

ALLWEILER - weltweit präsent ALLWEILER - global presence

Werke in Deutschland
Plants in Germany

ALLWEILER AG
Schraubenspindelpumpen, Kreiselpumpen,
Zahnradpumpen, Propellerpumpen und Anlagen
Screw Pumps, Centrifugal Pumps, Gear Pumps,
Propeller Pumps and Systems

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ALLWEILER AG
Exzentrerschneckenpumpen, Schlauchpumpen,
Kreiskolbenpumpen und Mazeratoren
Progressing Cavity Pumps, Peristaltic Pumps,
Rotary Lobe Pumps and Macerators

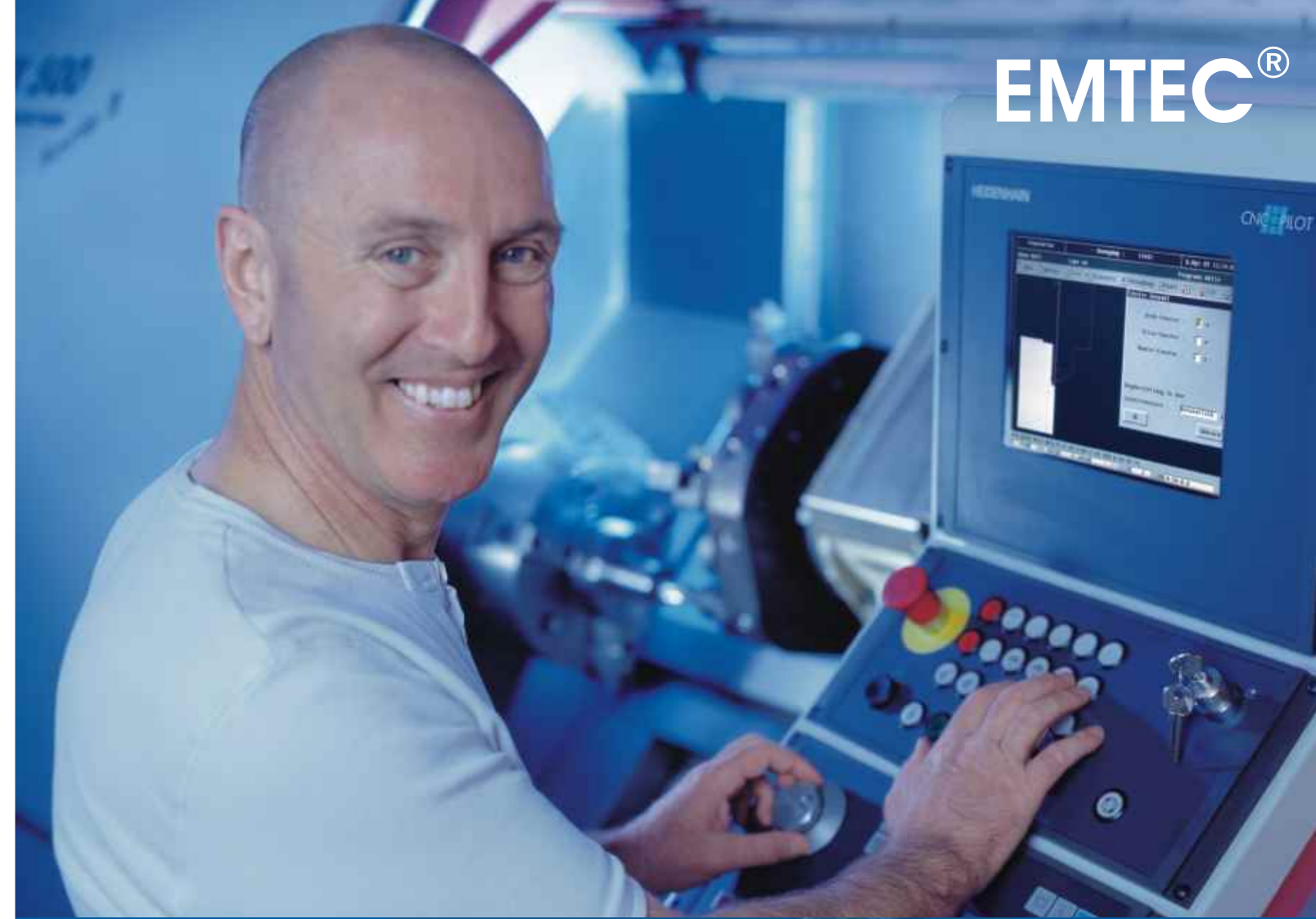
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Die Anschriften der ALLWEILER Vertretungen weltweit finden Sie unter <http://www.allweiler.com>
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ALLWEILER 
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EMTEC®

EMTEC®: High-Tech for Emulsion

Screw Pumps for demanding applications.
Reliably pump emulsions, cutting oils and cooling-lubricant solutions.

- Very high endurance
- For all cooling lubricants
- Flexible installation
- Highest possible efficiency
- Wide performance range

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EMTEC®:

Modern production technology represents a real challenge.

Ever greater precision with extremely tight tolerances forms the foundation of modern, innovative products. At the same time, expectations for cost-efficiency in production continue to grow. High-speed processing, short cycle times, process safety and high availability paired with low investment costs secure your position in the marketplace.

When you chose EMTEC® screw pumps from ALLWEILER, you can confront these challenges with confidence. Precise, extremely quiet and efficient, EMTEC® pumps supply chipping processes with any type of cooling lubricant at high pressure and low pulsation, all while exhibiting a robustness and longevity that is unequalled in the market.



EMTEC®:

A Long Service Life and Efficiency Guaranteed

EMTEC® combines the latest in pump design with high operational safety.

When you choose EMTEC®, you will be using screw pumps that the metal-processing industry has been using for decades and continues to employ successfully in large quantities. You will also benefit from the continuous efforts of ALLWEILER to further develop and optimize this pump. As a result, you can be certain that you are relying on a pump that has proven its value over many years of practical usage but simultaneously implements advanced design concepts. Including:

► The highest possible efficiency

ALLWEILER AG has decades of experience as the market leader for screw pumps and is able to confidently ensure that EMTEC® will work with the greatest possible efficiency. This will help you keep a solid grip on your plant dimensions and energy costs.

► Specially designed safety concept provides high operational safety

The design and materials used in EMTEC® are chosen specifically to deliver the longest possible service life under high-wear conditions.

The rotor housing made of specially hardened gray casting (EN-GJL) is part of a special safety concept. The housing surface in contact to the screws shows a ceramic-like hardness.

However, unlike other materials - such as SiC - wear, shocks, vibration or aeration cannot lead to sudden failure of the pump unit.



20 DQ



140 D8.6

► A wide range of applications for all cooling lubricants

EMTEC® is suitable for: emulsions
cutting and grinding oils
cooling lubricant solutions and much more.

Maximum performance with EMTEC®*

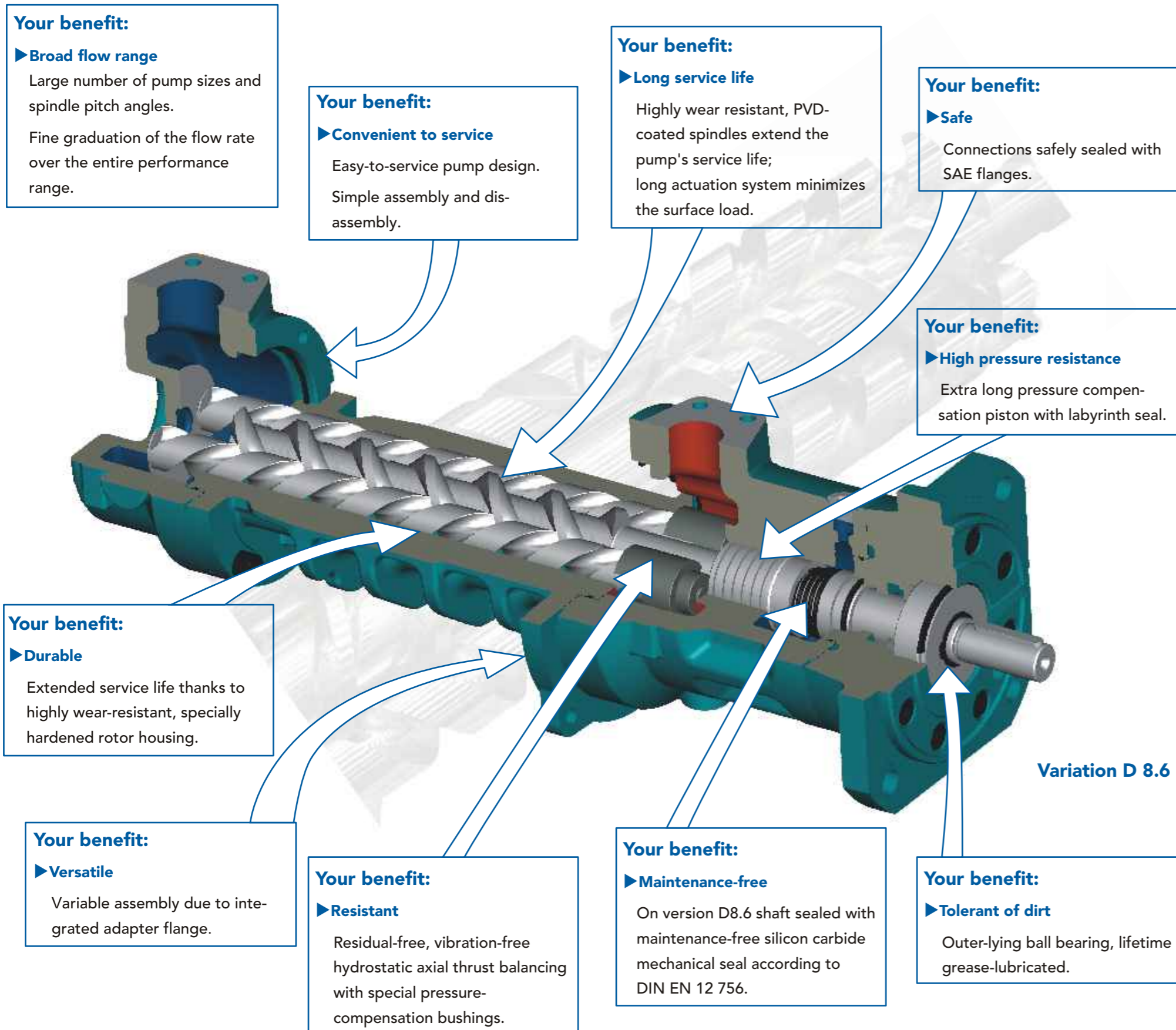
Capacity	Q	10 up to 900 l/min	Contamination level	up to 250 mg/l
Design pressure	p_d	up to 100/120 bar *	Filter fineness	up to 100 μ m
Suction pressure	p_s	up to 10 bar		
Temperature	t	up to 80 °C		
Viscosity	ν	1 up to 2,000 mm ² /s		

* All performance data listed here and in the following tables apply to 50-Hz operation.

EMTEC®: Leading Technology for a Long Service Life

EMTEC® is a product of decades of experience, skilled use of special materials and advanced technology.

EMTEC® -
the heavy duty Screw
Pump for the most
demanding applications



Variation D 8.6

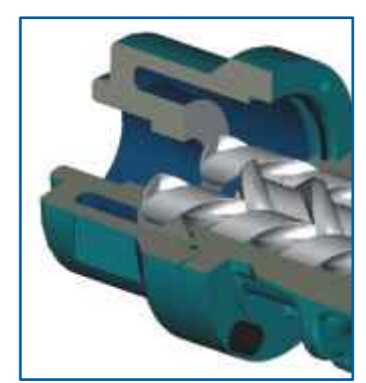
EMTEC® Screw Pumps are available in the two variations D 8.6 and DQ.

► **Variation DQ: versatile and economical**



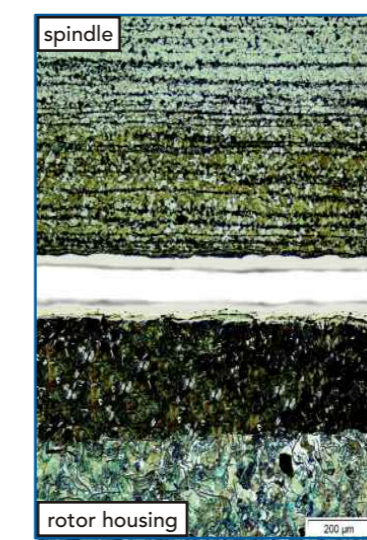
The DQ variation has all of the benefits of variation D 8.6. But instead of a mechanical seal, it uses a shaft sealing ring (FPM).

Variation DQ



The liquid enters the pump through an axial suction port in standard version. It is therefore very easy for you to vary the pump's extension length. This approach ensures you a simple and flexible tank installation that is easy to maintain

Materials



spindle
Base material: Special steel
Hardened zone 62 HRC
PVD hard coating 1200 HV
Ceramic like edge layer 1200 HV

rotor housing
Special hardened casting 62 HRC
Base material

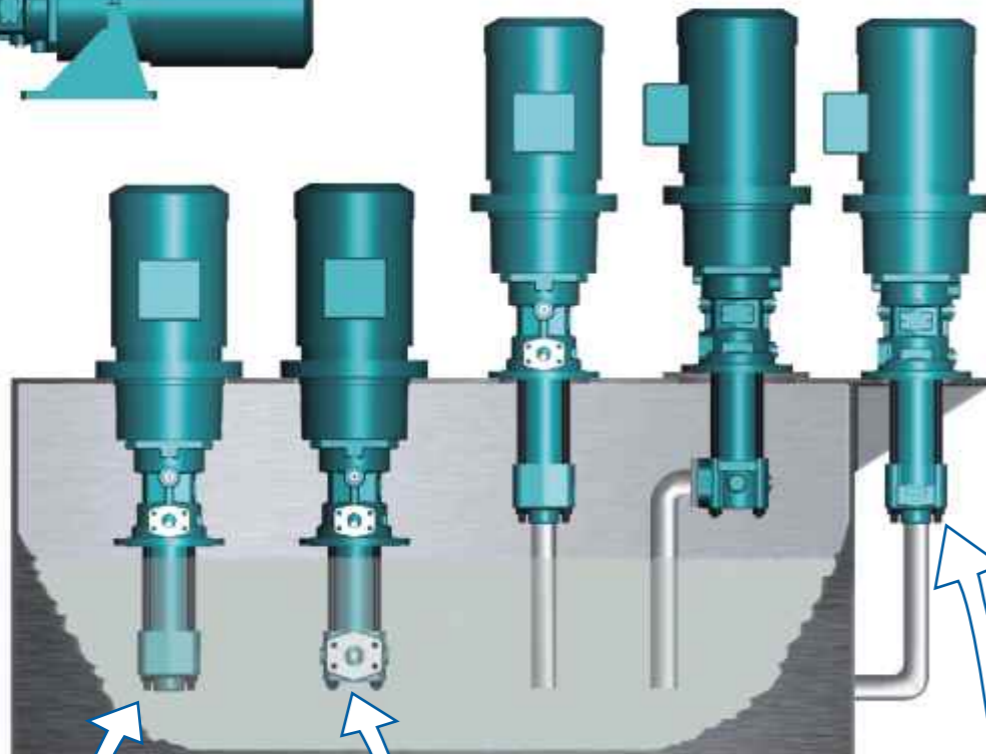
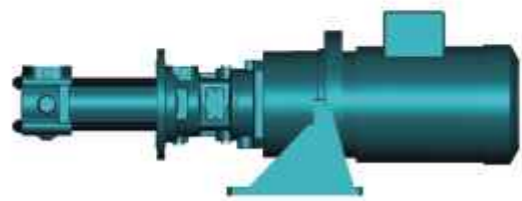
The special material combination used on EMTEC® brings together the highest possible hardness with optimal elasticity and resistance to fracture.

EMTEC® INNOVATIVE

EMTEC®: Extremely Variable in Installation

During foot mounted dry installation (well suited for operation with admission pressure and easily accessible for maintenance) a silicon carbide mechanical seal ensures a long service life.

EMTEC® is especially easy and economical to install with the tank top installation "discharge connection above the tank cover".



Submerged tank mounting saves space, maintenance and costs compared with the dry installation. Any leakage stays in the tank.

Of course you are free to choose any other horizontal or vertical (motor upwards) mounting positions for EMTEC®.

► Easy integration in existing systems

You would like to apply EMTEC® for a system planned with another pump and already in operation? No problem: We provide exchange kits to easily adapt EMTEC® to given dimensions.

EMTEC®: All You Need for High-Pressure Cooling Lubricant Supply

No pumping system shows more advantages in tool machinery than EMTEC®.

Wide flow range

Through fifteen pump sizes and spindle pitch angles EMTEC® pumps deliver flow rates from 10 l/min to 900 l/min:

- Chooseable for all kinds and sizes of tool machinery
- Precise selection according to the required operating points

Almost no pulsation

The EMTEC® has a very low frequency pressure pulsation of just 1-2 % of the delivery pressure:

- Uniform cooling capacity
- No pulsation dampener necessary
- No pipe work fatigue

Low operation noise

The acoustic power level of EMTEC® is e.g. just 68 dBA at speed of 2,900 1/min and a power consumption of 10 kW:

- Improved occupational health and safety
- Improved process safety
- Low expenses for noise protection



Wide pressure range with "stiff" performance curve

The characteristic curve of EMTEC® is unaffected by an increase in pressure across a broad range:

- Universal use
- Flow independant from pipe work resistance

High efficiency at compact design

A particular example is when pumping cutting oils; efficiency of over 80 % is reached even at high pressures. The driving power needed is reduced by up to 40 % compared e.g. with multistage centrifugal pumps:

- Reduced cooling efforts
- Low operational costs
- Low investment costs



Very good resistance to wear

The pumping principle used by the EMTEC® is far more resistant against dirt exposure than other positive displacement pump systems:

- High process safety
- Low operational costs

Best wear resistance and operational safety

The extremely hard surfaces of EMTEC® provide superior resistance to wear. The special design principle also makes it especially tolerant to sources of interference such as vibrations, shocks, exposure to gas or temporary reversion of the rotation direction:

- High process safety
- Non-critical (simple) maintenance

