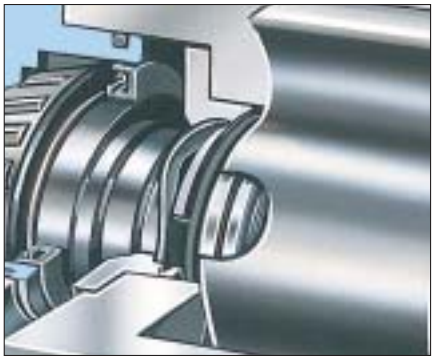
DuraLobe®

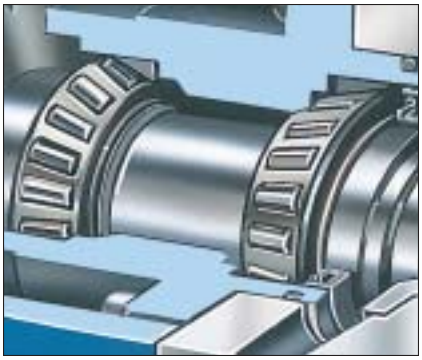
VIKING BI-ROTOR PUMP

FOR REVOLUTIONARY LOBE PUMP PERFORMANCE

- Maintain product integrity.
- Reduce downtime for greater productivity.
- Eliminate costly backup pumps and exchange programs.
- Reduce spare parts inventory and costs.



1 INNOVATIVE SEAL PLACEMENT.
Seals are mounted directly behind the rotors and lie within the product flow path to receive full velocity of cleaning solution for superior CIP service.



2 UNIQUE CARTRIDGE DESIGN.
Back pull-out shaft cartridges eliminate traditional shim points for quick and easy maintenance. Cartridge design allows for in-line servicing and reduces the overhead cost of large spare parts inventories.

Innovative Design Results

Completely Clean, Completely CIP

TEMPERATURE RANGE:
-30 °C to +150 °C
-20 °F to +300 °F

VISCOSITY RANGE:
1.0 cSt to 110,000 cSt
28 SSU to 500,000 SSU

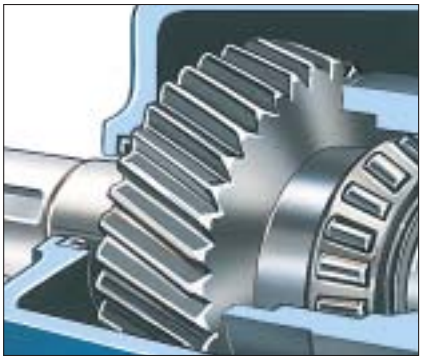
CAPACITIES:
to 140 M^3/Hr
to 600 GPM

DIFFERENTAL PRESSURES:
to 14 BAR
to 200 PSI

Complies with EHEDG method for in-place cleanability of food processing equipment

Available with options to meet 3-A requirements for sanitary applications.

3 EFFECTIVE CIP DESIGN. Fully swept pump chamber, flat front cover, bi-wing rotor profile, and forward seal location eliminate areas of product entrapment for outstanding CIP service. Clean entire pump chamber without any pump disassembly.



4 DURABLE CONSTRUCTION. Precision helical gears synchronize rotors. Shorter shaft and improved bearing position minimize shaft deflection, extending seal life. Gearbox serves as an oil reservoir for continuous lubrication of gears.

5 PORT OPTIONS. Sanitary clamp, ACME, external NPT, raised face flange and special rectangular, and enlarged ports. Mounting options: horizontal or vertical ports. Other options: jacketing, integral pressure relief valve, and a wide variety of seal options.

s In Revolutionary Output

The DuraLobe® represents the first significant breakthrough in lobe pump design and performance in more than 50 years.

The DuraLobe's Innovative Design

DuraLobe performance is due to two major design innovations. First, seals are located directly behind the rotors in the pumping chamber. This unique location eliminates the areas of product entrapment typically found with conventional designs. Product and bacteria have no place to settle in the DuraLobe and are exposed to the full turbulence of CIP cycles. The second design innovation is the use of shaft cartridges. Back pull-out shaft cartridges eliminate numerous shim points for easy servicing. Plus, cartridges are easy to inspect and maintain thereby minimizing the length of scheduled downtimes.

Offers Superior Clean-In-Place (CIP) Service

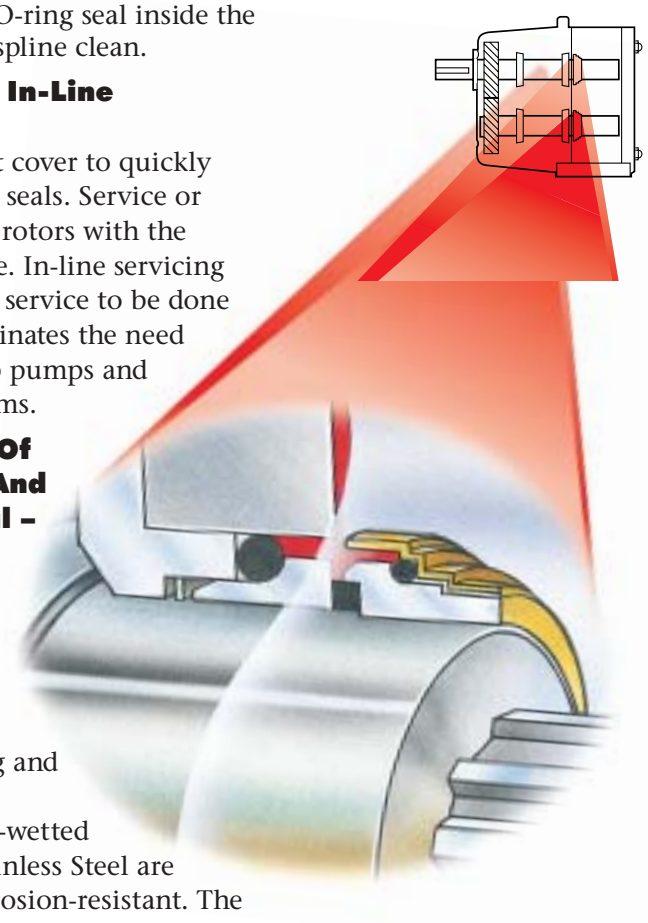
By eliminating areas of product entrapment around the seals and rotors, the DuraLobe can be cleaned quickly and thoroughly with CIP methods without any pump disassembly. An O-ring seal inside the rotors keeps the spline clean.

And Complete In-Line Servicing

Remove the front cover to quickly access rotors and seals. Service or replace seals and rotors with the pump still in-line. In-line servicing allows scheduled service to be done quickly and eliminates the need for costly backup pumps and exchange programs.

For A Variety Of Traditional – And Nontraditional – Lobe Pump Applications

The DuraLobe combines a gentle, low-shear pumping action with dry-running and reversible flow abilities. Product-wetted parts of 316L Stainless Steel are sanitary and corrosion-resistant. The DuraLobe handles solids, liquids, slurries, and pastes, making it ideal for a variety of industrial and sanitary applications.



Forward seal placement provides unmatched CIP effectiveness.

DuraLobe®

VIKING BI-ROTOR PUMP

Outstanding Clean-In-Place (CIP) service. Reduced product contamination. Longer seal life. Complete in-line servicing. The DuraLobe allows lobe pump users to achieve new levels of life cycle performance and output.

CONSTRUCTION — SERIES S1, S2, S3, AND S4

Pump Construction	Casing And Heads	Lobes	Shafts	⑤ Mechanical Seals	Other O-Rings	Gearbox	Timing Gears
Standard	316L Stainless Steel	316L Stainless Steel	Stainless Steel	Single Mechanical Carbon/SS, Viton® Elastomers	Viton®	Cover and Bearing Cartridge: Cast Iron	Hardened Steel

SPECIFICATIONS — SERIES S1, S2, S3, AND S4

Model Numbers Unmounted Pumps	Port Size	① Nominal Pump Rating		Maximum Hydrostatic Pressure		② Maximum Recommended Discharge Pressure When Handling 100 SSU Liquid		Maximum Temperature		Approximate Shipping Weight With Valve (Less Power)	
	Inches	M^3/HR	GPM	⑥ BAR	PSIG	⑥ BAR	PSIG	Degrees C.	Degrees F.	KG	Pounds
S1S	③ 1	2.2@920	12 @1150	20	300	10	150	150	300	16	36
S1M	③ 1	3.3@920	18 @1150	20	300	10	150	150	300	16	36
S1L	③ 1	4.6@920	25 @1150	20	300	7	100	150	300	17	38
S2S	③ 1.5	9.1@920	50 @1150	20	300	10	150	150	300	39	85
S2M	③ 2	12.8@920	70 @1150	20	300	10	150	150	300	44	96
S2L	③ 2	18.2@920	100 @1150	20	300	7	100	150	300	48	106
S3S	③ 2	30.0@920	125 @ 870	20	300	14	200	150	300	89	196
S3M	④ 3	48.0@920	200 @ 870	20	300	10	150	150	300	91	200
S3L	④ 3	60.0@920	250 @ 870	20	300	7	100	150	300	97	214
S4S	④ 3	70.0@720	300 @ 700	20	300	14	200	150	300	222	490
S4M	④ 4	105.0@720	450 @ 700	20	300	10	150	150	300	245	540
S4L	④ 4	140.0@720	600 @ 700	20	300	7	100	150	300	269	593

① Nominal rating based on handling thin liquids.

② For maximum recommended discharge pressures at rated speeds or when handling other viscosities and/or speeds, see performance curves. If suction pressure exceeds 50 PSIG, consult factory.

③ Pumps standard with external NPT ports. Other port types available.

④ Ports standard with 150# ANSI raised face flanges. Other port types available.

⑤ Optional seals available for sanitary or industrial applications, including single mechanical, single mechanical with quench, double mechanical with flush, single O-ring, double O-ring with quench. Mechanical seal face options include Carbon/SiC and SiC/SiC. Elastomer options include Buna-N, EPR, Nitrile/FDA, EPDM/FDA, Viton/FDA and Teflon®.

⑥ 1 BAR = 0.1 MPa = 100 kPa = 14.7 psi.

Viton® is a registered trade name of the DuPont Dow Elastomers, L.L.C. *Teflon® is a registered trademark of the E.I. DuPont Co.*

For more information, contact your local distributor.

VIKING PUMP

IDEX CORPORATION

An ISO-9001 and 14001 System-Certified Company

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 Printed in U.S.A. Form No. 273D