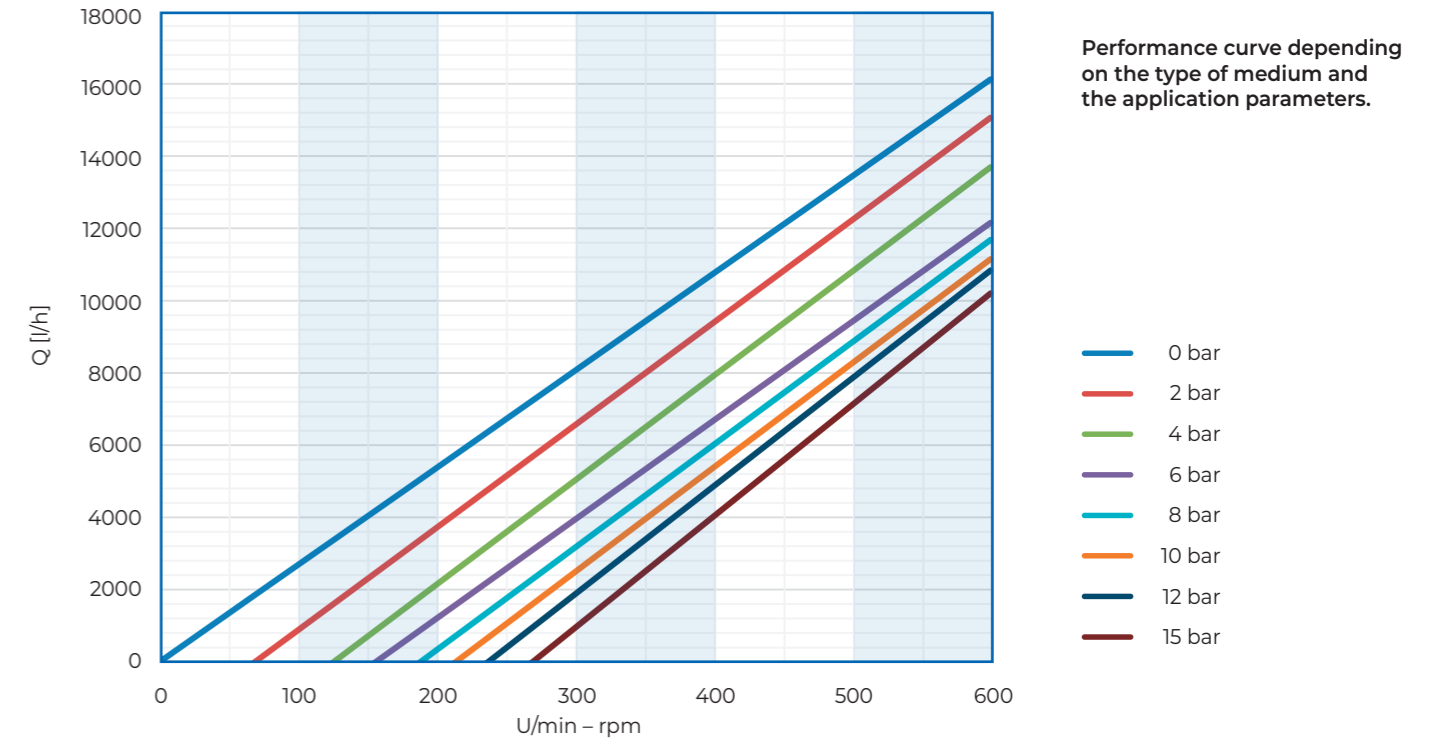
PUMP CHARACTERISTICS:

displacement volume: 0,45 l/rotation
 speed range: 0-600 rpm
 pump pressure: max. 15 bar
 temperature: max. 180 °C (with customized software)
 Customization: Each pump is equipped according to customer requirements

PUMP S/N: _____

required performance: _____ kW
 required torque: _____ Nm
 drive speed: min. _____ Upm/rpm
 max. _____ Upm/rpm

Pump curve shows performance with a viscosity of approx. 1.000 cps. With higher viscosities, SOMA SINUS SODIAL® pumps work without slip.



SOMA Pumps GmbH, Stand: 28.09.2022

Performance curve SOMA SINUS SODIAL® Type SCN40/SCN40-D

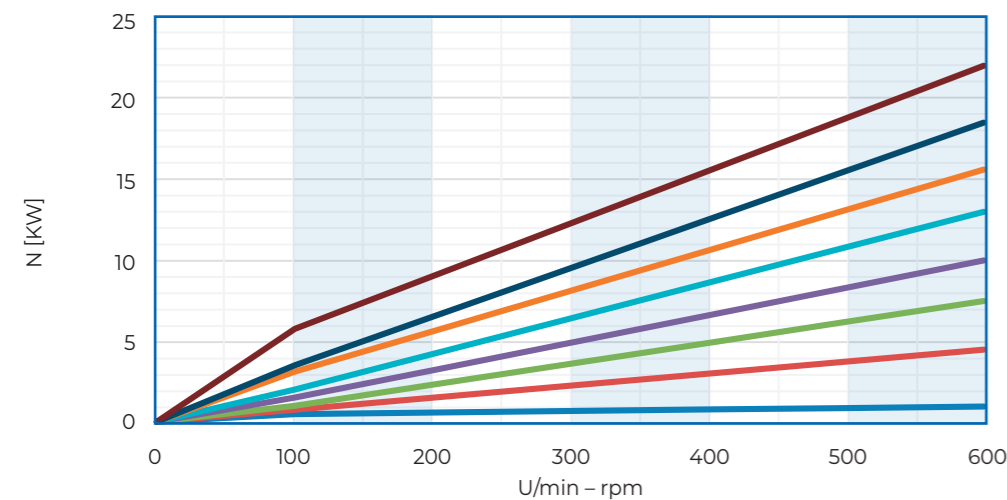
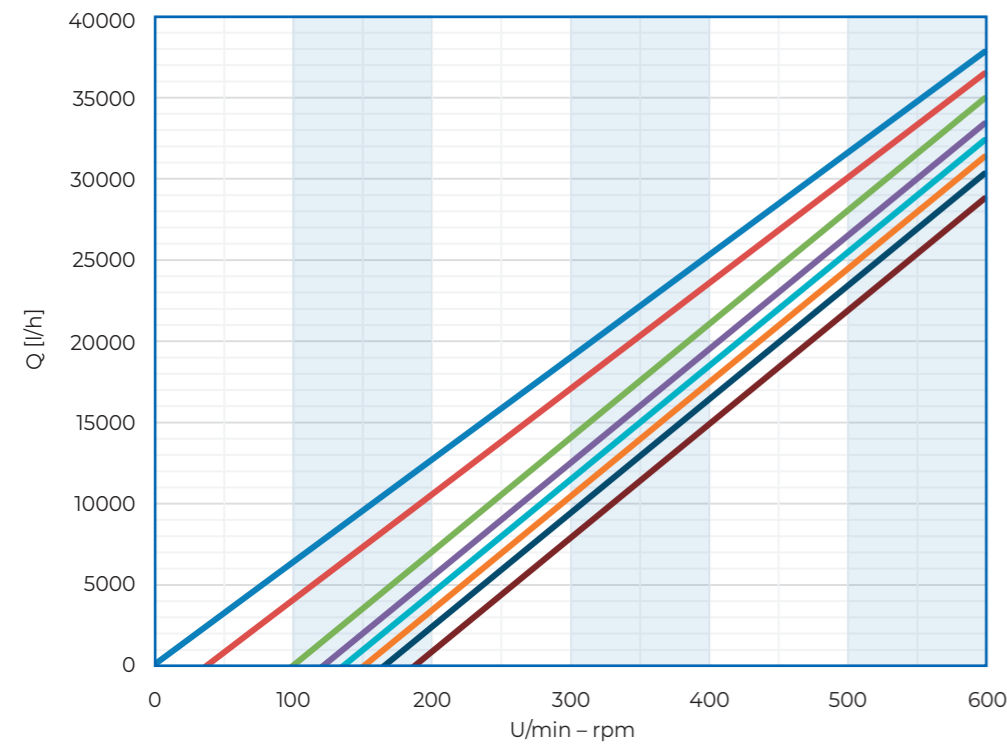
PUMP CHARACTERISTICS:

displacement volume: 1,15 L/rotation
 speed range: 0-600 rpm
 pump pressure: max. 15 bar
 temperature: max. 180 °C (with customized software)
 Customization: Each pump is equipped according to customer requirements

PUMP S/N: _____

required performance: _____ kW
 required torque: _____ Nm
 drive speed: min. _____ Upm/rpm
 max. _____ Upm/rpm

Pump curve shows performance with a viscosity of approx. 1.000 cps. With higher viscosities, SOMA SINUS SODIAL® pumps work without slip.

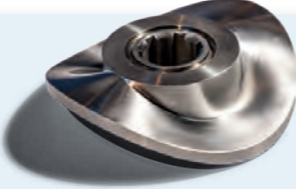
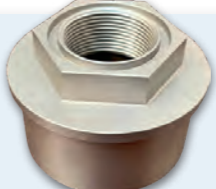
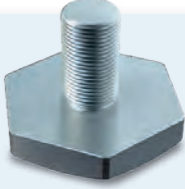
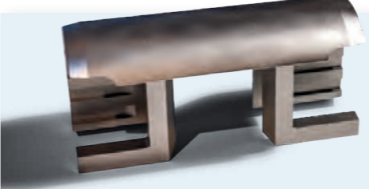


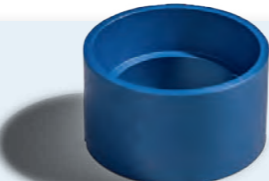


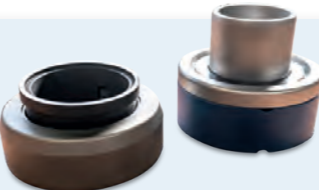

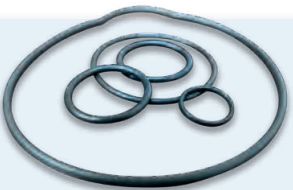


SOMA Pumps GmbH, Stand: 28.09.2022

Spare parts

SOMA SINUS SODIAL® original spare parts guarantee maximum performance, long life with minimum wear. All internal part which are in contact with the product are Food and Drug Administration (FDA), EG 1935-2004 and 3.1 Stainless Steel certified.

Main spare parts are available within 24 hours. The shown below spare parts are available in different materials and versions XX-pump size (SCN10-SCN20-SCN25-SCN40-SCN60).

 <p>T04XX-0100-10 Rotor 3.1 certified</p>	 <p>T04XX-0820-10 Locking nut 3.1 certified</p>	 <p>T04XX-1100-10 Locking screw 3.1 certified</p>
 <p>T04XX-0700-10 Scraper Gate Guide 3.1 certified</p>	 <p>T04XX-1200-50 Liner FDA/EG1935-2004 certified</p>	 <p>T04XX-0400-49 Scraper FDA/EG1935-2004 certified</p>
 <p>T04XX-0960-55 Front Supprot FDA/EG1935-2004 certified</p>	 <p>T04XX-5250-55 Backing ring FDA/EG1935-2004 certified</p>	 <p>T04XX-0517-10 Lip Seal System FDA/EG1935-2004 certified</p>
 <p>T04XX-0641-97 Single Mechanical Seal system 3.1/FDA/EG1935-2004 certified</p>	 <p>T04XX-0660-97 Wearing kit 3.1/FDA/EG1935-2004 certified</p>	 <p>T04XX-1700-84 O-Ring kit FDA/EG1935-2004 certified</p>

Accessories and advantages

Pump control

Stainless steel housing with different options and safety classes

- ✓ Clockwise / counter-clockwise operation
- ✓ Switch on/off
- ✓ Emergency stop
- ✓ Reset switch – corresponding with dry running
- ✓ Maximum on safety is guaranteed !

Housing heating -cooling, cover heating -cooling

Heating and cooling options are available for the perfect handling of the product.

Stainless Steel motor cover

SOMA's stainless steel motor cover protects pump and motor.

Drain system

Support the cleaning process with a complete empty pump housing.

Digital speed control

For an optimal monitoring of the process.

Dry run protection

Protects the pump for wear and damage.

Pump repair shop

Our service team is trained for the repair for all types of pump types.
Interested on a side service or a training ? Please give us a call.



Accessories and advantages

Suction power

SOMA SINUS SODIAL® pumps have an excellent suction power for low and high viscous products.

Pulsation free

SOMA SINUS SODIAL® pumps transfer for product with nearly no pulsation and increase the product quality.

Cleaning

SOMA SINUS SODIAL® pumps are as a standard CIP/SIP and manually cleanable.

Certified

All parts witch are in contact with the product are FDA, EG1935-2004 and 3.1 certified.

Sealing System

For SOMA SINUS SODIAL® pumps different sealing options are available e.g.

- ✓ Single mechanical seal system
- ✓ Double mechanical seal system
- ✓ Lip seal system

Low maintenance cost

All internal spare parts can be changed in line without taking out of the system.
This saves time and avoids an interruption in production.

Energy efficiency

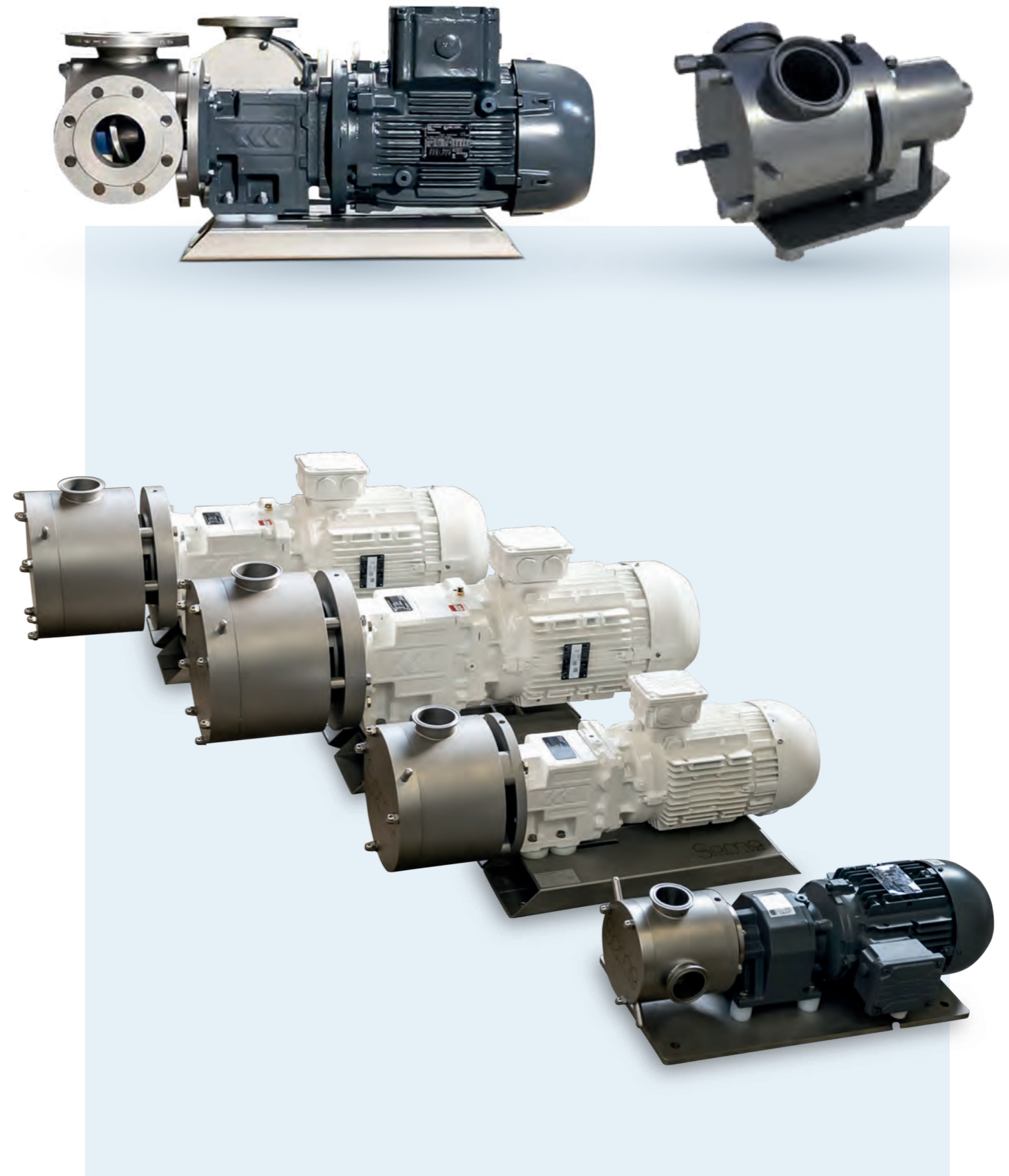
SOMA SINUS SODIAL® pumps have up to 50% less energy consumption compared to other pump types.

Accessories and advantages

- ✓ Very gentle transfer of the product
- ✓ Constant flow with nearly no pulsation
- ✓ For low and high viscous products
- ✓ Full life guarantee for pump housing and cover
- ✓ Different sealing options available
- ✓ CIP/SIP and manual cleaning
- ✓ Heating and cooling option for pump housing and cover
- ✓ Simple maintenance
- ✓ No foaming of the product
- ✓ Nearly all kind of connections available
- ✓ ATEX- models available
- ✓ FDA, EG1935-2004 and 3.1 certified
- ✓ Customized base plates

Why you should choose a SOMA pump

- ✓ Innovative new developments
- ✓ Short reaction time with personal contact person
- ✓ Fair market prices
- ✓ Consulting and sales of all type of pumps.
- ✓ Certified after ISO 9001:2015



Soma
PUMPS GMBH



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