



Solid Pumping solutions

Varisco Portfolio Presentation





This is Varisco



Clients in **180** countries



155 employees



Established in **1932** Padua, Italy



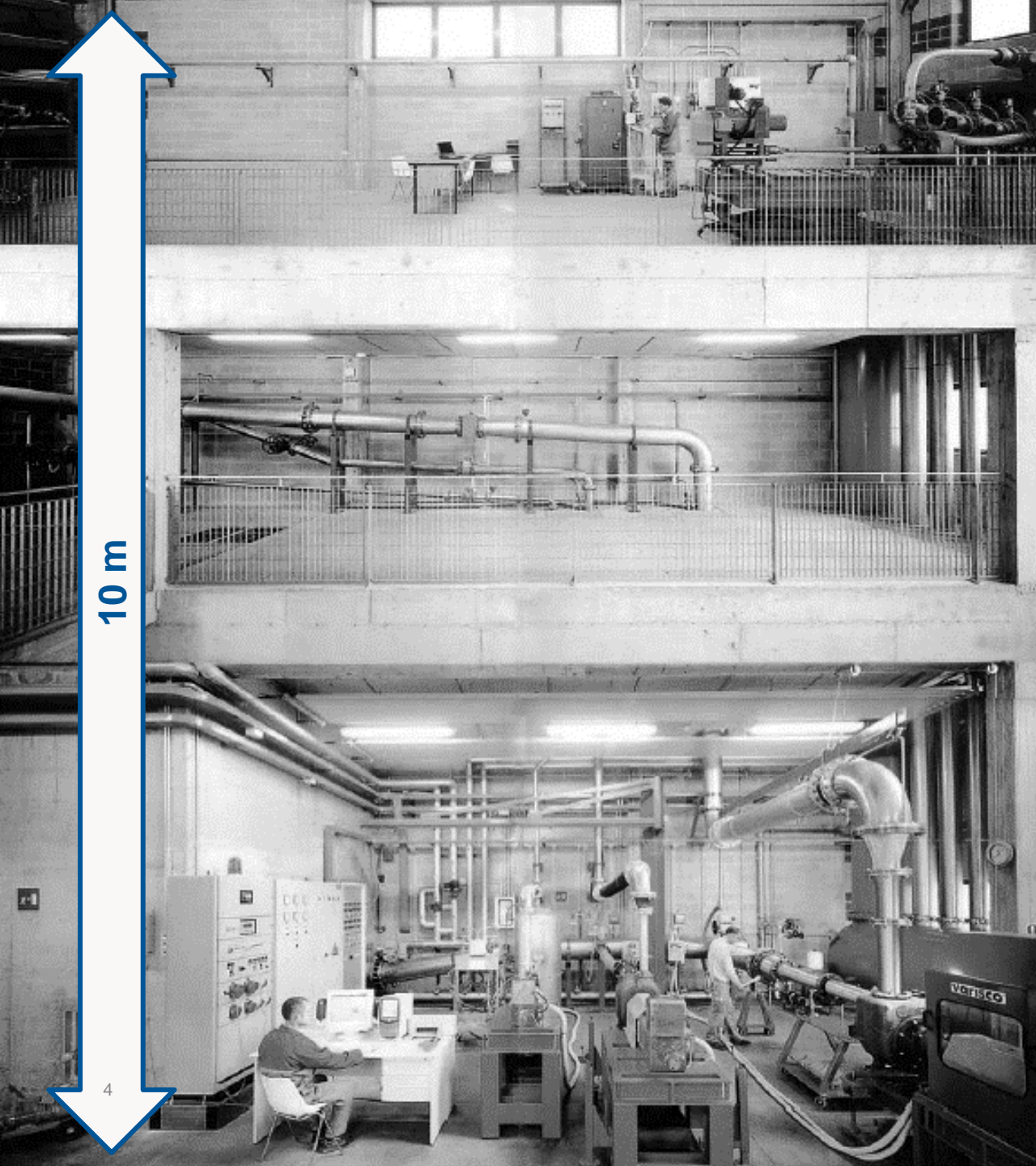
From 2016 part of **Atlas Copco Group**



Factory



CRS and testing area



Water Area for centrifugal pumps

- three fully automatic stations equipped with DC motors for exact speed control
- Unique vertical testing facility, over 10m high, for priming and NPSH testing of 1" to 12" pumps.

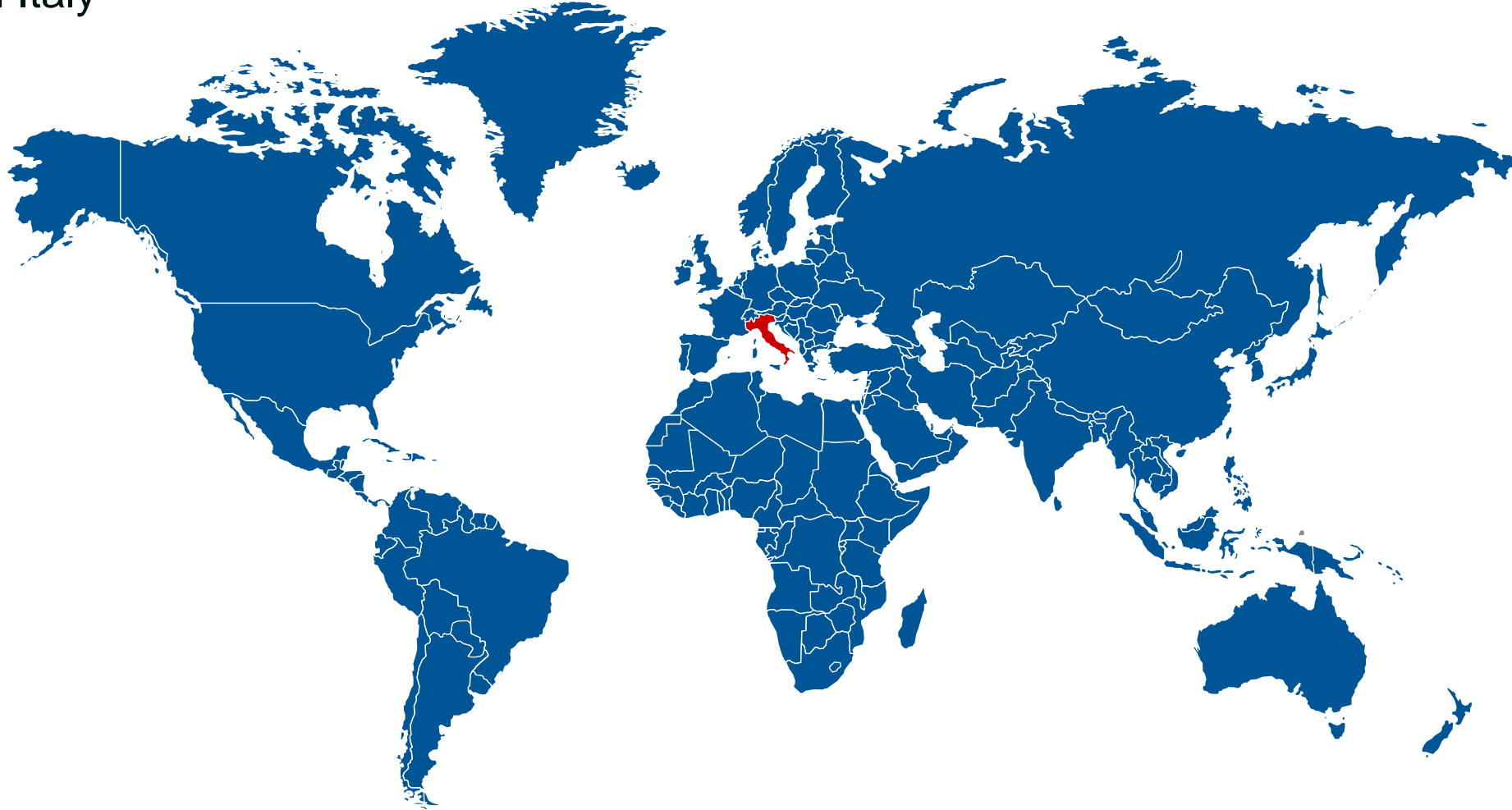


Oil Area for internal gear pumps

- from 1" to 10" and viscosity from 5 to 300 cSt.

Worldwide distribution

Made in Italy



Industry Pumps



—
**Industry
Pumps
Varisco
Portfolio**



SELF-PRIMING CENTRIFUGAL PUMPS



J SERIES
SELF-PRIMING
CENTRIFUGAL PUMPS



ST-R SERIES
SELF-PRIMING TRASH PUMPS

VOLUMETRIC PUMPS



V SERIES
POSITIVE
DISPLACEMENT
INTERNAL GEAR
PUMPS



SAXMAG
MAGNETIC DRIVE
PUMPS V SERIES

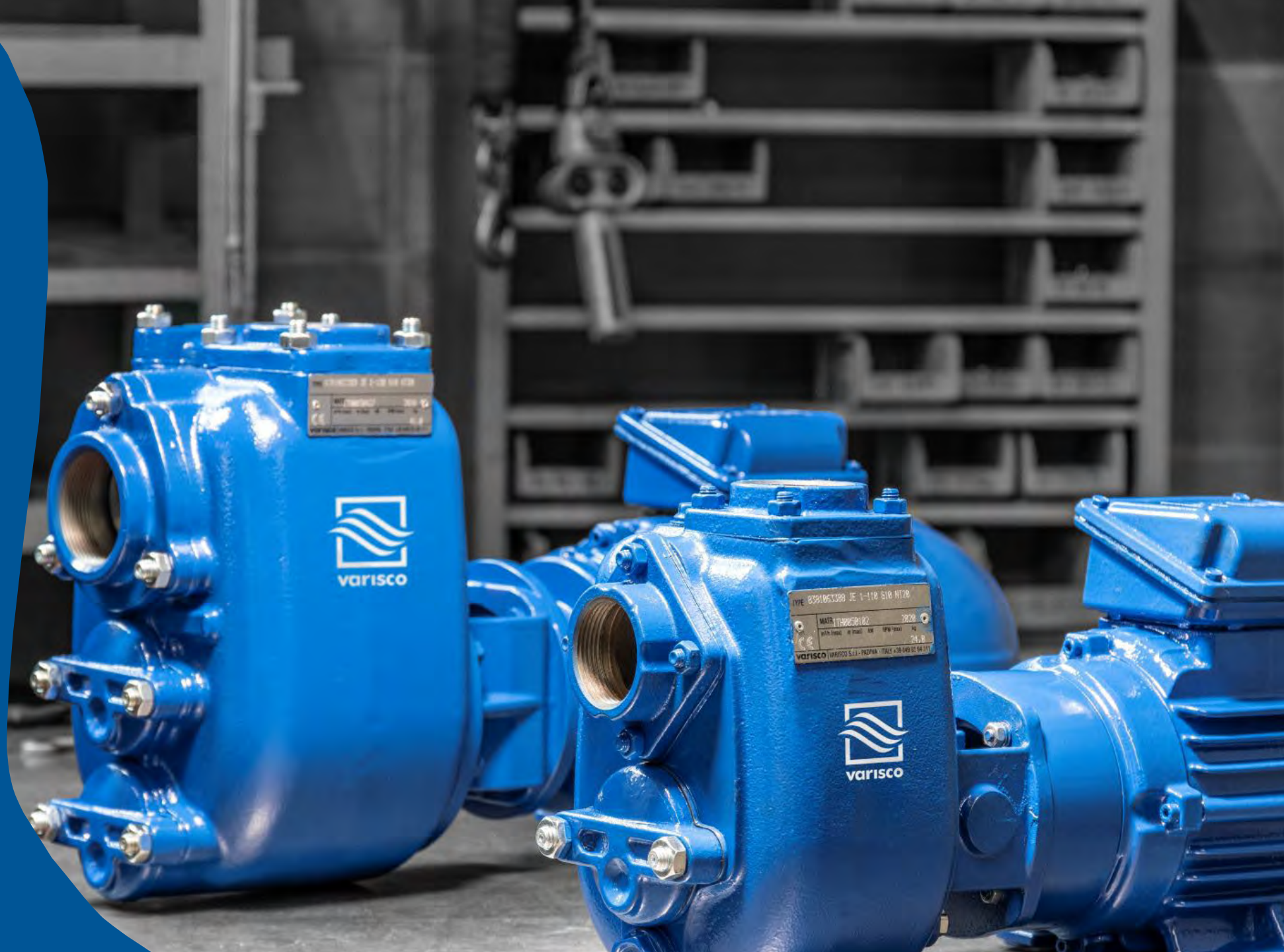


G SERIES
POSITIVE
DISPLACEMENT
EXTERNAL GEAR
PUMPS G



LB SERIES
SELF-PRIMING
DIAPHRAGM PUMPS

Self-priming Centrifugal Pumps



Self-priming Centrifugal Pumps



J SERIES



ST-R SERIES



 Industry



 Water
treatment



 Naval

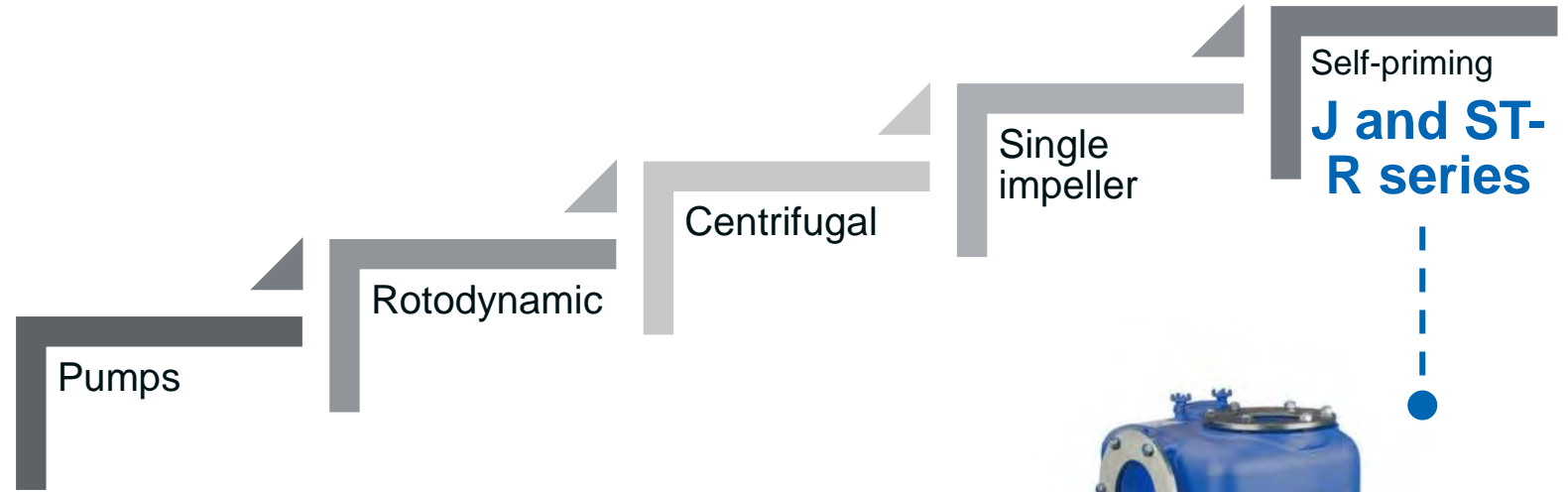


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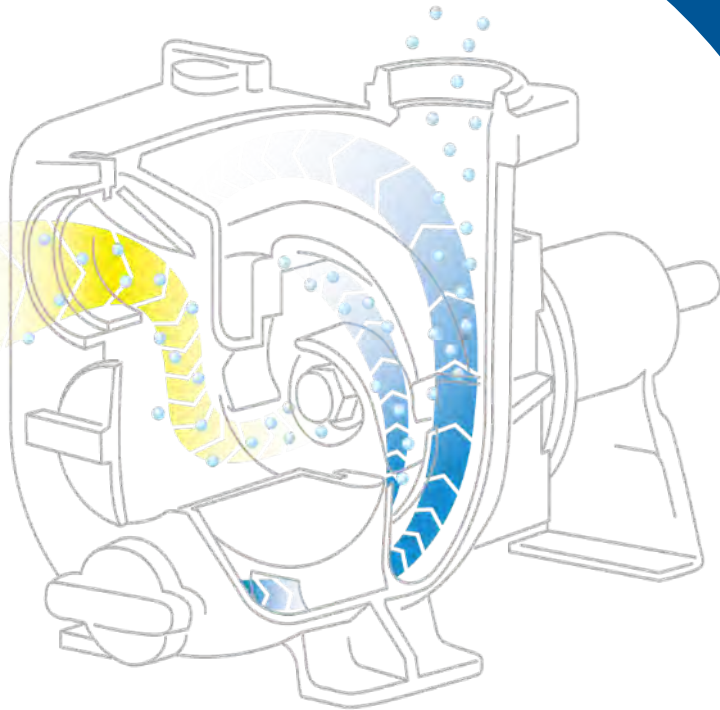


Self-priming centrifugal pumps

are used in applications requiring a fast-priming capacity from demanding suction heights combined with the ability to transfer and manage polluted, waste and abrasive fluids with suspended solids



J Series Advantages



1) Rapid self-priming

Without foot valve up to a height of 7.5 m (24.5 ft)

2) High resistance

To abrasive liquids which are turbid and sandy

3) Semi-open impeller

High thickness casting impact resistant

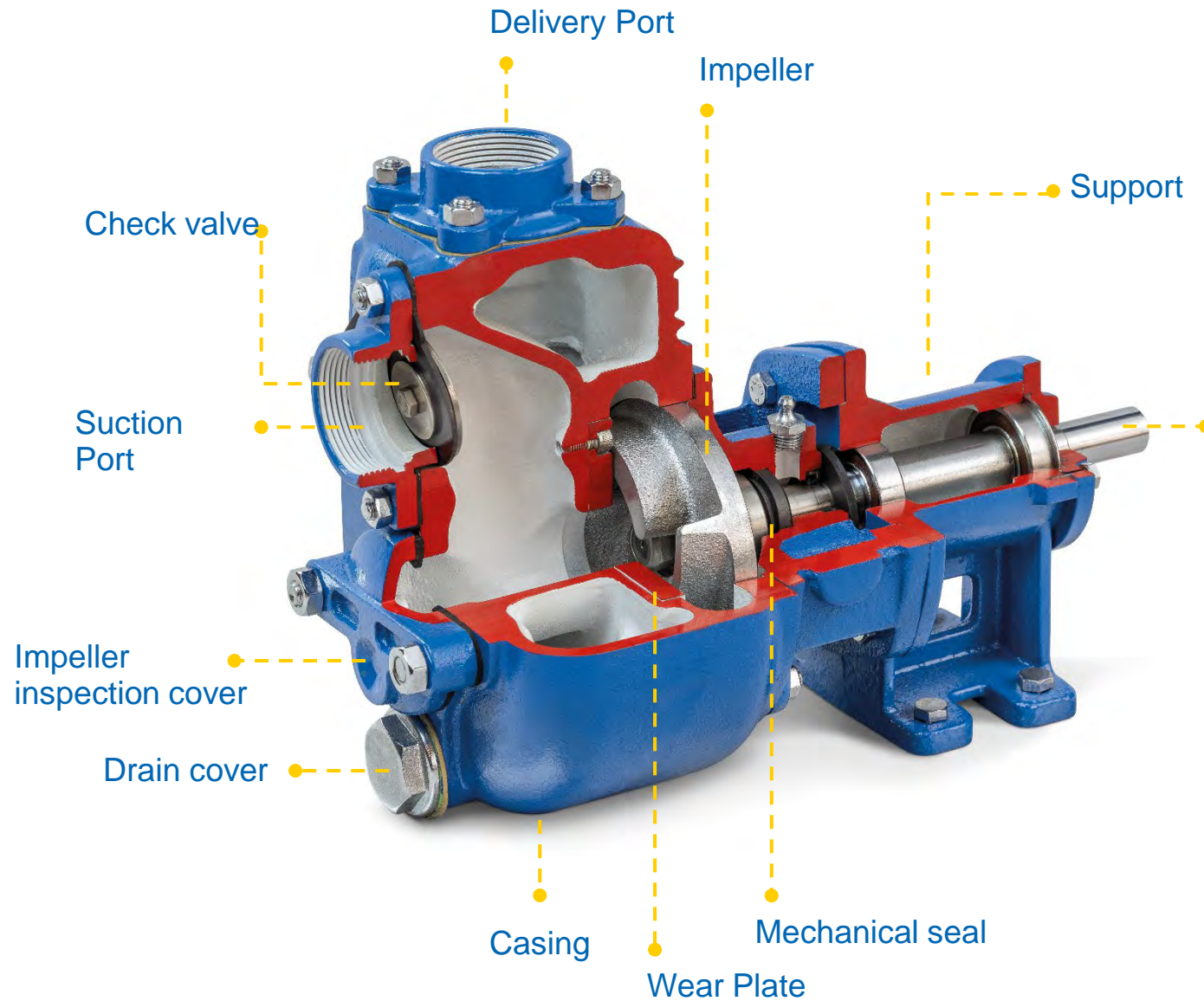
4) Wear plate

Easily replaceable stainless steel wear plate, front to the impeller

5) Easy maintenance

Removable front cover for direct access to the impeller

J SERIES PUMPS



J SERIES ARRANGEMENTS



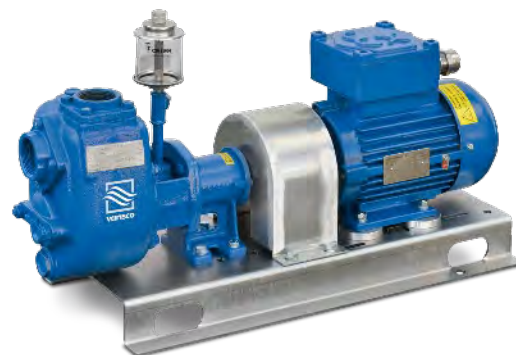
JS PUMPS
Bare shaft



JE...NT PUMPS
Standard electric motor



Motore standard IEC
WEG W22 Premium



JE...ST PUMPS
Base plate



JO PUMPS
Hydraulic motor



J Series

Models



J Series Models	Ports	
	ISO 228 (BSP)	DN
J 1-110	1 1/2"	40
J 1-160	1 1/2"	40
J 1-180	1 1/2"	40
J 2-100	2"	50
J 2-120	2"	50
J 2-170	2"	50
J 2-180	2"	50
J 2-215	2"	50
J 3-100	3"	80
J 3-140	3"	80

J Series Models	Ports	
	ISO 228 (BSP)	DN
J 3-180	3"	80
J 3-210	3"	80
J 3-225	3"	80
J 3-240	3"	80
J 3-252	3"	80
J 3-305	3"	80
J 4-100	4"	100
J 4-160	4"	100
J 4-220	4"	100
J 4-225	4"	100

J Series Models	Ports	
	ISO 228 (BSP)	DN
J 4-250	4"	100
J 4-316	4"	100
J 6-250	/	150
J 6-350	/	150
J 6-400	/	150
J 8-300	/	200
J 8-305	/	200
J 10-305	/	250
J 12-385	/	300
J 12-400	/	300

- 1 ½ " to 12" size
- Up to 1.200 m3/h
- Cast Iron, Hardened Cast Iron, Stainless Steel

—

Self-priming Centrifugal Trash Pumps



ST-R Series Advantages

Easy maintenance

Full access to the impeller and mechanical seal for inspection and maintenance without removing the pipework or the rotating assembly.

Rapid Self-priming

without foot valve to a height of 7,5 m.

Abrasion resistant

Front and rear wear plates with oil resistant rubber facing

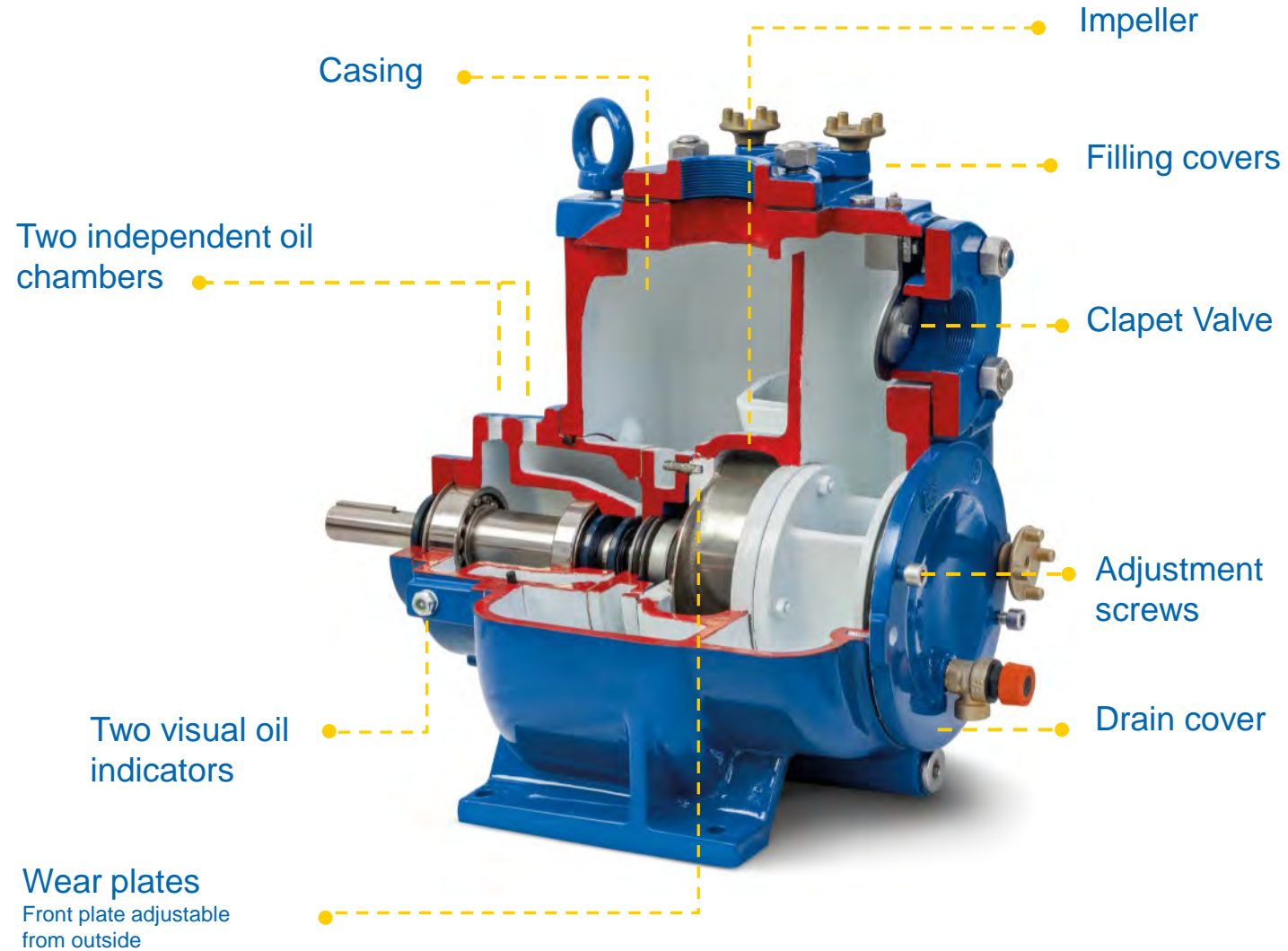
Passaggio di solidi di grandi dimensioni

Two vane, semi-open impeller handling solids up to 3" (75 mm) in diameter.



SERIE ST-R

Self-priming trash pumps ideal for pumping liquids with large solids in suspension. They are used on purification plants and sewage systems where their maintenance friendly design, provides a completely safe, waste management solution.



ST-R SERIES ARRANGEMENTS



ST-R PUMPS
Bare shaft



ST-R...BASE PUMPS
Base and joint

Series ST-R

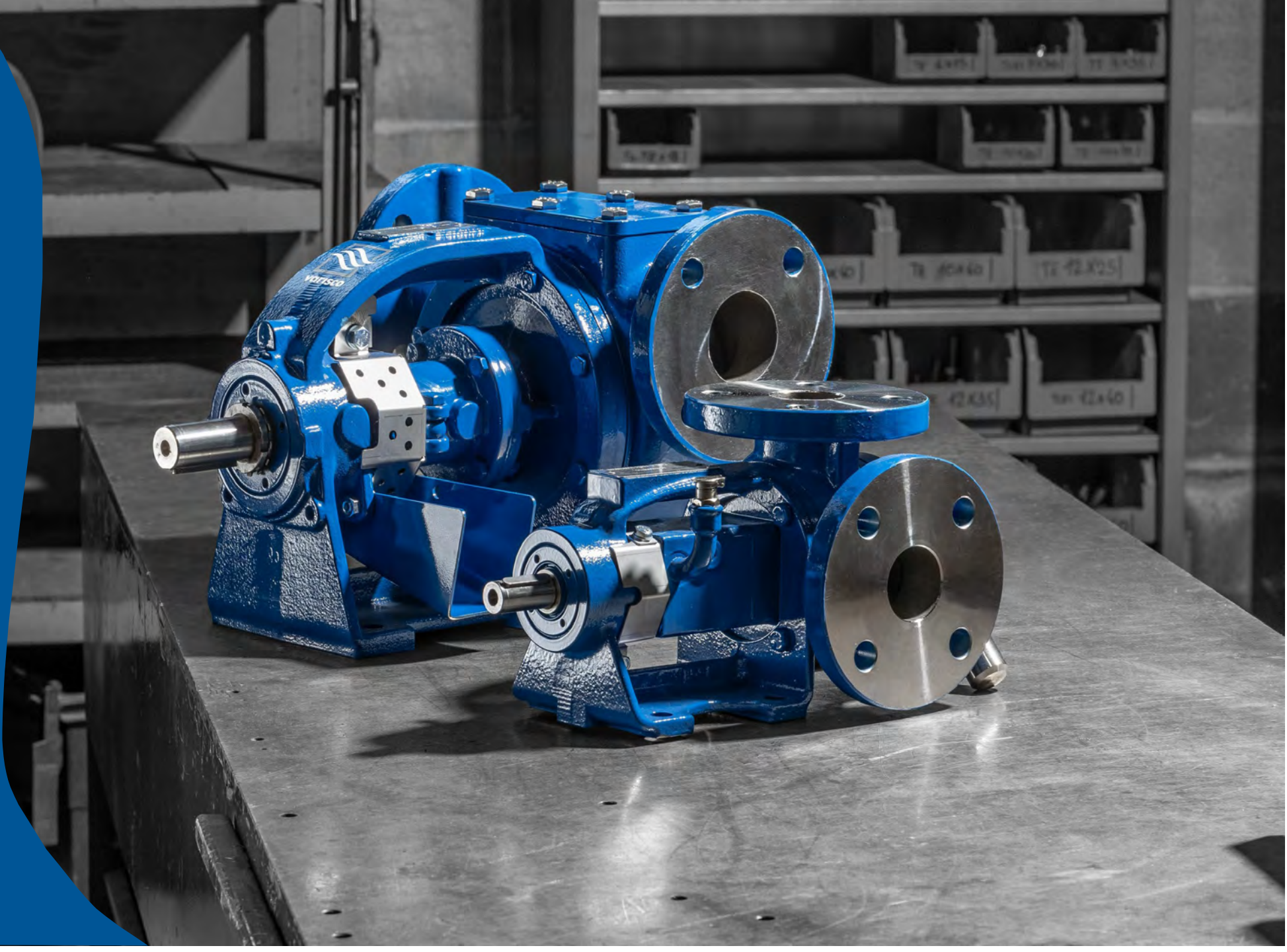
Models



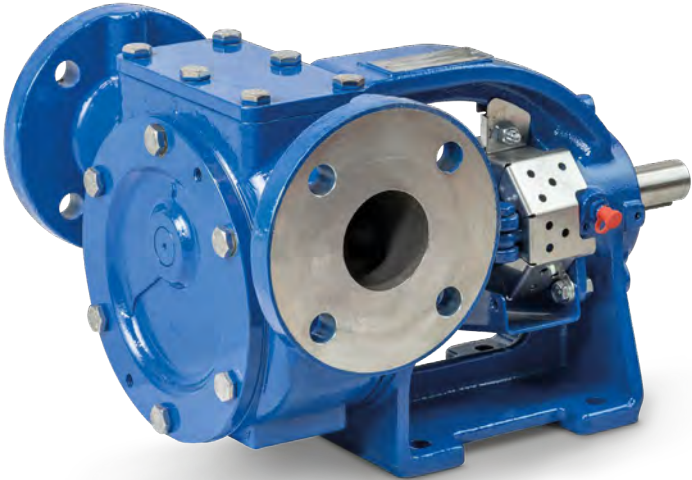
ST-R SERIES	PORTS		POWER	SPEED	CAPACITY	HEAD	POWER	SPEED	CAPACITY	HEAD
MODEL	ISO 228 (BSP)	DN	Kw - 50hz	rpm	Q max - mc/h	H max - m	Kw - 60hz	rpm	Q max - mc/h	H max - m
ST-R 2	2"	50	7.5	2900	50	36	N/A	N/A	N/A	N/A
ST-R 2	2"	50	1.5	1450	34	9	2.2	1750	39	16
ST-R 3	3"	80	5.5	1450	100	17	11	1750	110	25
ST-R 4	4"	100	11	1450	170	20	18.5	1750	180	29
ST-R 6	/	150	30	1450	340	30	N/A	N/A	N/A	N/A
ST-R 6	/	150	7.5	960	260	14	15	1150	310	19
ST-R 8	/	200	18.5	960	420	19	37	1150	520	26

- 2" to 4" size
- Up to 420 m³/h
- Cast Iron, Hardened Cast Iron, Stainless Steel

**V Series
Positive
displacement
internal gear
pumps
V Series**



Positive displacement internal gear pumps



 **Chemicals**



 **Food stuffs**

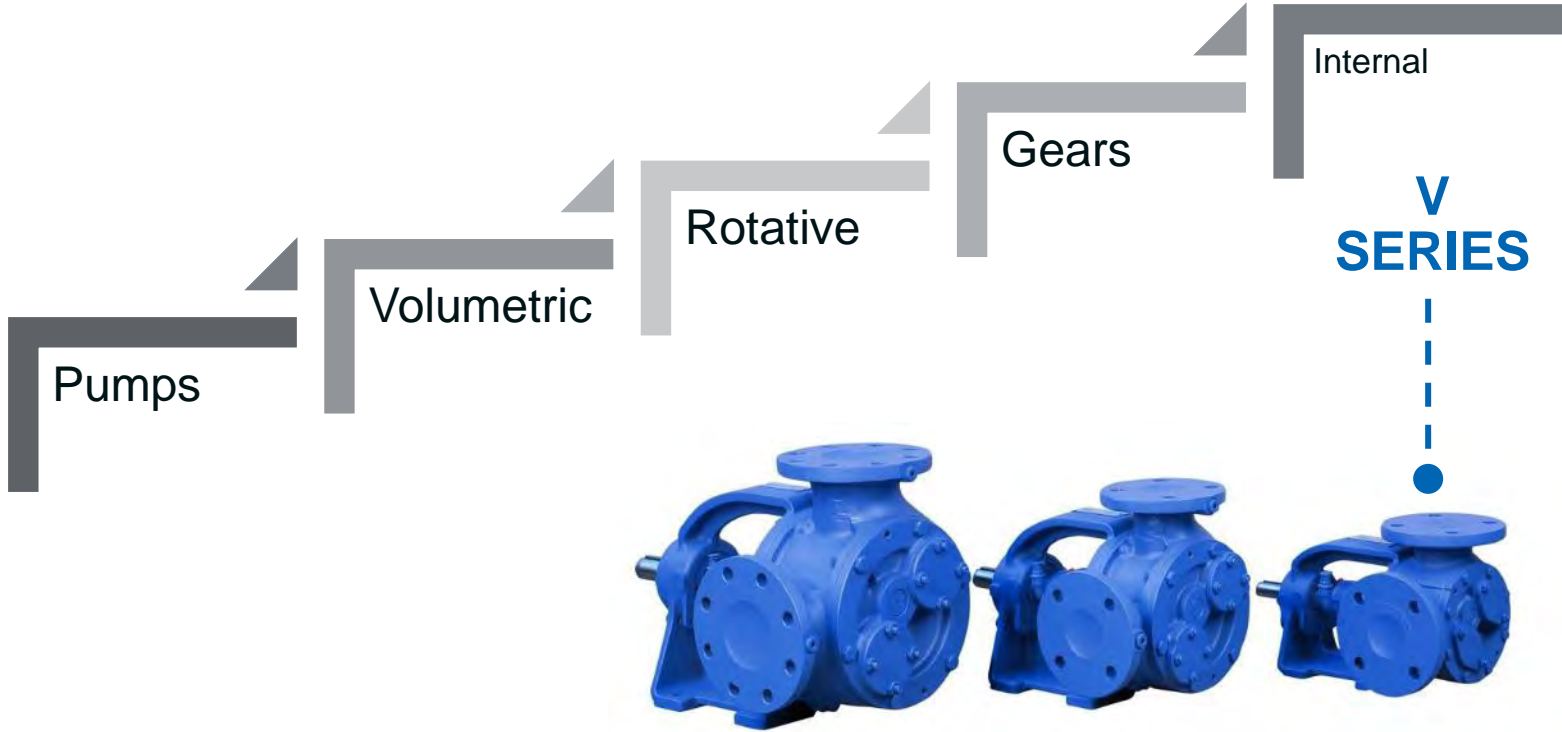
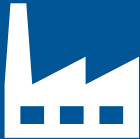


 **Inks and Adhesives**



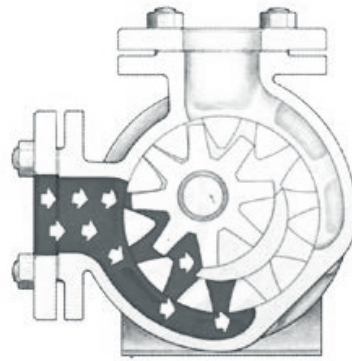
 **High temperature liquids**

—
**Positive
displacement
internal gear
pumps
V Series**

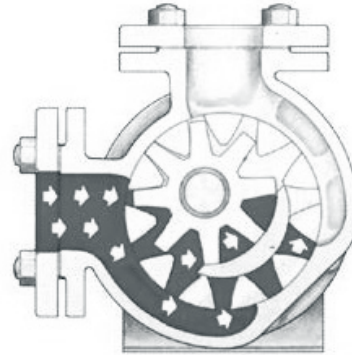


Working Principle

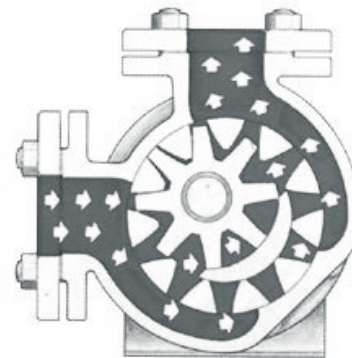
The flow is generated by two gears: the rotor and idler, one inside the other, separated by a crescent. As the gears rotate, liquid is drawn into the spaces created between the gears and the crescent. When the gears mesh, the liquid is forced out of the pump. The result are a smooth flow of liquid and high capacity combined with compact size.



1/3



2/3



3/3

1) Constant capacity

directly proportional to the rotational speed and virtually independent of pressure

2) Pulsation Free

without pulsations or pressure peaks which could cause vibrations in the pipework

3) Versatility

Simply by adjusting the axial position of the rotor, the same pump can handle water-thin liquids or high viscosity liquids

4) Self-priming

The high vacuum created by the pump permits rapid self-priming at the maximum height made possible by the physical characteristics of the pumped liquid

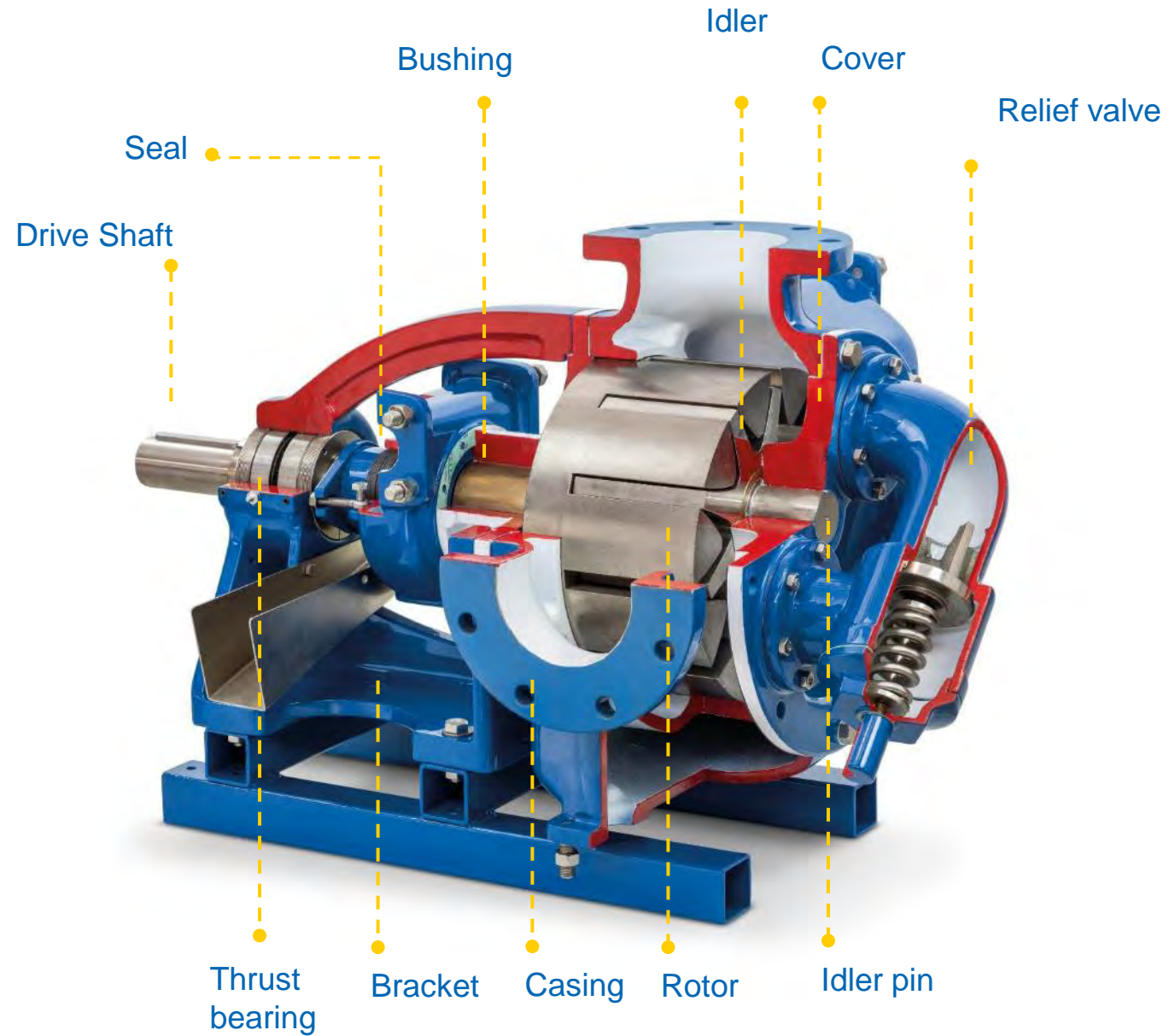
5) Preheating

Heating chamber cast integral with the casing or mounted on the cover or gland.

6) Conformity to ATEX standard zona 1-2

V SERIES

Positive displacement internal gear pumps for pumping liquids with any kind of viscosity or even with abrasive particles without solids. They are used in industrial applications.



V SERIES ARRANGEMENTS

Materials:

- Cast iron
- Stainless steel
- Steel WCB



V PUMPS
Bare shaft



V PUMP
Base and joint



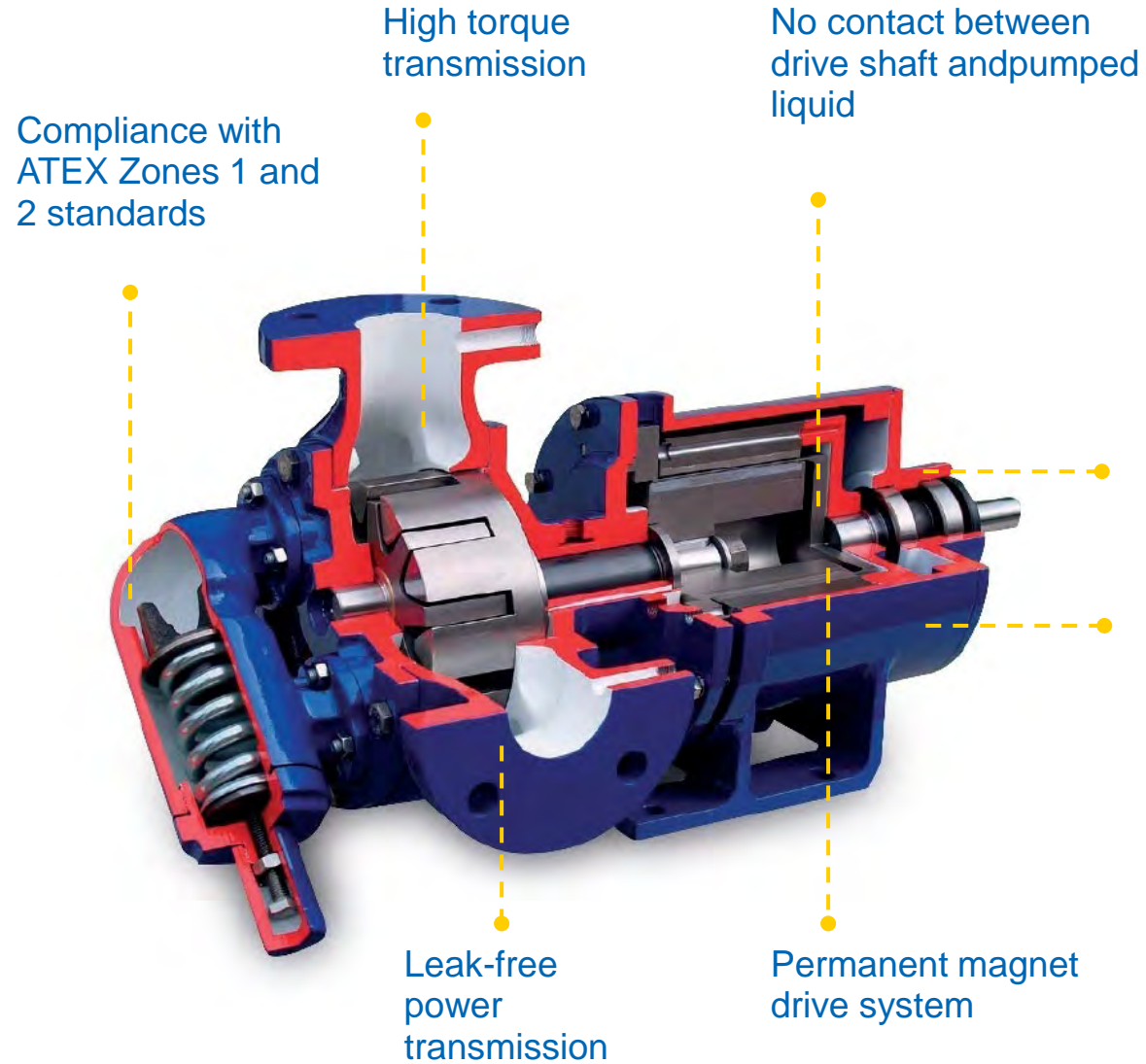
V PUMP
Vertical

Series V

Models

MODELS	PORTS		UNIT DISPLACEMENT	CAPACITY	PRESSURE
	mm	in	l/rev	m ³ /h (max)	bar (max)
V25-2	40	1" 1/4	0,045	4,5	16
V30-2	40	1" 1/4	0,082	8,4	16
V50-3	50	2"	0,23	15,6	16
V60-2	50	2"	0,5	22	16
V70-2	80	3"	0,8	28	16
V80-2	80	3"	1,2	42	16
V85-2	100	4"	1,6	54	12
V90-2	100	4"	2,2	54	12
V100-2	100	4"	3,2	78	12
V120-2	125	5"	6,5	117	8
V151	150	6"	6,5	117	8
V150-2	150	6"	7,8	144	8
V180	200	8"	12	170	10
V200	200	8"	16,7	240	8
V250	250	10"	31	350	8

SAXMAG V PUMP MAGNETIC DRIVEN

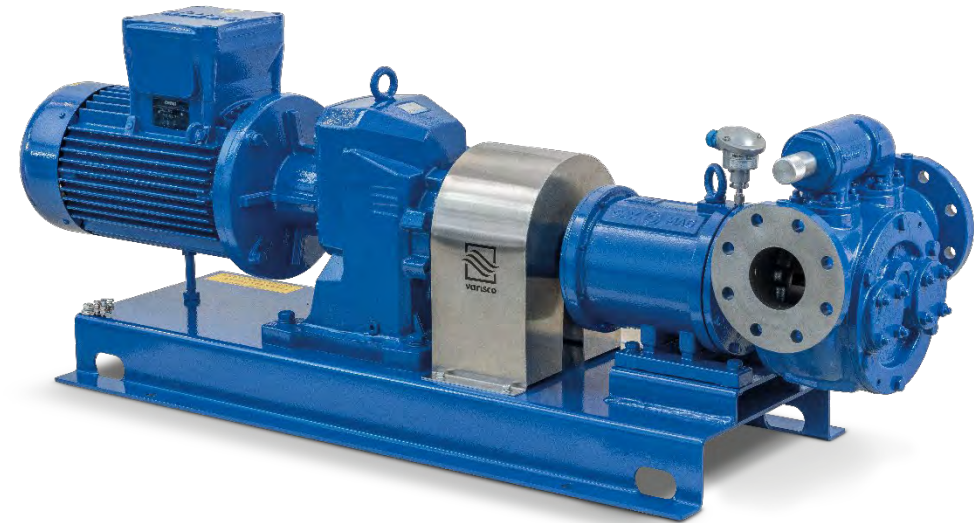


Massima semplicità di sostituzione
Altissima classe di tenuta
Tempi di fermo impianto ridotti
No wear, as compared to dynamic seals

V SAXMAG PUMPS ARRANGEMENTS



V SAXMAG PUMP
Bare shaft



V SAXMAG PUMP
Base and joint



SAXMAG Series

Models



MODELS	PORTS		CAPACITY	PRESSURE	TORQUE	TEMPERATURE
	mm	in	l/min (max)	Bar (max)	Nm	°C (max)
V 25-2	40	1"1/4	75	12	50 / 320	200
V 30-2	40	1"1/4	120	12	50 / 320	200
V 50-3	50	2"	172	12	50 / 320	200
V 60-2	50	2"	375	12	110 / 320	200
V 70-2	80	3"	440	12	180 / 850	200
V 80-2	80	3"	660	12	180 / 850	200
V 85-2	100	4"	900	12	180 / 850	200
V 100-2	100	4"	1376	8	550 / 850	200

G SERIES

External Gear Pumps

Those pumps are ideal for pumping clean viscous liquids from 0,2 up to 150.000 mPas at a max. Temp. 250°



GS Series

Cast Iron, Ductile Iron, Bronze (GS and GW dosing Series), from 3/4" to 4"



GW Series

AISI 316L, Hastelloy C, Titanium, PTFE, PVDF (GN), from 1/4" to 4"



GN Series

Pack gland, Single MS, Mag drive

GS / GK Series Dosing and Transfer Pump

Suitable for pumping liquids with a viscosity from 1 to 100.000 mPas. In case of medium or high viscosity fluids they can operate as a dosing pump through a variable speed drive.



Model	Ports Size	
	mm	in
GS 4	20	3/4"
GS 8	20	3/4"
GS 12	20	3/4"
GS 17	20	3/4"
GS 34	25	1"
GS 48	25	1"
GS 83	50	2"
GS 120	50	2"
GS 157	50	2"
GS 234	65	2 1/2"
GS 316	65	2 1/2"
GS 386	65	2 1/2"
GS 466	80	3"
GS 621	80	3"
GS 772	80	3"
GS 1184	100	4"

Model	Ports Size	
	mm	in
GK 4	20	3/4"
GK 8	20	3/4"
GK 12	20	3/4"
GK 17	20	3/4"
GK 34	25	1"
GK 48	25	1"
GK 83	50	2"
GK 120	50	2"
GK 157	50	2"



GW Series Dosing Pump

Suitable for transfer and dosing of low lubricant fluids at very low viscosity from 0,2 mPas



Model	Ports Size	
	mm	in
GW 2	10	3/8"
GW 3	10	3/8"
GW 6	10	3/8"



GN Series Dosing Pump

They are built to ensure no seizing in case of dry running and to allow internal cleaning with C.I.P. / S.I.P. cycle.

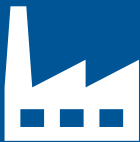


Model	Ports Size	
	mm	in
GN 2	7	1/4"
GN 3	15	1/2"
GN 8	15	1/2"
GN 10	20	3/4"
GN 17	20	3/4"
GN 30	25	1"
GN 49	40	1 1/4"
GN 78	40	1 1/4"
GN 98	40	1 1/4"
GN 150	50	2"
GN 208	50	2"
GN 276	50	2"
GN 555	80	3"
GN 740	80	3"
GN 1184	100	4"

Model	Ports Size	
	mm	in
GF 5	15	1/2"
GF 10	20	3/4"
GF 15	20	3/4"
GF 20	20	3/4"
GF 26	25	1"
GF 38	25	1"
GF 51	20	1"



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LB SERIES
Self-priming
diaphragm
pumps



LB SERIES

Self-priming mechanical diaphragm pumps for dense liquids that contain abrasives and solids in suspension. They are used in industrial and construction sectors.



Models	Capacity l/min	Pressure bar
LB65K/R43/MC152+BP	85	1.2
LB65K/R43/MC154+BP	42	1.2
LB70P/R43/MC152+BP	150	1.5
LB70P/R43/MC154+BP	75	1.5
LB70G/R43/MC152+BP	150	1.5
LB70G/R43/MC154+BP	75	1.5
LB80A/R43/MC202+BP	250	1.5
LB80A/R43/MC204+BP	125	1.5
LB80A+F/R43/MC204+BP	125	1.5
LB80G+F/R43/MC302+BP	250	1.5
LB80VG+F/R38/MC204	115	1.5
LB80VR+F/R38/MC204+BP	115	1.5
LB80VS+F/R38/MC204+BP	115	1.5
LB110A/R31/MC404+BP	425	1.5
LB110G/R31/MC404+BP	425	1.5
LB110A/R31/MC306	280	1.5
LB110G/R31/MC306+BP	280	1.5
LB125A+F/R31/MC554+BP	650	1.5

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VULCAN SERIES

Progressing cavity screw pumps



VULCAN SERIES

Solid content

Gas content

Corrosive

Modular design for both Series (Industrial) and Hygienic

Universal Joint solution

Pressure up to 48 bar

Flow rate 2L/h to 420m³/h



Size	Model
1	12-0.1
	24-0.1
2	12-0.2
3	06-001
	12-001
4	06-002
	12-002
	24-002
5	06-003
6	06-005
	12-005
	24-005

Size	Model
7	06-006
	12-003
	24-001
8	06-012
	12-006
	24-003
	48-001
9	04-024
	06-016
	08-012
	12-008
	24-004
	48-002

Size	Model
10	04-034
	06-028
	08-017
	12-014
	24-007
	48-003
11	04-064
	06-044
	08-032
	12-022
	24-010
	48-005

Size	Model
12	04-110
	06-076
	08-055
	12-038
	24-019
	48-010
13	06-115
	12-120
	06-100
	12-100
14	06-240
	06-400



Applications

J Series – Self-priming centrifugal pumps



WATER TREATMENT

Water treatment, water
purification plants,
municipality companies, etc.

Technical features:

JE/JX SERIES

**G10/11 - F10/11 - P10/11 - K10
(CI - AISI 316 - VITON)**

2 - 3 - 4 - 6" size



LANDFILLS – WASTE TREATMENT

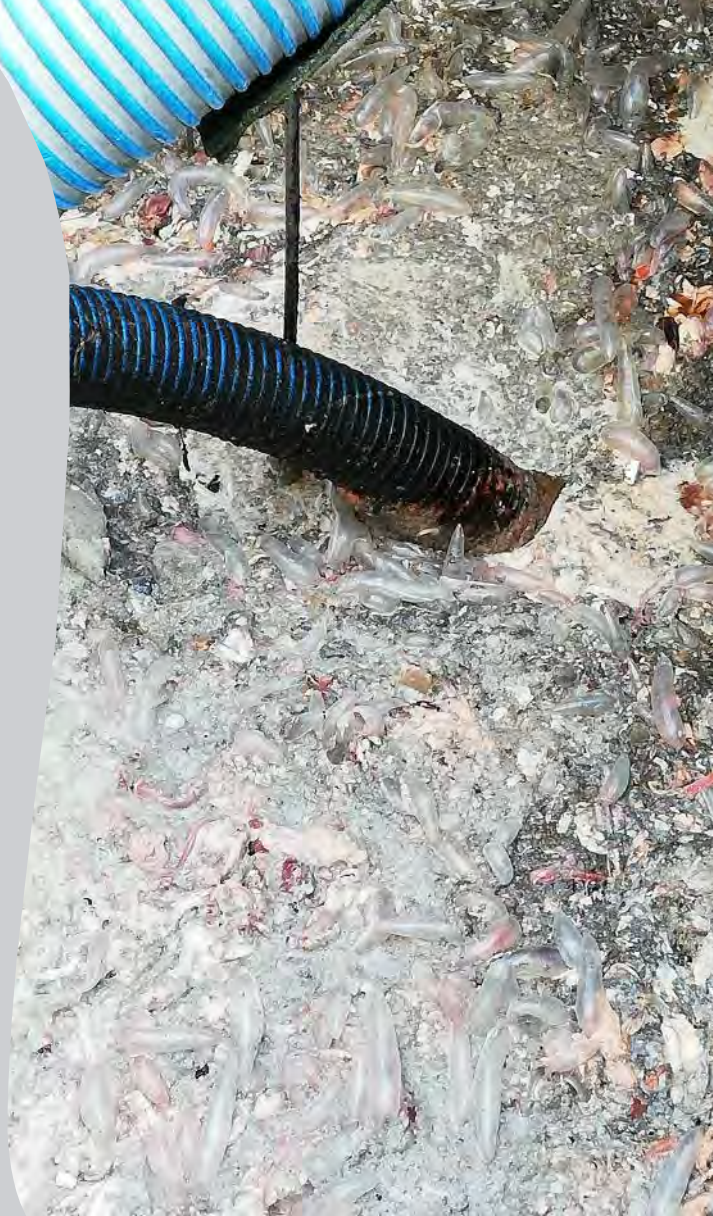
Leachate – lime – corrosive
fluid

Technical features:

JE/JX (GRINDER) SERIES

**K10/20 – F10/20 – F10/20
(CI – AISI 316 – VITON -
TEFLON)**

2 - 3 - 4” size



MANUFACTURING AND INDUSTRIAL PROCESSES – TRANSFER / WASHING / COOLING

Waters full of metal residues (steel mills), plastics (chemical industry), abrasive fluid, etc.

Technical features:

JE/JX SERIES

ALL AVAILABLE MATERIALS
(DEPENDS ON THE APPLICATION)

2 - 3 - 4 " size



RECYCLING PLANT

PET washing line

Technical features:

JE (SPECIAL AMT SERIES)

G10/F10 AMT

2 - 3 - 4 " size



VEILING MACHINES

Unit for the industrial coating, decoration and digital printing of all surfaces.

Technical features:

JS/JE SERIES

P10/11 (CI - VITON)

2 - 3 - 4" size

[Video](#)



PAINT INDUSTRY

Solvents, water polluted by paints (proposal facilitated by the presence of the V series)

Technical features:

JE/JX SERIES

F10/20 – K10/20

(CI – AISI 316L – VITON -
TEFLON)

2 - 3 - 4 “ size



BILGE PUMPS

Expulsion of polluted (sea) water

Technical features:

JE/JO SERIES

Q10 – K10

(CI – AISI 316L – VITON – ZINC ANODES)

1 ½ - 2 - 3" size



EQUIPMENT - INDUSTRIAL VEHICLES

Water distribution, fuels,
chemical fluids, dirty fluids, etc.

Technical features:

JO SERIES

**G10/11 – F10/11 – P10/11 K10
(CI – AISI 316 – NBR VITON)**

2 - 3 “ size



EQUIPMENT - BLEEDING VEHICLES

Sewage, wastewater, lime, water with large suspended solids, street washing, etc.

Technical features:

JO SERIES

G10/11 – F10/11 – P10/11 K10
(CI – AISI 316 – NBR – VITON)

2 - 3" size



EQUIPMENT - CONSTRUCTION VEHICLES

Water with sand and gravel,
lime, dirty water, water with
large suspended solids, etc.

Technical features:

JO SERIES

G10/11 – F10/11 – P10/11 – K10
(CI - AISI 316 - NBR - VITON)

2 - 3" size



EQUIPMENT - CONSTRUCTION VEHICLES

Water with sand and gravel

Technical features:

JO SERIES

G10/11
(CI - NBR)

2" size





Applications

ST-R series - Self-priming trash pumps



WATER TREATMENT

Water purification plants -
sedimentation tanks

Technical features:

ST-R SERIES

G10 – F10
(CI – AISI 316 – VITON)

2 - 3 - 4 - 6 - 8" size





Applications

V Series – Positive displacement internal gear pumps



ADHESIVES AND SEALANTS

Industry of glues, adhesive tapes, sealants for building and DIY, furniture factories (machinery or plants for plywood panels), packaging, etc.

Technical features:

V / V....A / SAX MAG V SERIES

ST4BS - ST4K - ST4W - SPG -
SPK SAXMAG G - SAXMAG K
(CI - AISI 316 - VITON - TEFLON)

2 - 3 - 4 - 6" size



SOAP AND DETERGENTS

Production of liquid and
powder detergents

Technical features:

V SERIES

**ST4K - ST4WAT - ST4WAW -
ST4W – ST4BS - SPK
(HARDENED CARBON
STEEL - CI - AISI 316 - VITON
- TEFLON)**

2 - 3 - 4 - 6 - 8” size



DOCK STORAGE

Vegetable oil, animal fat,
biodiesel, additives, etc.

Technical features:

V / V....A

ST4BS - ST4K - ST4W - SPG
SPK (CI - AISI 316 - VITON -
TEFLON)

2 - 3 - 4 - 6 - 8" size



CHEMICALS – HIGH VISCOUS FLUID

Rubber and plastic industry

Technical features:

V / V....A

ST4BS - ST4K - ST4W - SPG
- SPK (CI - AISI 316 - VITON
- TEFLON)

2 - 3 - 4" size



CHEMICALS - PETROLCHEMICAL / DANGEROUS FLUIDS

Filled polyol, additives, etc.

Technical features:

V / V...A / SAX MAG V SERIES

ST8BS - ST8K - ST8W
SAXMAG G - SAXMAG K
(CI - AISI 316 - VITON - TEFLON)

2 - 3 - 4" size



PAINT, VARNISH, INK AND SOLVENTS

Production of paint

Technical features:

**V / V...A / SAX MAG V
SERIES**

**ST4BS - ST4K - ST4W - SPG -
SPK SAXMAG G - SAXMAG K
(CI - AISI 316 - VITON -
TEFLON)**

1 ¼ - 2 - 3" size



FOOD STUFFS

Chocolate, cocoa butter, cocoa liquor, fat, glucose, fructose, peanut butter, etc.

Technical features:

V SERIES

CHOCO - SP+R - SPG+R - ST4K
- SPH (CI - AISI 316 - VITON -
TEFLON)

2 - 3 - 4" size

Available:
according to EC n. 1935 / 2004
regulation (cast iron only -
CHOCO pumps)

Not available:
according to EHEDG, 3-A, FDA
regulations



MOLASSES, CPB

Sugar industry, animal feed,
ecc.

Technical features:

V / V....A

ST4BS - ST4K - ST4W - SPG
- SPK (CI - AISI 316 -
VITON - TEFLON)

3 - 4 - 6 - 8 " size



BITUMEN

Insulations, roads, roofs,
etc.

V / V....A

ST4W + R / EH - SPG
(CI - AISI 316 - VITON -
TEFLON)

2 - 3 - 4" size



OEM (Original Equipment Manufacturer)

Processing - transport of chemicals

Technical features:

V SERIES

ST4BS - ST4K - ST4W - SPG –
SPK (CI - AISI 316 - VITON -
TEFLON)

2 - 3" size



TEXTILE

Viscose (artificial silk - rayon), acrylic fiber, chemical film for fabrics

Technical features:

V / V...A / SAX MAG V SERIES

ST4BS - ST4K - ST4W - SPG - SPK SAXMAG G - SAXMAG K (CI - AISI 316 - VITON - TEFLON)

1 ¼" – 2" size



POLYURETHANE FOAMS

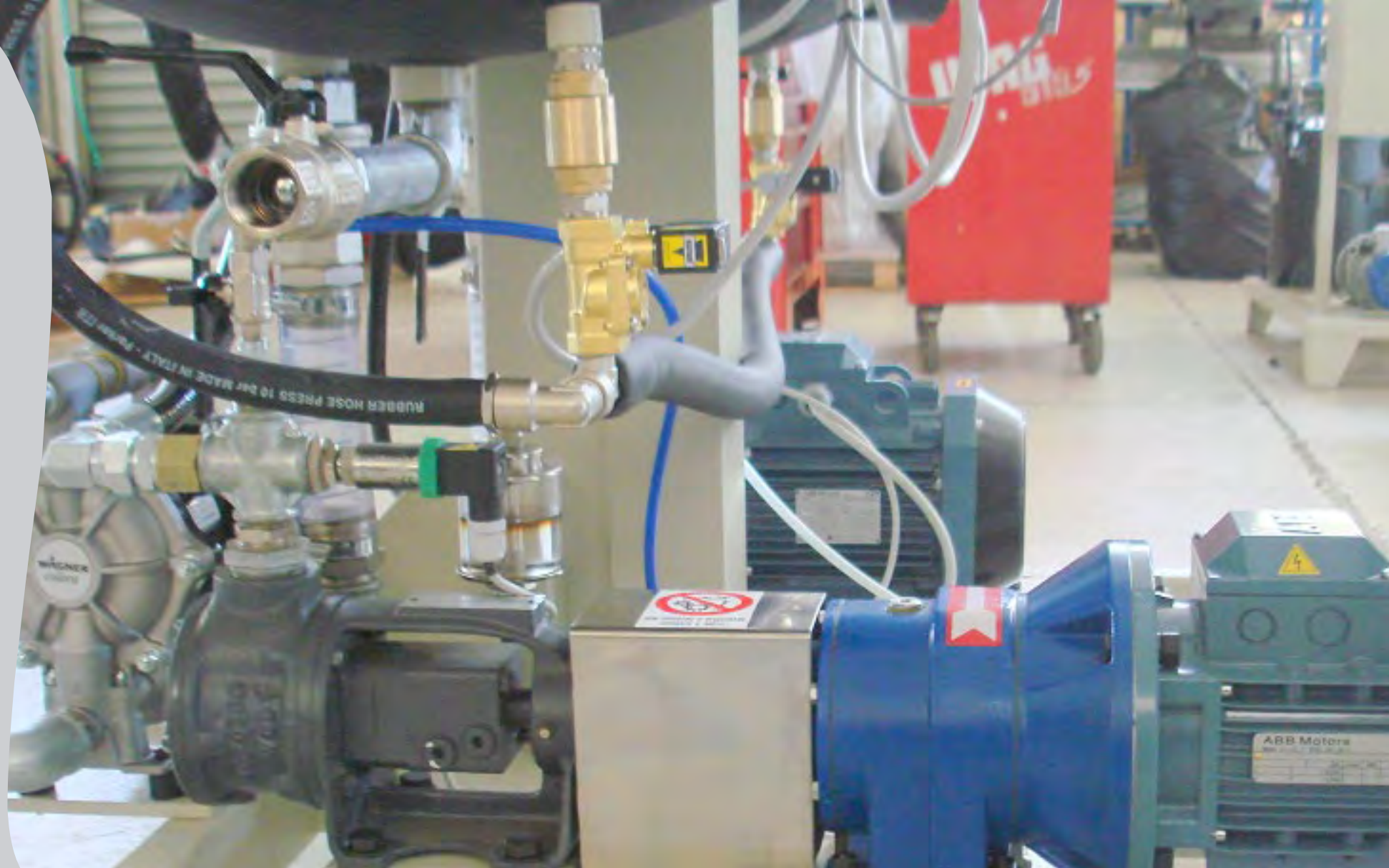
Furniture and furnishing
industry

Technical features:

V / V...A / SAX MAG V SERIES

ST4BS - ST4K - ST4W - SPG -
SPK SAXMAG G - SAXMAG K
(CI - AISI 316 - VITON - TEFLON)

1 ¼" - 2 - 3" size



THERMAL AND ACOUSTIC INSULATION

Automotive and household appliances industry - filled polyol, additives, glue, ecc.

Technical features:

V / V...A / SAX MAG V SERIES

ST4WAT - ST4WAW - ST4W –
ST4BS - SPK
(HARDENED CARBON STEEL -
CI - AISI 316 - VITON - TEFLON)

2 - 3 - 4" size



PET FOOD

Animal fat, vegetable oil, ecc.

Technical features:

V / V....A

SPG - SPK
(CI - AISI 316 - VITON -
TEFLON)

3 – 4" size





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