



**Rotary Lobe Pumps**  
For Industrial Applications

Your partner for  
**high-performance**  
pumping technology.



## You can rely on them: Rotary lobe pumps made by Vogelsang.

The rotary lobe pump product range covers up to 1,000 m<sup>3</sup>/h and up to 16 bar differential pressure. Continuous research and development forms the basis for the leading technology which makes us the market leaders for elastomeric-coated rotary lobe pumps. Robustness, reliability, durability – not to mention service and maintenance-friendliness and economical efficiency – are the basic characteristics of Vogelsang pumps.

### The principle

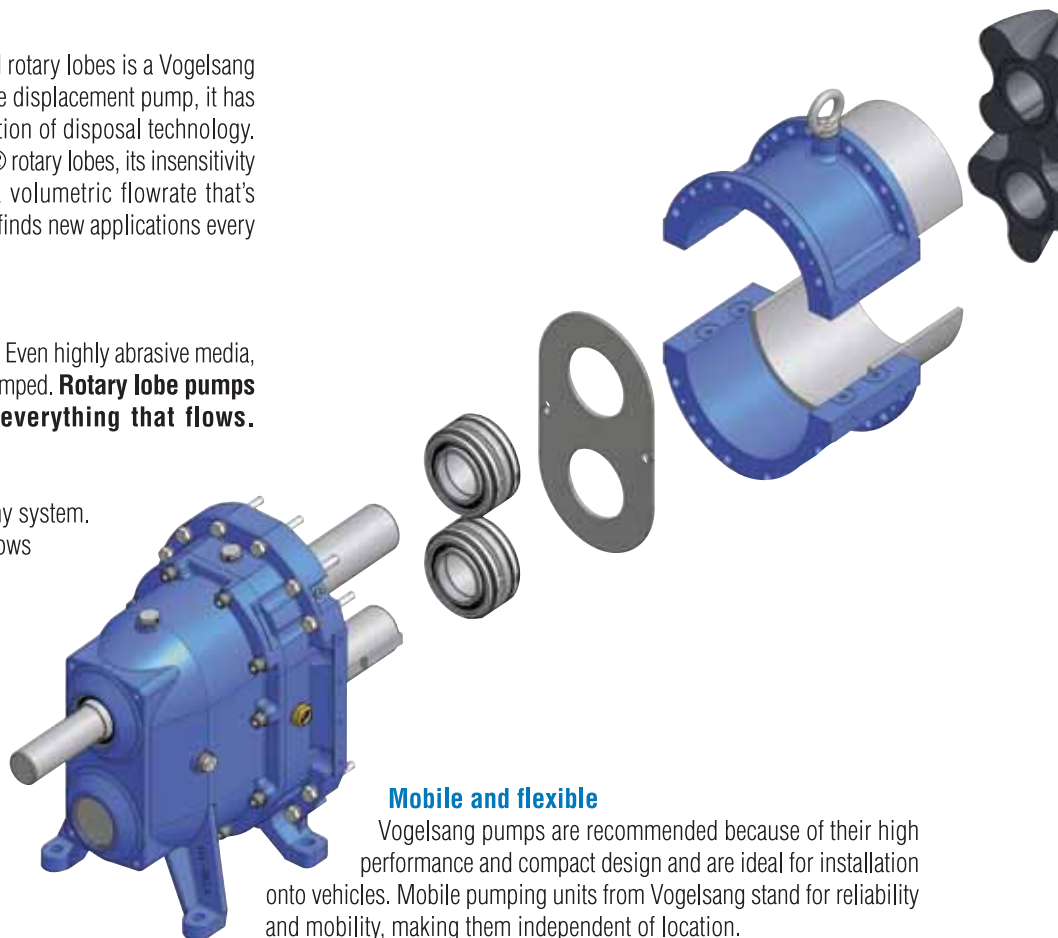
The rotary lobe pump with elastomer coated rotary lobes is a Vogelsang invention. As a contactless, rotating positive displacement pump, it has become indispensable in everyday application of disposal technology. Thanks to the pulsation-free operating HiFlo® rotary lobes, its insensitivity to dry running and foreign bodies and a volumetric flowrate that's proportional to rotational speed, this pump finds new applications every day.

### Performance

The use of a Vogelsang pump has few limits. Even highly abrasive media, acids or high solids-content media can be pumped. **Rotary lobe pumps from Vogelsang can nearly pump everything that flows.**

### Compact and space saving

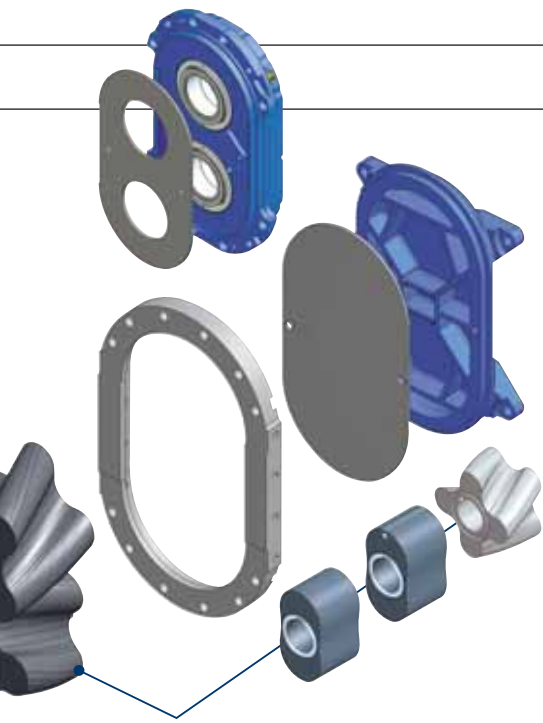
Vogelsang pumps can be integrated into any system. Its compact and service-friendly design allows installation in the tightest spaces. Also, because of its compact design installing a Vogelsang pump as replacement for other pump is generally not a problem.



### Mobile and flexible

Vogelsang pumps are recommended because of their high performance and compact design and are ideal for installation onto vehicles. Mobile pumping units from Vogelsang stand for reliability and mobility, making them independent of location.





### Available pump series

The VX rotary lobe pumps from Vogelsang are available in three series. Individual pumps are configured as to individual needs and specific applications. Interior coating, lobe material or the type of drive system can be individually specified.

**Q Quick-Service:** Service in the shortest possible time; all important parts such as lobes, seals, side and radial cover plates may be replaced on site without removing the pump. This saves money and provides maximum operational availability.

**QD:** Quick-Service pump with a third load bearing unit in the cover plate. That means high stability, even at high operating pressures.

**Marathon:** Quick-Service pump in a two-stage design, with or without a third bearing unit in the cover plate. Long lifetimes also for highly abrasive media and high operating pressures.

### Shaft warranty

Large diameters and no steps: Vogelsang pumps use only non-breakable shafts! That's why we offer for all V/VX series pumps a 5-year warranty against shaft breakage for properly used pumps.



### Seal cartridge

Replacing seals is easier than ever: The mechanical seal and the gearbox seal of all the Quick-Service pumps can be replaced together as a single cartridge unit in the shortest amount of time.

### Drive unit

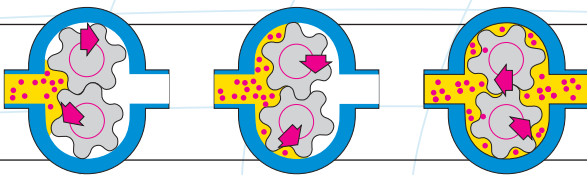
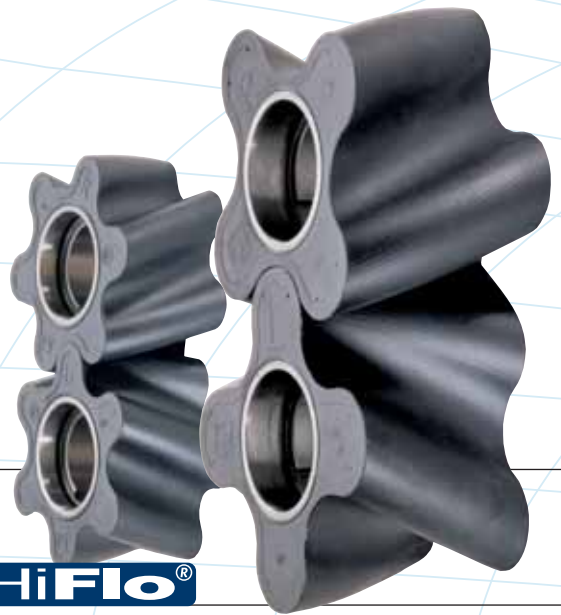
Diesel engine, electric or hydraulic motors are available in various configurations.



## Applications

Vogelsang pumps convey a wide range of media at a variety of locations and under the most extreme conditions. Vogelsang pumps are used for:

- sewage treatment plants
- disposal technology and recycling
- chemical industry
- petrol-chemical industry
- vehicle assembly
- ship building
- food processing industry



## Rotary lobes in a new dimension

For a long time pulsation greatly limited the performance of rotary lobe pumps. By developing the HiFlo® lobes, whose vanes are helically angled along the axis, the Vogelsang engineers achieved the needed breakthrough to solve the problem.

### This makes the HiFlo® lobes unique:

- **Pulsation-free operation**  
longer lifetimes reduce maintenance costs, quieter operation, less noise
- **Higher volumetric pumping efficiency**  
through higher allowable rotational speeds
- **Improved suction characteristics**  
through the reduction of cavitation
- **Self-priming**  
up to 8 meters WC (26 feet WC)
- **Higher pressures**  
through the prevention of pulsation-caused pressure spikes.

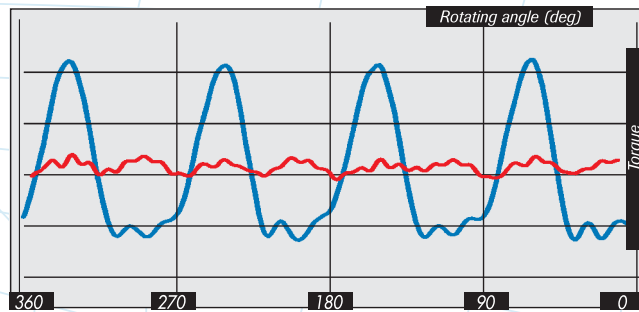


Figure: Measured vibrations generated by 2-wing lobes compared to 3-wing HiFlo® lobes when there is counter-pressure.



## LifeGuard: The concept for assuring the maximum lifetime of your rotary lobe pump.

### Maximum shaft diameter

The drive shaft of every Vogelsang pump has a maximum diameter. This prevents shaft deflection and wear.

### Adjustable housing half segments

Wear of housing half segments can be compensated without using additional parts.

### Multi-stage lobes = lobes with multiple sealing lines

Multiple sealing lines increase volumetric efficiency (multi-stage pressure build-up).

### Quick-Service bearing cover (option)

Supported shaft ends result in reduced lobe wear.

### Expander lobes (option)

Using the patented expander technology, wear can be compensated by later adjustment.

### Injection housing (option)

Thanks to the innovative housing geometry, the flow of foreign bodies through the pump is optimised. Wear is reduced.

### Lobe coating with the highest standards = seamless rubber coating.

Longer lifetime using a special elastomer. Low wear with a strong bond to the steel core.

### Shafts without offsets

Highest possible reliability at maximum operating pressures. No weakening from offsets or cut-ins.

### Lobes with V-meshing

Less wear by compensating for axial loads.

### Wear-resistant housing surfaces (option)

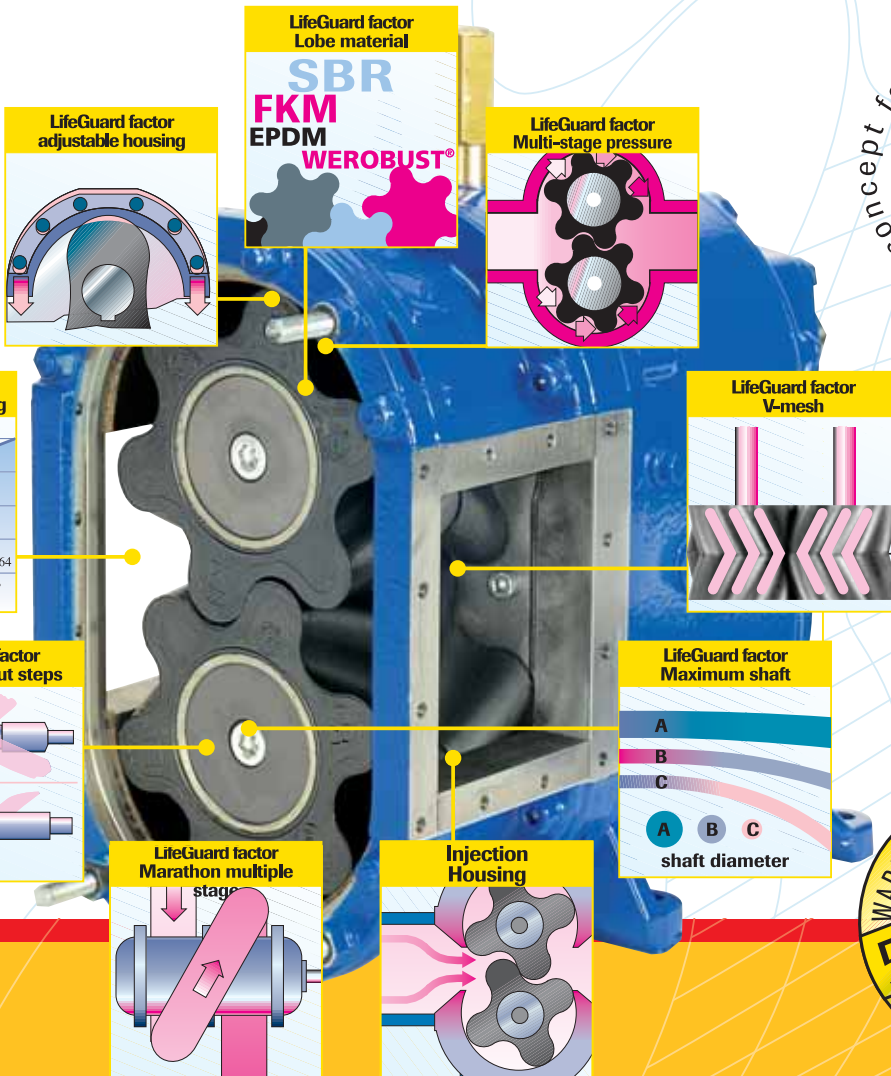
Long lifetime by using suitable wear-resistant materials. (For example: ceramic, tungsten carbide, etc.)

### Multi-stage pumps (Marathon design)

Extreme extension of lifetimes through multiple pressure stages.

### HiFlo® technology

Pulsation free pumping means longer lifetimes for drive units and couplings.



**Pumps, that run instead of pumps that sit idle.**



## This is why Vogelsang is relied on:

### QUALITY

Best materials, proven technology and a fully developed complete concept make the Vogelsang pump something special in the world of pump technology. A Vogelsang pump is a proven quality product.

### SERVICE

Vogelsang offers you an individualised all-round service. It starts already with extensive and detailed documentation and operation manuals. Spare parts are available in the shortest time, thanks to our manufacturing capabilities and an authorised service partner nearby who helps you in replacing worn parts and repair work. The Vogelsang ServicePack rounds out our line-up. Whether it's pump start-up, on-site training and instruction here in-house, or Full-Service with a maintenance contract and a wear-parts service package, customers can choose the most suitable package for them.

### RELIABILITY

You can certainly rely on Vogelsang. Because Vogelsang pumps last longer and survive model changes, we keep the most important spare parts for older pumps in stock for you.

### INNOVATION

Innovation has a tradition at Vogelsang, and as a result we believe in: Progress for the benefit of our customers. That's why we implement your ideas and wishes into our products.

### PARTNERSHIP

We offer our customer exactly what one expects from a great partner: reliability and a sense of responsibility, fairness and cooperation. Vogelsang, your partner in pump technology.



### Quality management

Whoever fails to improve, soon stops being good. We constantly strive to improve the quality of our products. Quality control is (a way of life) of course practiced at Vogelsang. No pump leaves production unchecked. To document this we are certified as to **DIN EN ISO 9001: 2008**



### Special designs

Design and production at Vogelsang are one unit. This allows us to produce customised units here in-house. Examples of special designs include:

- multiple chamber pumps
- two-stage pumps
- combination drive units
- pumps with integrated shredding units



### Lobes and elastomers

Elastomeric coating of lobes in a vulcanisation process makes them inseparable from the lobe cores. This is how the lobes are rubber coated. Available elastomers are:

- NBR ● HNBR ● SBR
- EPDM ● FPM ● CSM ● AFLAS
- steel ● stainless steel ● POM

	Type	Displacement		Max. operating pressure			max. flowrate		Nenn-drehzahl U/min	Max. rotational speed U/min
		Marathon	I/U	Q	QD	Marathon QD	m <sup>3</sup> /h	l/min		
Model 100	45		0,29	10			3-13	50-220	200-800	1000
	64		0,42	9			5-19	75-320	200-800	1000
	90		0,59	7			6-26	100-430	200-800	1000
	128		0,84	4			9-38	150-630	200-800	1000
Model 136	70	140 (70/70)	1,27	10	12	16	10-45	170-750	150-650	800
	105	210 (105/105)	1,90	10	12	16	15-70	250-1200	150-650	800
	140	280 (140/140)	2,53	8	12	14	20-90	330-1500	150-650	800
	210	420 (210/210)	3,80	5	10	12	30-140	500-2300	150-650	800
	280		5,06		8		40-180	670-3000	150-650	800
	420		7,59		6		60-280	1000-4700	150-650	800
Model 186	92	184 (92/92)	3,56	10		16	20-100	333-1700	100-500	600
	130	260 (130/130)	5,03	10	12	16	30-145	500-2400	100-500	600
	184	368 (184/184)	7,12	8	12	14	40-200	670-3400	100-500	600
	260	520 (260/260)	10,06	5	10	12	60-290	1000-4850	100-500	600
	368		14,24		3	8	80-400	1330-6800	100-500	600
	390		15,09		3	7	90-435	1500-7250	100-500	600
	520		20,12		6		120-580	2000-9650	100-500	600
	736		28,48		3		160-800	2700-13600	100-500	600



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