

**BÖRGER**<sup>®</sup>

EXCELLENCE - MADE TO LAST

PROVEN PUMP  
SOLUTIONS FOR THE  
WINE INDUSTRY



# PERFECTLY MATCHED: STATIONARY AND MOBILE WINERY PUMP SYSTEMS



No matter what you are pumping with customized Börger pump solutions, we cover a wide range of applications in the wine industry. Due to the wide spectrum of rotor geometries, materials and pump sizes including customized solutions, we are perfectly suited for a variety of applications with different fluid types, wide flow requirements and local operating conditions. There is a reason the "Börger Pump" has become a synonym for flexible rotary lobe pumps in the wine industry.

## DIFFERENT SKID DESIGNS

For pump system installations, the structural conditions plant site and required accessories need to be considered. Börger offers complete solutions. In addition to the rotary lobe pump itself, we also manufacture the pump skid components for stationary and mobile applications.

Individually made base frames and customized flange connections as well as stainless steel hoppers or feed augers are part of Börger's product portfolio. The mounting position of the pump / drive combination are selected according to plant requirements.

Börger supplies special pump systems or mobile unit "turn-key". The design, metal construction and electrical engineering departments are up to the challenge.



*CRUSH PADS*



*MUST TRANSFER*



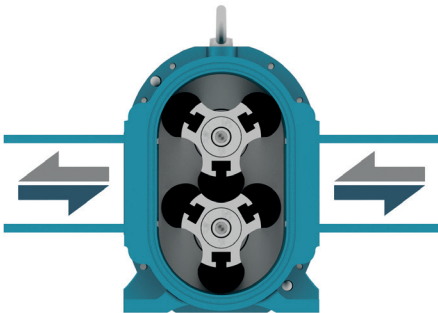
LEES PUMP OVER

POMACE HANDLING

# BÖRGER ROTARY LOBE PUMPS

## ROBUST, RELIABLE AND CUSTOMIZED

*Börger rotary lobe pumps have proven their durability within the world's largest wineries. The solids handling capabilities are powerful, reliable and efficient. Börger pumps provide a low shear, low pulse conveying characteristic to gently handle the grapes.*

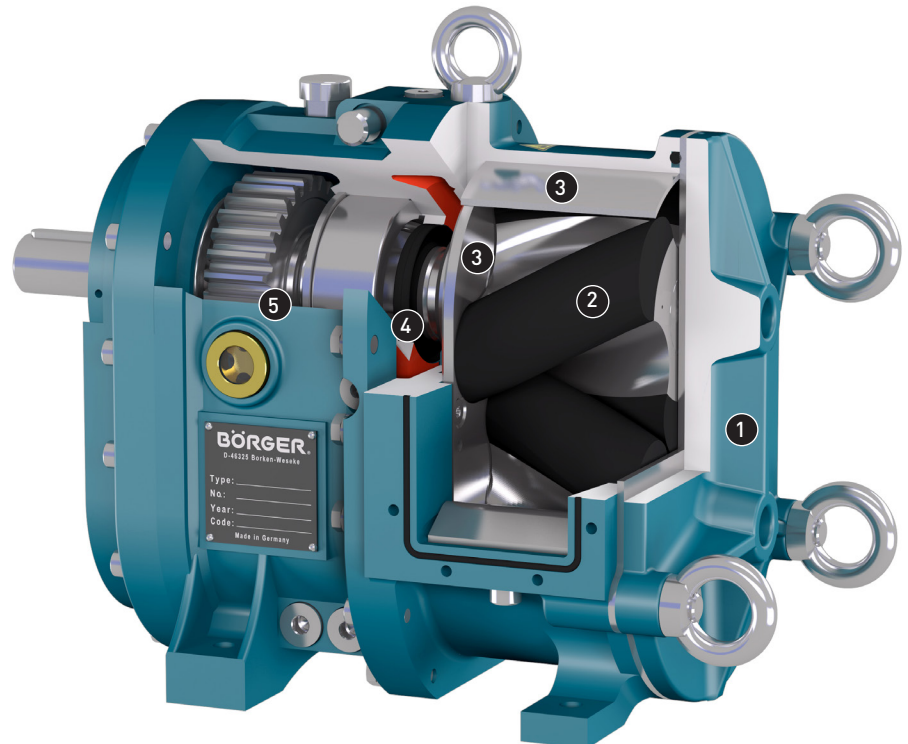


### OPERATING PRINCIPLE

Börger rotary lobe pumps are self-priming, valveless, positive displacement pumps. The synchronized rotation of the rotor pair creates a vacuum on the priming side of the pump. This vacuum draws the liquid into the pump chamber. The medium is pumped into the pressure area due to the rotation of the rotors. If the direction of rotation is changed, the flow is reversed.

### CONSTRUCTION

- 1 The quick-release cover**  
Access to all wetted parts by simply loosening four ring nuts.
- 2 The rotors**  
Large selection of high-quality rotors for almost pulsation-free pumping of the medium.
- 3 The casing protection**  
The casing liners and casing protection plates protect the pump casing from wear and can be replaced in a matter of minutes.
- 4 The intermediate chamber and shaft seal**  
The large-volume quench chamber is oil-filled and ensures the highest degree of safety. The ideal mechanical seal is selected depending on the medium.
- 5 The carrier and timing gear**  
The high-quality and maintenance-free carrier and timing gear guarantees a smooth and even operation of the rotors. The result is a long service life of the pump.



## ROTARY LOBE PUMPS AT A GLANCE

- + Flow rates up to 7,500 gpm
- + Low Shear Solids Handling
- + Self-Priming Capabilities
- + Reversible Operation
- + Compact, Space Saving Design
- + Ease of Maintenance (MIP)

### CASE STUDY: CRUSH PAD APPLICATION

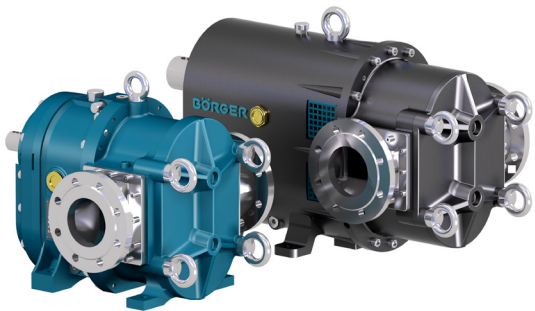
*Large 10" rotary lobe pumps outfitted with elastomer coated, patented rotor tips are used to pump grapes in large wineries. The elastomer lobe material allows the pump to self-prime. The large pump cavities of the rotary lobe pump pass the grapes more gentle than other rotary PD pumps.*



# MAXIMAL MODULAR VARIETY

## NO BÖRGER PUMP IS LIKE ANY OTHER

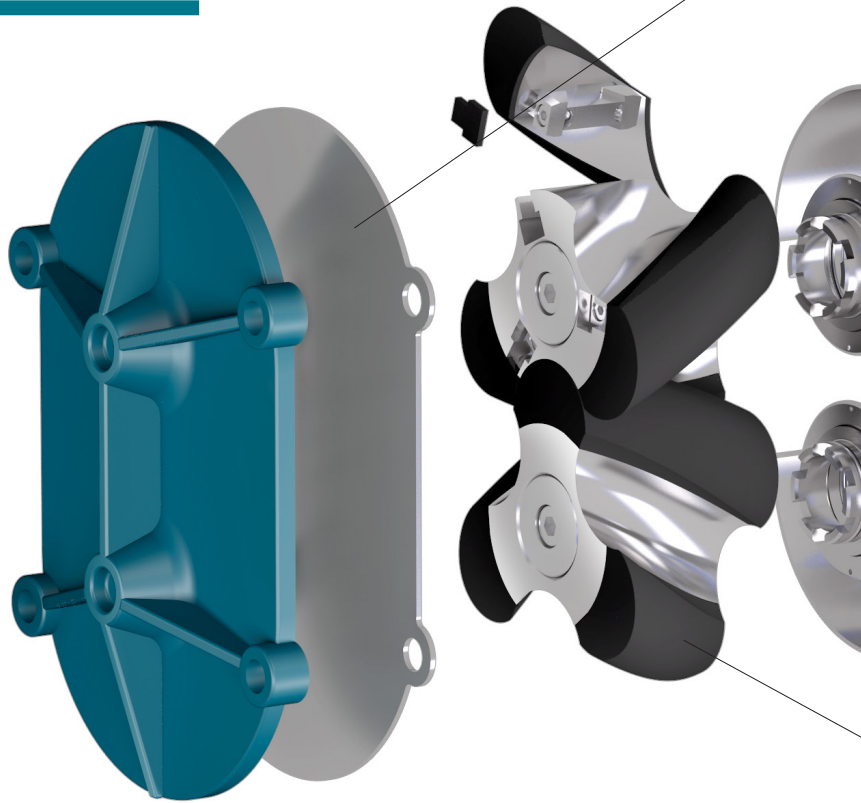
*No matter which application – Börger builds a suitable rotary lobe pump for you. With suitable materials, exactly aligned construction and design, whether with overhead mounted drive, submerged or as a mobile pump. Even individual solutions are a specialty of Börger.*



### 25 PUMP SIZES WITH FLOW RATES OF UP TO 6,600 GPM (1,500 m<sup>3</sup>/h)

*The BLUEline and ONIXline models differ in flow and pressure ranges. The proven BLUEline incorporates flow rates up to 6,600 gpm (1,500 m<sup>3</sup>/h).*

*The newly developed ONIXline from Börger, designed for best efficiencies at pressures up to 16 bar.*



#### Börger rotary lobe pumps overview

Pump series	Speed in rpm		Flow rate in gpm (m <sup>3</sup> /h)		Max. pressure in psi (bar)
	Min.	Max.	Min.	Max.	
BLUEline AL	50	600	4 (1)	125 (28)	175 (12)
BLUEline PL	50	600	13 (3)	575 (130)	175 (12)
BLUEline CL	50	600	35 (8)	830 (188)	175 (12)
BLUEline FL	50	600	80 (18)	1800 (410)	175 (12)
BLUEline EL	50	600	140 (32)	4850 (1,100)	145 (10)
BLUEline XL	50	600	230 (52)	6600 (1,500)	145 (10)

Pump series	Speed in rpm		Flow rate in gpm (m <sup>3</sup> /h)		Max. pressure in psi (bar)
	Min.	Max.	Min.	Max.	
ONIXline BJ	50	800	13 (3)	300 (68)	230 (16)
ONIXline BL	50	800	26 (6)	600 (135)	230 (16)



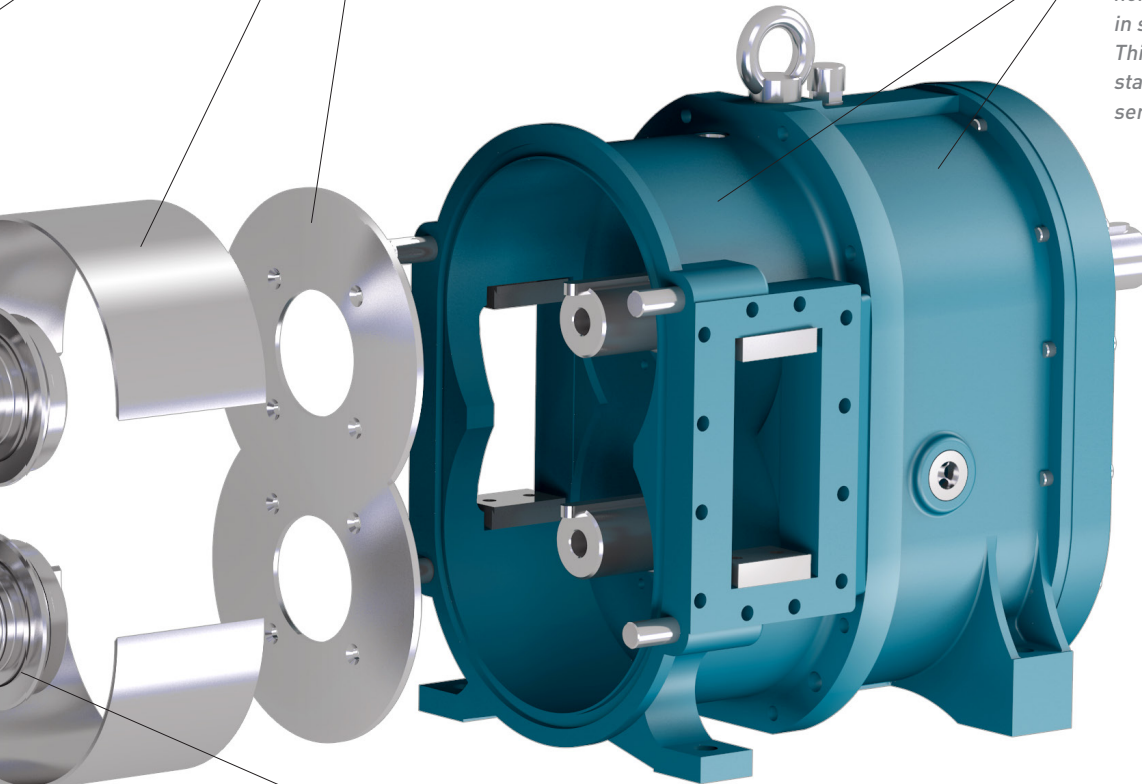
## UNIQUE CASING PROTECTION

*In order to prevent pump casing damage, e.g. due to abrasive or aggressive fluids, Börger pumps are equipped with casing protection. The unique casing liners and casing protection plates are available in different materials.*



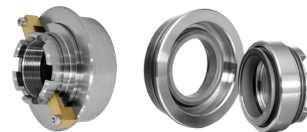
## UNIQUE BLOCK DESIGN

*All 25 pump models feature dedicated, non-segmented pump casings and rotors in single-piece (BLOCK) construction. This design reflects the high quality standard of Börger and guarantees long service life with ease of maintenance.*



## VARIETY OF ROTORS

*Börger offers a comprehensive range of rotors differentiated by geometry and material. We offer a suitable rotor for your application.*



## HIGH-QUALITY SEALS

*Our solids-resistant, single-acting mechanical seals ensure the highest degree of safety. Individual shaft seal solutions for challenging applications are possible.*

## DETAILED AND LARGE VARIETY OF MATERIALS

*Börger offers a broad range of materials for all pump components. For example, the pump casing can be manufactured in cast iron, cast steel, Aluminium, stainless steel, Duplex® or Hastelloy®.*

# WINE CART PUMPS FOR FLEXIBLE SERVICE

## CONTROL UNIT

On request, Börger provides a control unit which is perfectly configured for each specific product. The control technology is designed and programmed for the specific unit and its application.



*Börger offers the industry-proven **BLUEline** rotary lobe pumps in a portable cart mounted design. The mobile pump can be safely and efficiently moved throughout the winery, from tank to tank.*

The minimal shear and low pulsation operation allows Börger rotary lobe pumps to gently convey grapes, must, lees, pomace, etc. The cart pumps can be pushed manually and moved over obstacles throughout your facility. Reversible functionality allows for easy operational cleaning. Quickly connect hoses to the pump flanges and you are ready to go!

## *Börger wine cart overview*

Pump Model	Flow Range in USGPM	HP Rating	Connection Size
AL 25	20	2	1.5"
AL 50	50	3	2"
PL 100	100	5	2.5"
PL 200	200	7.5	3"
CL 390	400	20	4"
FL 776	1,000	30	6"



AL 50 Rotary Lobe Pump



PL 200 Rotary Lobe Pump



CL 390 Rotary Lobe Pump



## WINE CART PUMP AT A GLANCE

- + Stainless Steel Pump Housing
- + Patented Rotor Tip Construction: EPDM
- + Nema 4X Control Panel
- + Start/Stop/Reverse Functions
- + 50 ft. Power Cord
- + Hand Held Remote with 10 ft. Cable
- + Variable Speed Control

## CASE STUDY: FILTRATION PUMP

*Every winery needs a filtration pump. The Börger rotary lobe pump is a versatile choice. Various flows and pressures can be achieved, giving the highest level of flexibility. The Optimum Rotor is an excellent selection for the filtration applications due to its high pressure stability.*



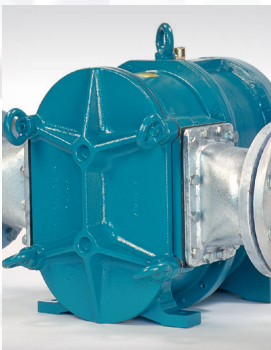
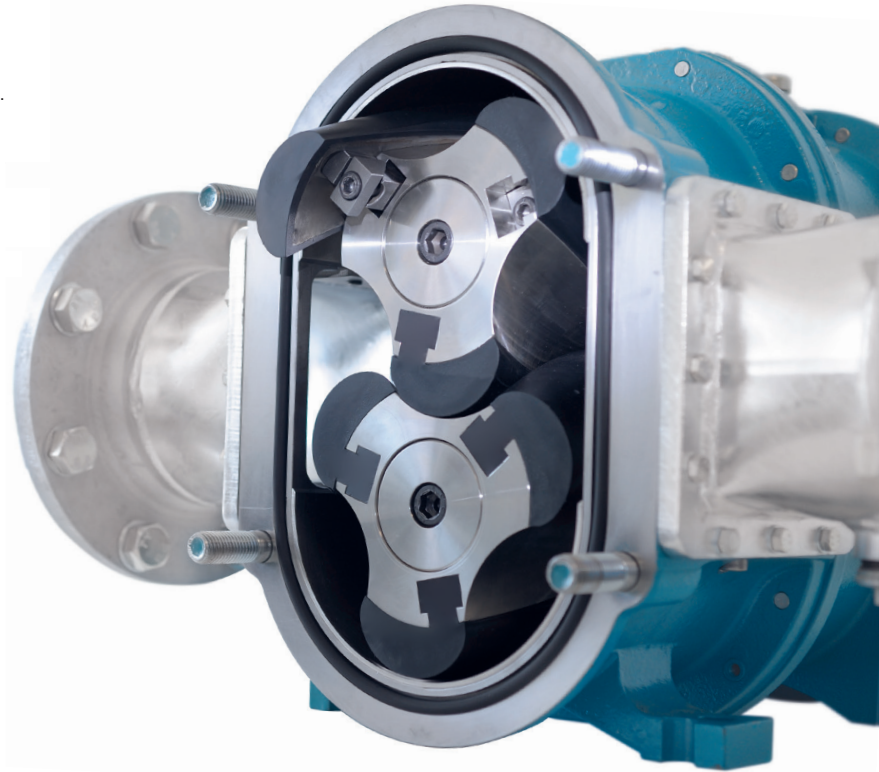
# MAINTENANCE IN PLACE (MIP) SIMPLE. EASE OF MAINTENANCE.



*Repairs and downtimes are time-consuming and costly. To maximize your production time with minimized interruptions, your operating and maintenance personnel can inspect and if necessary replace all product wetted parts onsite.*

Börger pumps are designed for continuous operation and incorporate unbeatable ease of maintenance features. All components are extremely resilient and durable.

Expensive maintenance contracts? Not with Börger products. We offer MIP (Maintenance In Place). Control maintenance and repair procedures yourself. Product wetted parts can be inspected or replaced at the installation site without the need to remove piping and the drive system. Easily and quickly by your own personnel.



## MAINTENANCE IN PLACE MIP DESIGN

- + Replaceable lobe tips and liners
- + Reversible front protection plate
- + Seal design resistant to abrasion
- + Long operational life
- + Maintenance done onsite  
by your own staff
- + Reduced Life Cycle Costs

### CASE STUDY: MUST PUMP

*A winery was experiencing dry run problems with a progressive cavity pump operating in a must application. Since in the front end of the wineries often large pumping units including auger feed systems are used, reliability and fast maintainability with minimal life cycle cost is key. With the Börger MIP Design all fluid wetted parts can be cost effectively and quickly exchanged onsite by your own staff.*





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