BÖRGER®
Innovation

Simplicity

is Simply Better

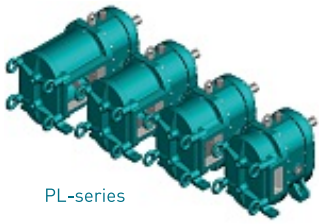
Rotary Lobe Pumps

So simple, yet so diverse.

Please add.

Six series with 20 sizes.

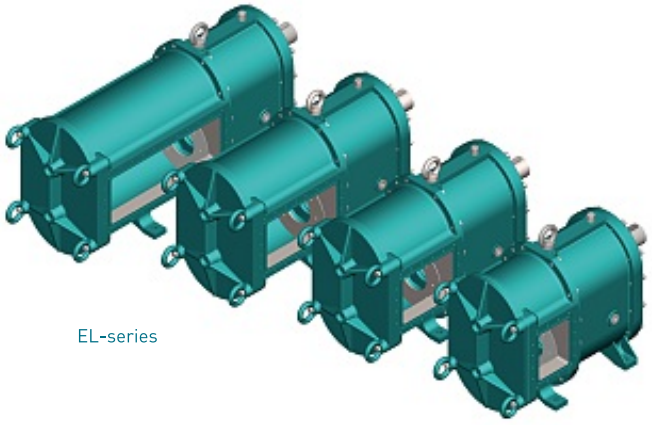
AL-series



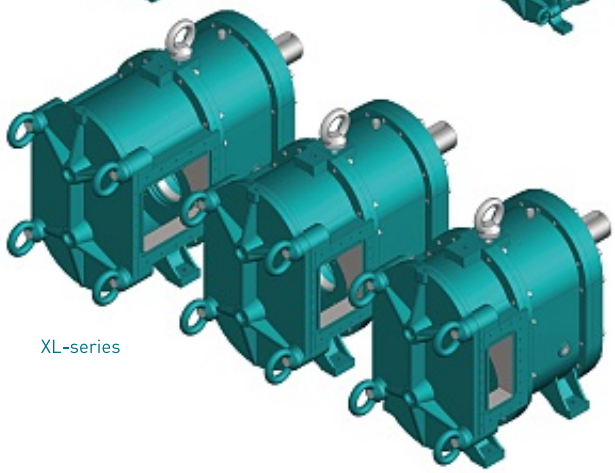
PL-series

CL-series

FL-series



EL-series



XL-series

All pump models are manufactured using single piece construction. That won't be copied easily. The AL, PL, CL, FL, EL and XL series allow for a rated capacity between 1-1000 m^3 (5-5,000 usgpm). Whatever pump size is right for you depends on its intended purpose, installation location and the characteristics of the pumped fluid. Whatever you need, we'll give you thorough technical advice.

When we select a rotary lobe pump model for you, we consider the large variety of different pump sizes and materials available, including the best suited shaft seal and drive selection, so that your customized pump is built for its intended use. The pump casing is constructed using grey cast iron as standard. It is given either an abrasive-resistant coating or is finished entirely in stainless or duplex steel for corrosive applications.

All elastomers can be supplied in an almost unlimited material range with various characteristics.
Our performance driven, reliable and robust pumps benefit not only from the Maintenance in Place Feature (MIP) but also from high efficiencies resulting in low energy consumption, reducing the life cycle costs to a minimum.

And now multiply.

Worldwide unique: the significant rotor variety.

Optimum Rotor*

Dual-lobe, screw profile

- large sealing area with effective scraping edge
- for abrasive and aggressive fluids
- almost pulsation-free and high pressure stability

Premium Rotor*

Dual-lobe, linear

- large sealing area and pressure stabile
- for high viscous, abrasive products
- from hard metal / stainless steel or plastics

Rotor

Dual-lobe, linear

- The Allrounder
- entirely elastomer coated
- for aggressive and abrasive fluids

Rotor*

Dual-lobe, readjustable

- entirely elastomer coated
- for abrasive conveying products
- threefold longer service life

Rotor*

Tri-lobe, screw profile

- with replaceable rotor tips
- for solids and debris containing fluids
- with low pulsation

Rotor*

Tri-lobe, linear

- with replaceable rotor tips
- with long-living sealing line
- for solids and debris containing fluids

Rotor

Tri-lobe, screw profile

- entirely elastomer coated
- with non-wetted core
- with low pulsation

Rotor

Tri-lobe, linear

- PTFE or Plastics coated
- for chemically problematic fluids
- solvents-resistant

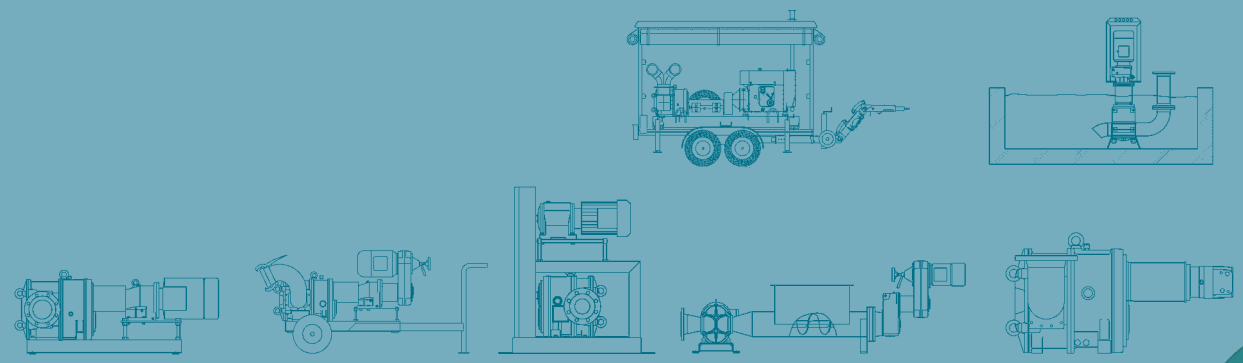
*patented

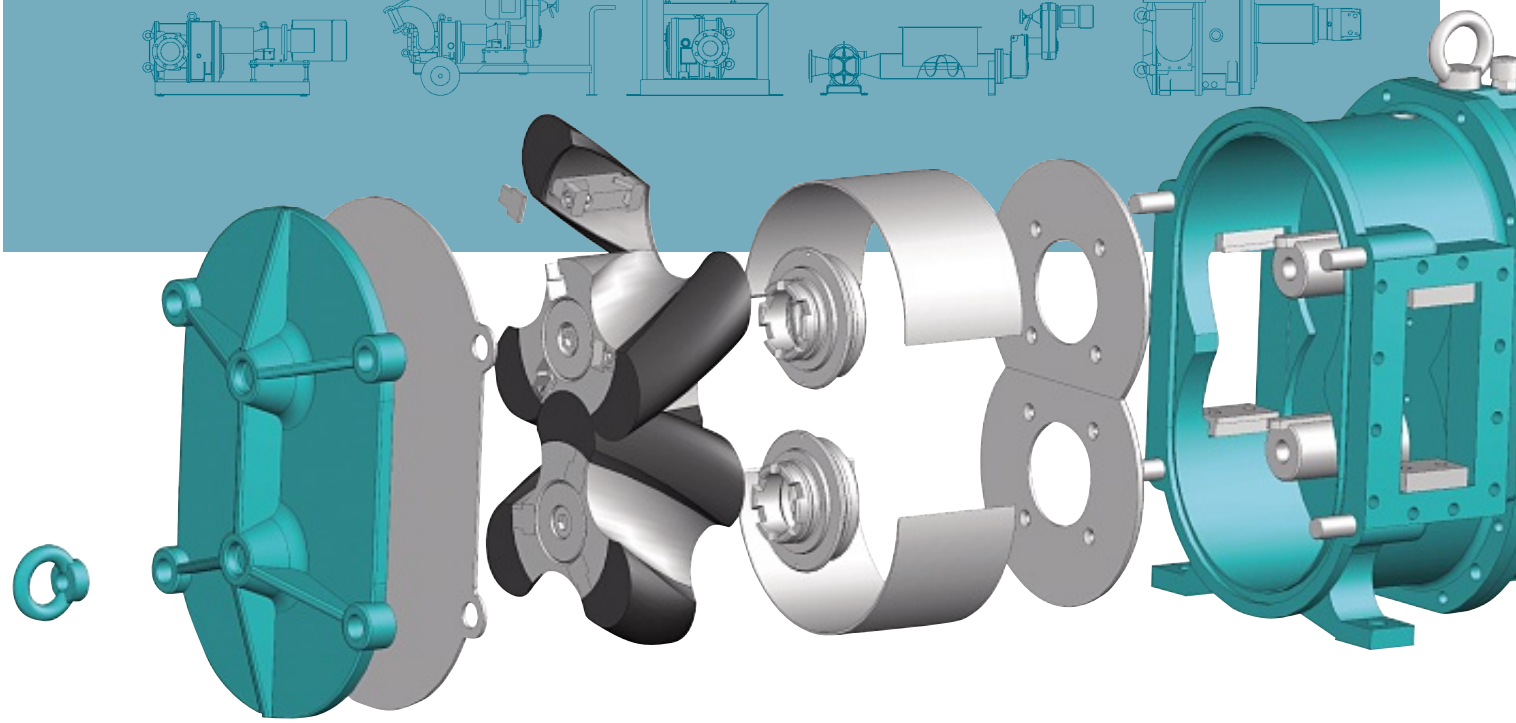
Different rotary lobe types with various materials of construction such as elastomer, plastic or metal are used depending on the fluid characteristics. Viscous, abrasive and aggressive pumped media can be handled easily with the variable and modular rotor design capabilities.

Thanks to the special, patented construction, the robust rotor core and durable shaft remain non-wetted. We consider all factors when determining the selection of the best suited rotor for each individual application, therefore meeting the special demands of our customers.

In case of changing operating conditions, different rotor designs can be fitted into an existing pump unit because of our modular pump design.

Construction, Drive and Assembly



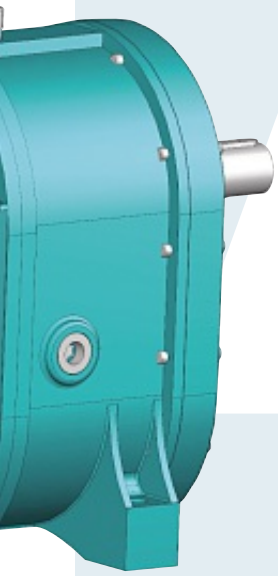


The low number and compact nature of the individual components will astonish anyone that has disassembled a Börger rotary lobe pump. The different sizes of the casings and rotors are manufactured in a single piece construction, quite different from the high number of components normally found in comparable pumps.

The result of course are robust and compact rotary lobe pumps, which are known for quiet, safe and reliable operation, long operational life and for ease of maintenance. The replacement of wear parts can be managed, in-situ, by service personnel in the blink of an eye without the removal of pipe systems or drive units. Simplicity is one of Börger's trademarks.

Börger rotary lobe pumps are universally mountable and are suited for many different types of installation.
For example, electric, combustion and hydraulic drives are used. Complete mobile aggregates can be manufactured to customer specification and are finished in our own workshop.

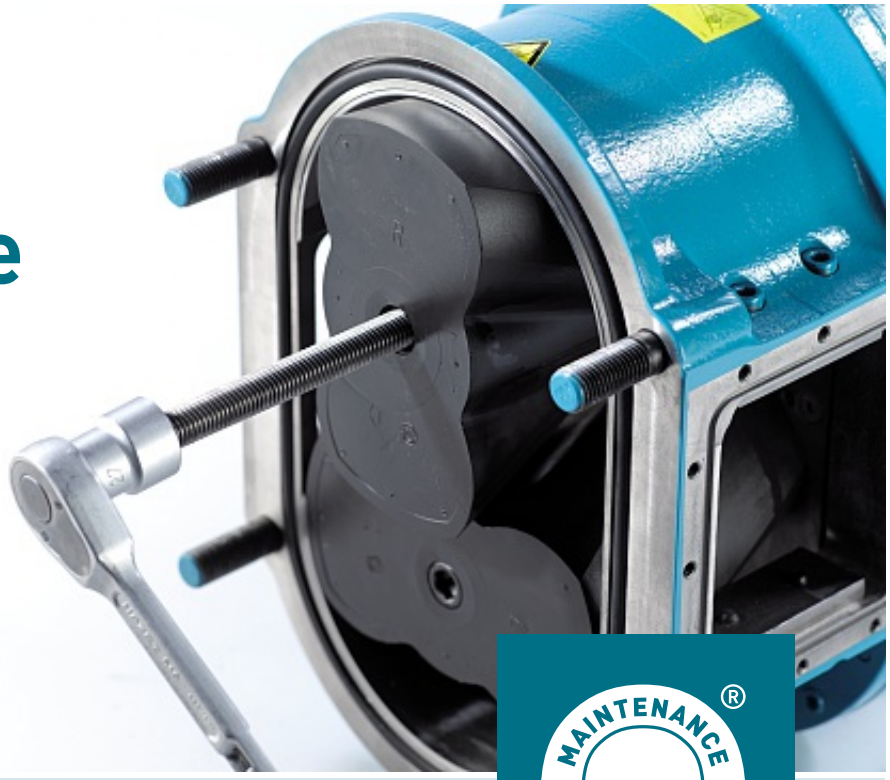
Small Börger Rotary Lobe Pump Glossary



Block construction	Timing gear in a one-piece construction casing with a strong bearing and durable gear wheel pairing.
Compact construction	High performance in a compact design.
Interior pump protection	Protection plates available from a selection of hardened steel, stainless steel, plastic or ceramic.
Life cycle costs	For the customer, capital cost, energy consumption, maintenance and downtime as well as replacement part pricing levels compare excellently with all other positive displacement pumps.
MIP	Maintenance in Place: Replacement of wear parts in the blink of an eye, in-situ by service personnel. The way to go in the reduction of maintenance and downtime.
Pump casing	Made from high-quality grey cast iron, ductile iron, stainless steel or in duplex quality. Thanks to the MIP construction an almost limitless operational lifetime is achieved.
Quench	The quench and control liquid filled intermediate chamber, between the pump casing and the timing gear, provides a high degree of safety and is supplied by Börger as standard.
Quick-release cover	This is the entrance door to the interior of the pump and provides the quickest possible access to all parts in contact with the pumped medium.
Rotary Lobe Pumps	Self-priming, valveless positive displacement pumps guarantee almost pulsation-free and smooth flow patterns; reversible flow by switching the flow direction.
Rotor materials	Coatings to suit intended usage made from elastomers, plastic, all-metal including stainless steel.
Rotors	The patented rotors with quickly exchangeable rotor tips, elastomer coated or readjustable; screw profile design for almost pulsation-free pumping.
Shaft seal	Supplied as standard with strong mechanical seal in different constructions and materials, optional with multi-seal or packing. The Börger Protect pump with double-acting mechanical seal is especially designed for pumping difficult and hazardous, often viscous media.
Smooth running	Large bucket geometry and short passage through the pump provide a smooth transfer of the pumped fluid.

BÖRGER®

MIP = Maintenance in Place



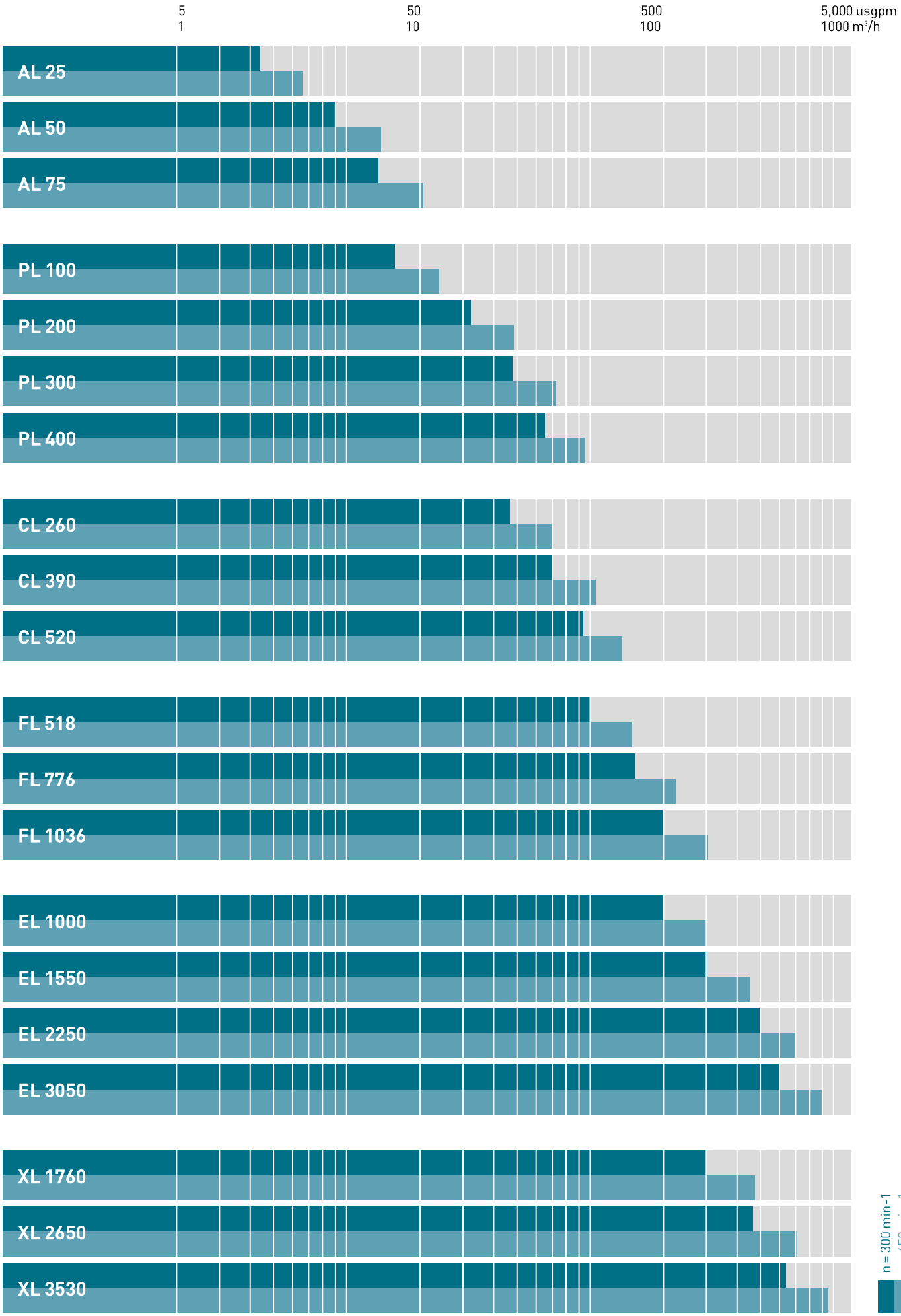
Both, repair- and downtime cost money. Production and process time should not be lost due to maintenance. Following this basic principle, Börger has been constantly striving to perfect its rotary lobe pumps. The result is an extremely efficient, reliable and easy to maintain pump aggregate that is worldwide unmatched.
All replacement and wear parts are extremely durable, resilient and affordable. You won't be forced into any expensive maintenance contracts with Börger – simply carry out any maintenance and repairs yourself! The unique MIP property of our pumps makes this possible. MIP or Maintenance in Place means that all replaceable parts can be easily installed and removed by maintenance personnel, in-situ, without having to remove any pipe or drive systems.

The quick-release cover enables easy access to the inner components of the pump. All wetted parts can be quickly maintained and replaced when necessary - without removal of pipe or drive system

Reversible flow direction

Rotary lobe pumps are self-priming, valveless positive displacement pumps. The screw rotor guarantees almost pulsation-free, smooth running. Reversible flow is achieved by simply switching the rotation direction. Rotary lobe pumps are therefore suitable for both loading and unloading applications.

Pump Output


5
1
50
10
500
100
5,000 usgpm
1000 m³/h
AL 25
AL 50
AL 75
PL 100
PL 200
PL 300
PL 400
CL 260
CL 390
CL 520
FL 518
FL 776
FL 1036
EL 1000
EL 1550
EL 2250
EL 3050
XL 1760
XL 2650
XL 3530
n = 300 min-1
n = 450 min-1
p = max. 12 bar | 180 psi

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Industries, Application and Pumped Media

- Wastewater and biosolids processing
- Chemical, ceramic, pharmaceutical and oil industries
- Paints, coatings and synthetic materials
- Fats, oil, grease and soap
- Starch and sugar mills
- Liquid raw materials, i.e. latex
- Pulp and Paper
- Meat and fish processing
- Fruit and vegetable processing
- Renewable energy production
- Clay and lime, aggregate industry
- Marine, Shipyards, and disaster protection