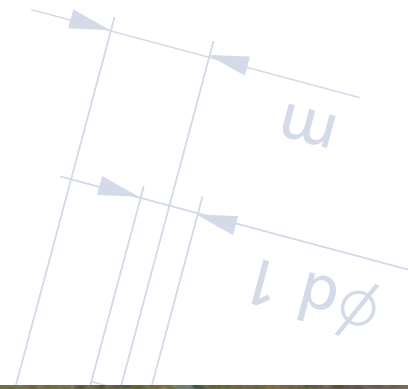


Self-priming Twin Screw Pumps for Food Production and Sanitary Applications

SLH Series

Pumping and Cleaning Processes with One Pump





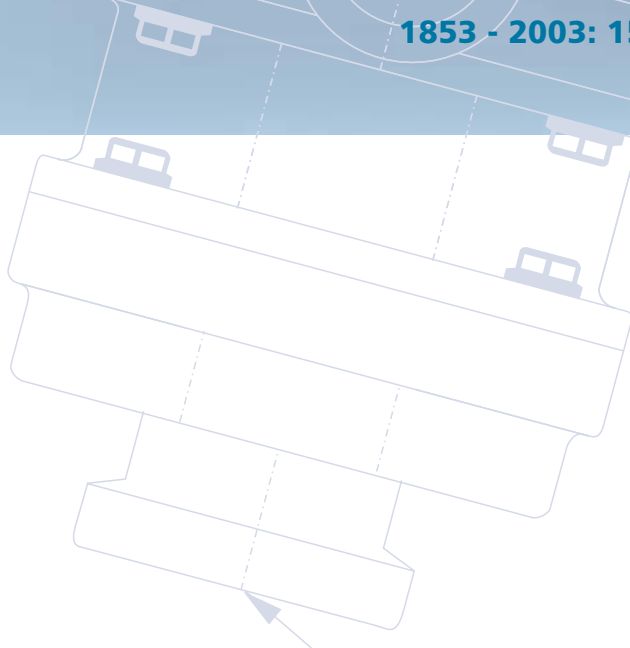
Bornemann was established in 1853 and has been designing and constructing pumps and pump systems for over 75 years.

In 1934, Bornemann began designing and manufacturing our Twin Screw Pumps with external bearings, which today are still the foundation of our production and the premier pump in our product line.

Agencies and subsidiaries throughout the world guarantee immediate and professional support in all phases of business from extensive consulting through professional engineering to the installation and reliable maintenance of the installed pump and system.

Bornemann is certified under DIN EN ISO 9001.

1853 - 2003: 150 years tradition and innovation.



Ideal Solutions for Food Productions and Other Sanitary Applications

SLH Series

With this special pump design adapted from our standard Twin Screw Pumps, Bornemann is offering sanitary pump solutions for applications such as:

- Food: oils, soups, sauces, dressings, ketchup, semi-solid foods, pastry, jam, purees, honey, sandwich spreads, salads....
- Milk products: yogurt, cream, butter, desserts, condensed foods, cheese spread, cheese curds....
- Confectionery: chocolate, creams, fondant, molasses, liquid sugar, raw materials, fillings...
- Brewery: malt extract, other beer products...
- Drinks: juices, concentrated drinks, syrups, wine, sparkling wines....

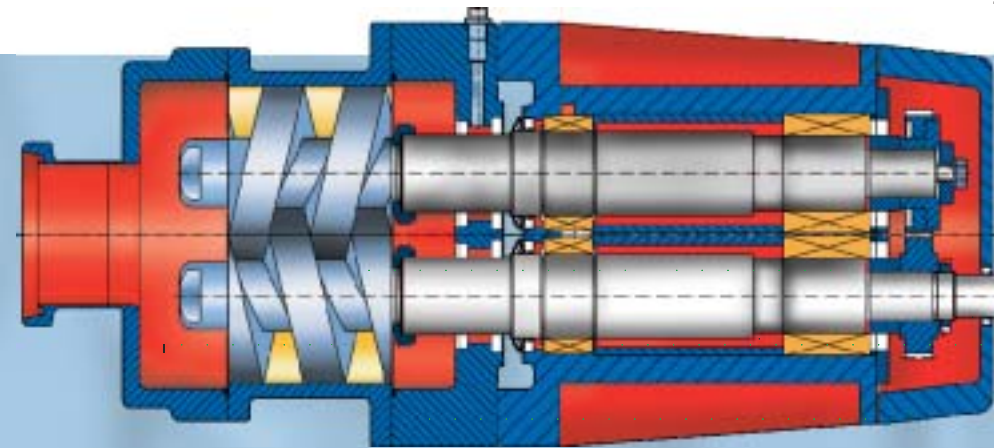
Advantages for Users

- Pumping and cleaning processes with one pump
- Low shearing to the pumped fluid, gentle handling
- Minimal maintenance, reduction in cleaning pumps and pipes
- Saves space through this 2 in 1 technology
- Abrasion-free and safe to run dry (option)
- Extremely favourable cost effectiveness



The SLH Concept

The conveying elements of this self-priming Twin Screw Pump are single-flow and have external bearings. Two non-contacting intermeshed transporting screws form closed chambers inside the pump housing, which conveys fluid from the suction to the discharge end.



The pumped fluid flows through the screws in an axial direction.

Therefore, the pump imparts very low shear and little pulsation to viscous and

shear-sensitive products. For this reason, SLH pumps are well suited for fluids with high or low viscosity, with lubricating or non-lubricating properties, and fluids containing some solids.

The entrance geometry of the suction chamber is modified to accommodate the particular fluid properties of the product, thus allowing the pump to handle applications with liquid, lumpy and abrasive fluids.

The SLH Pump can easily be adapted to the user's requirements according to viscosity, temperatures, working pressures, speed, and other criteria.

Speeds range from 200 rpm up to 3.600 rpm. With this wide range it is possible to operate the SLH not only on normal process sequences, but also cleaning and CIP operations as well, using only one pump.

Model illustration of the pump process with lumpy material...





Typical pump assembly, including the pump, gear reducer, and motor. Other assembly configurations are possible.



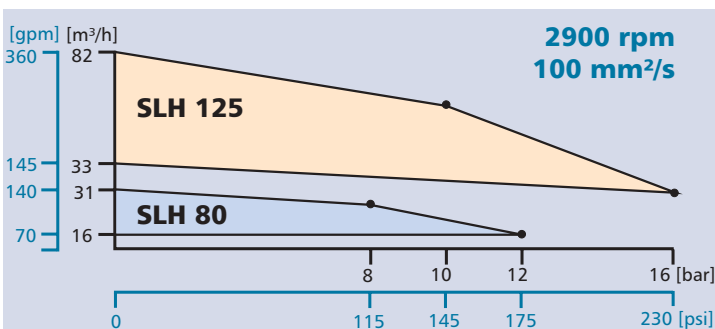
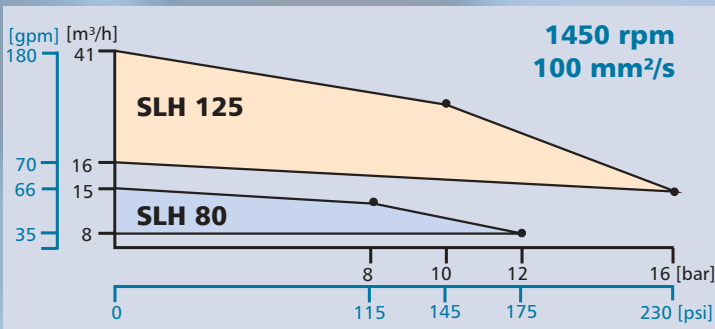
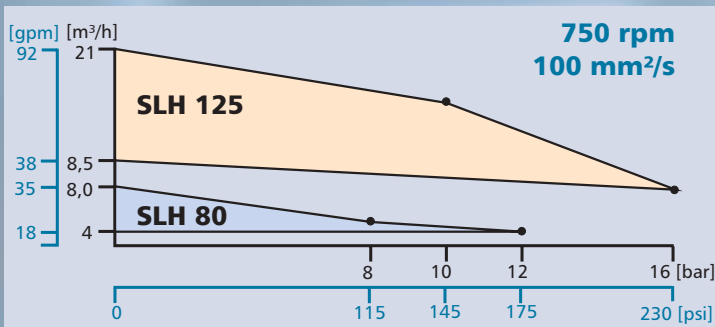
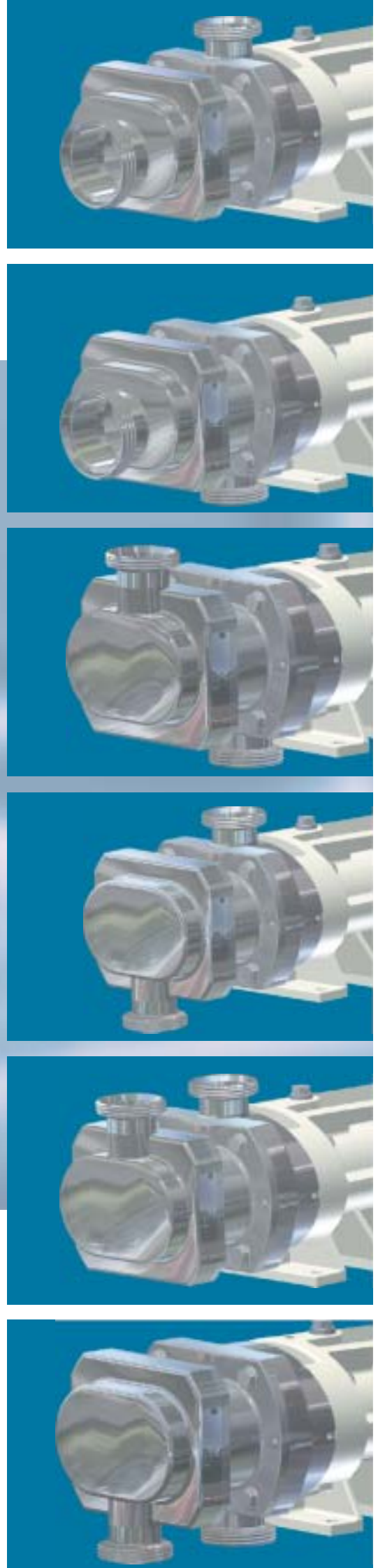
Fruit stays whole



The gentle fluid handling of the SLH pump is shown by this example of yogurt containing large pieces of fruit. The fruit pieces keep their size and appearance.



Performance and Diversity of the SLH Pump

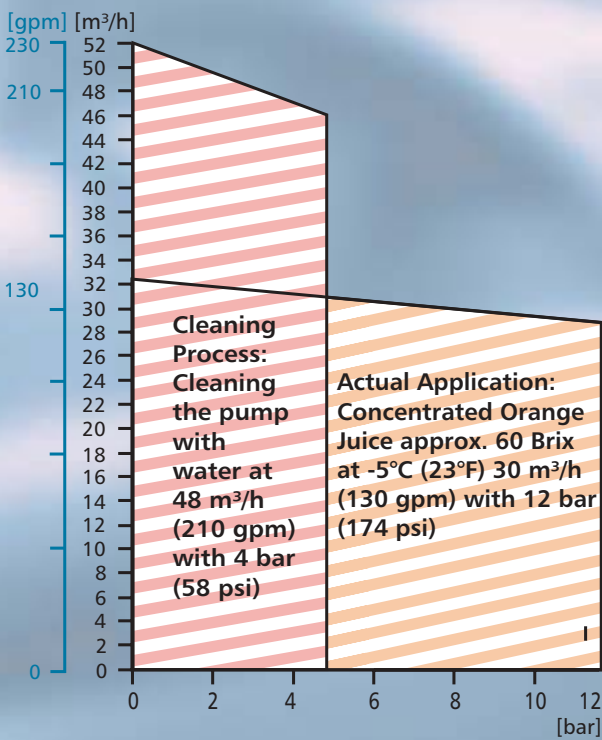


Minimal Maintenance and Quick Availability.

SLH pumps can be cleaned and maintained in almost no time! They are designed for quick disassembly and are CIP. Large radiuses on internal wetted parts, along with large inflow and outflow cross sections insure and simplify the cleaning and sterilization process. Thus:

Additional piping, MSR-technology and shut-off devices are not necessary. Saves costs and space.

A well known juice manufacturer uses a single SLH pump for both pumping and cleaning processes.



A variety of available screw pitches allow for different output capacities, depending on fluid viscosity, particle sizes, Differential pressures, and Pump speed.

Technical Data: SLH 80 / SLH 125

Output Capacities: Up to 100 m³/h (440 gpm)

Differential Pressures: Up to 16 bar (230 psi)

Pump Speed: Maximum 3.600 rpm

Viscosity: Maximum 100.000 cst

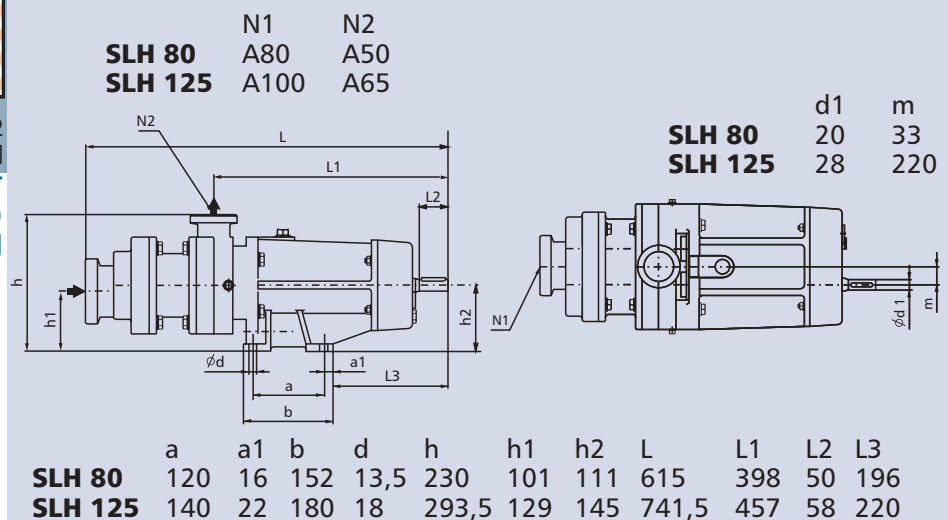
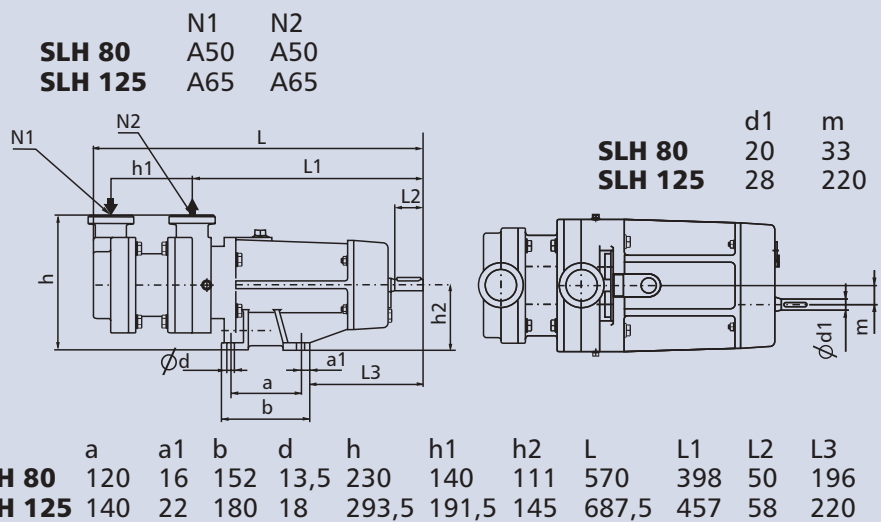
Direction of Operation: Reversible operation possible

Flange Connections: Milk screw thread according to DIN 11851, other connection variations upon request

Heating medium: Various

Heating temperature: Maximum 130°C (266° F)

Cleaning temperature: Short-term 140°C (284°F)





Pumps and Systems for Industry,
Environmental and Shipbuilding

www.bornemann.com

Joh. Heinr. Bornemann GmbH
Postfach 1162
31676 Obernkirchen
Germany
Fon +49 5724 390-0
Fax +49 5724 390290
info@bornemann.com



Good communication with our customers is an important feature in Bornemann's Quality Program, from initial project consultation to maintenance. Professional support and fast service are top priorities. Specialists in pumps and systems located in our company headquarters and in nearly 100 representatives

and agencies through the world provide professional quality support on a local level. Our employees and representatives are trained at our training center in order to stay current on new technologies and provide the best support available to our customers.

USA:

Bornemann Pumps Inc.
P.O. Box 1769
Matthews, NC 28106
USA

Fon:
+1 704 849-8636
Fax:
+1 704 849-8637
info.usa@bornemann.com

Argentina:

**Bombas
Bornemann S.R.L.**
Armenia 2898
B1605CDP Munro
Prov. Buenos Aires
Argentina

Fon:
+54 11 4756-8008
Fax:
+54 11 4756-5541
info.ar@bornemann.com

China:

**Bornemann Pumps & Systems
(Tianjin) Co., Ltd.**
No. 6 Jibin Building,
No. 45 Muning Road
TEDA, Tianjin
P. R. China 300457

Fon:
+86 22 66297800
Fax:
+86 22 25326799
info.cn@bornemann.com

Singapore:

**Bornemann Pumps
Asia Pte. Ltd.**
25 Intern. Business Park
German Centre, # 04-08
Singapore 609916
Singapore

Fon:
+65 6 561 6782
Fax:
+65 6 561 6784
info.sg@bornemann.com