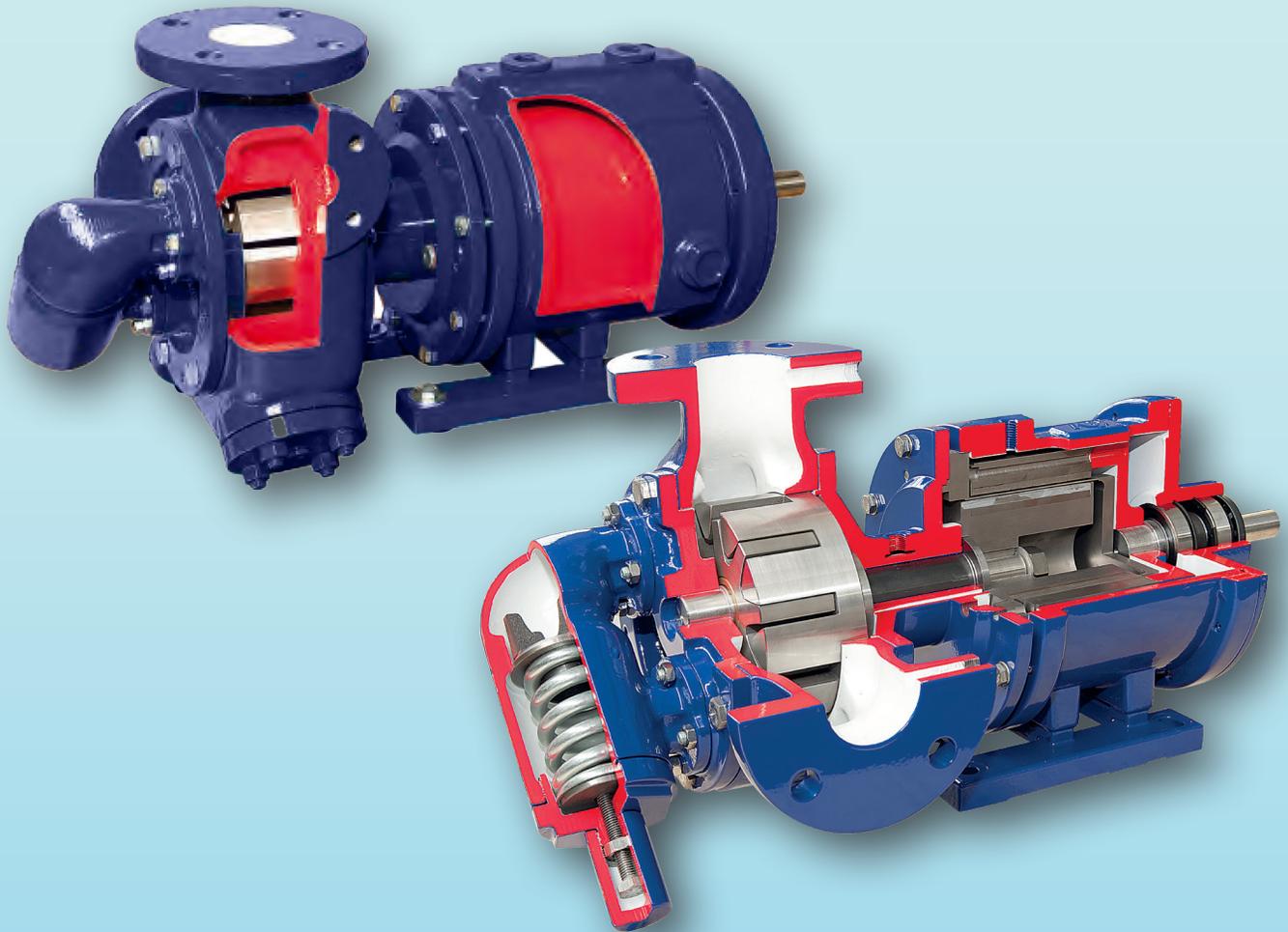


SAX  **MAG**

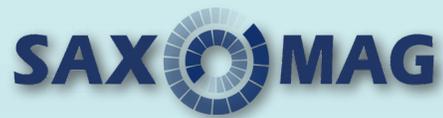


**INTERNAL GEAR PUMPS
WITH MAGNETIC COUPLING**



History of SAXMAG

- 1994 Foundation of the company IPV Industrie-Pumpen Vertriebs GmbH in Dresden. Managing partner's are Burckhard Tomiak and Maik Graumueller.
- 1996 Development of the first magnetic coupling for internal gear pumps.
- 1997 Major contract for delivery of 60 internal gear pumps with magnetic coupling SAXMAG from a chemical company in Leuna.
- 1998 Refinery plant is ordering internal gear pumps with magnetic coupling SAXMAG.
- 2002 ATEX certification for magnetic coupling SAXMAG 94/9/EG.
- 2007 Major contract for delivery of 70 internal gear pumps with magnetic coupling SAXMAG from a paint and varnish factory.
- 2011 IPV Industrie-Pumpen Vertriebs GmbH in Dresden – certified by the TÜV Sued as per DIN ISO 9001.
- 2012 Optimization of the magnet coupling SAXMAG and registration of SAXMAG ® as a brand name, number 010617249.
- 2014 All magnetic coupling SAXMAG is available with heating jacket.
- 2015 1100 magnetic coupling SAXMAG ® sold since 1996.
- 2015 Order for supply of 45 magnetic coupling SAXMAG ® for the US.
- 2016 Extension of the magnetic coupling SAXMAG ® with 1200-1900 Nm.
- 2016 Test certificate in compliance with the ATEX directive 2014/34/EU.

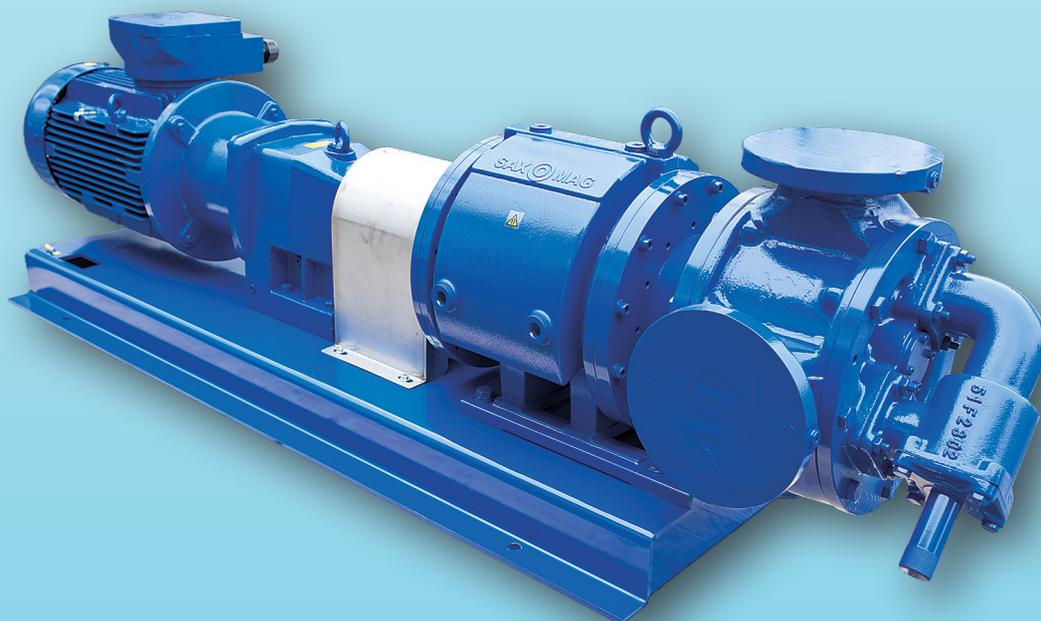


Why design pumps with a magnetic drive?

As a result of growing environmental awareness, process plants are designed and constructed in accordance with the latest health and safety regulations. These requirements are strengthened by national and international directives and technical regulations such as ATEX-Directive 2014/34/EU. That is why we have developed pumps with a magnetic drive.

Advantages

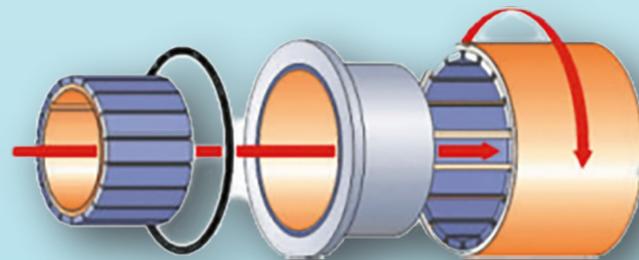
- no continuous shaft
- hermetically sealed
- meets the requirements of „TA-Luft“
- high operational reliability
- in conformity with ATEX
- maintenance-free



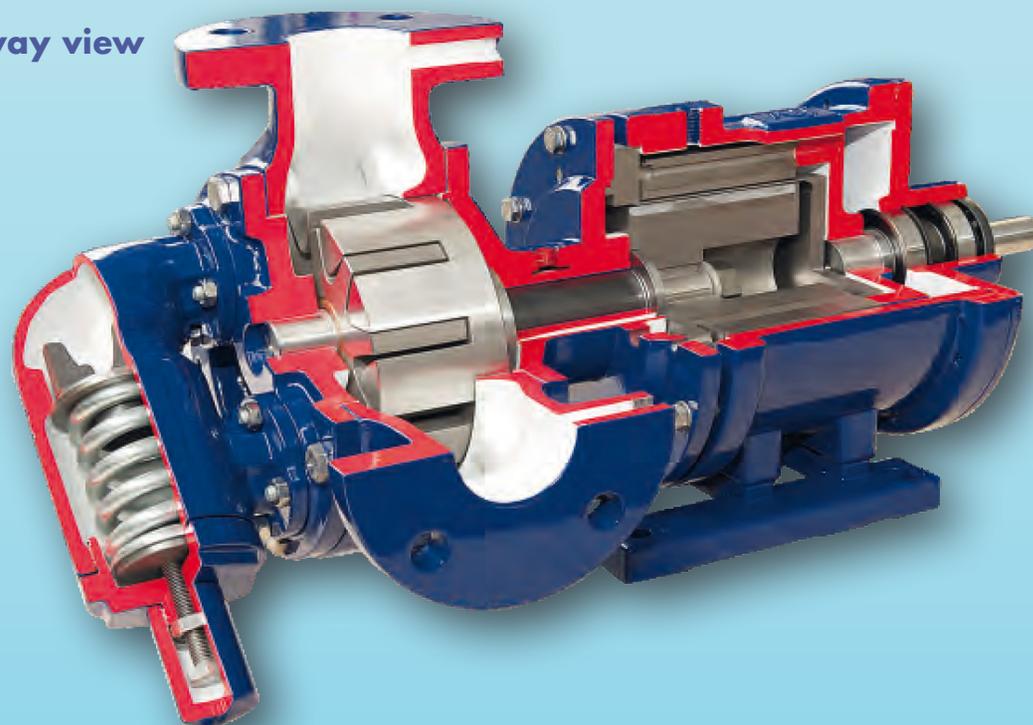
Internal gear pumps, V series

Construction of the magnetic coupling

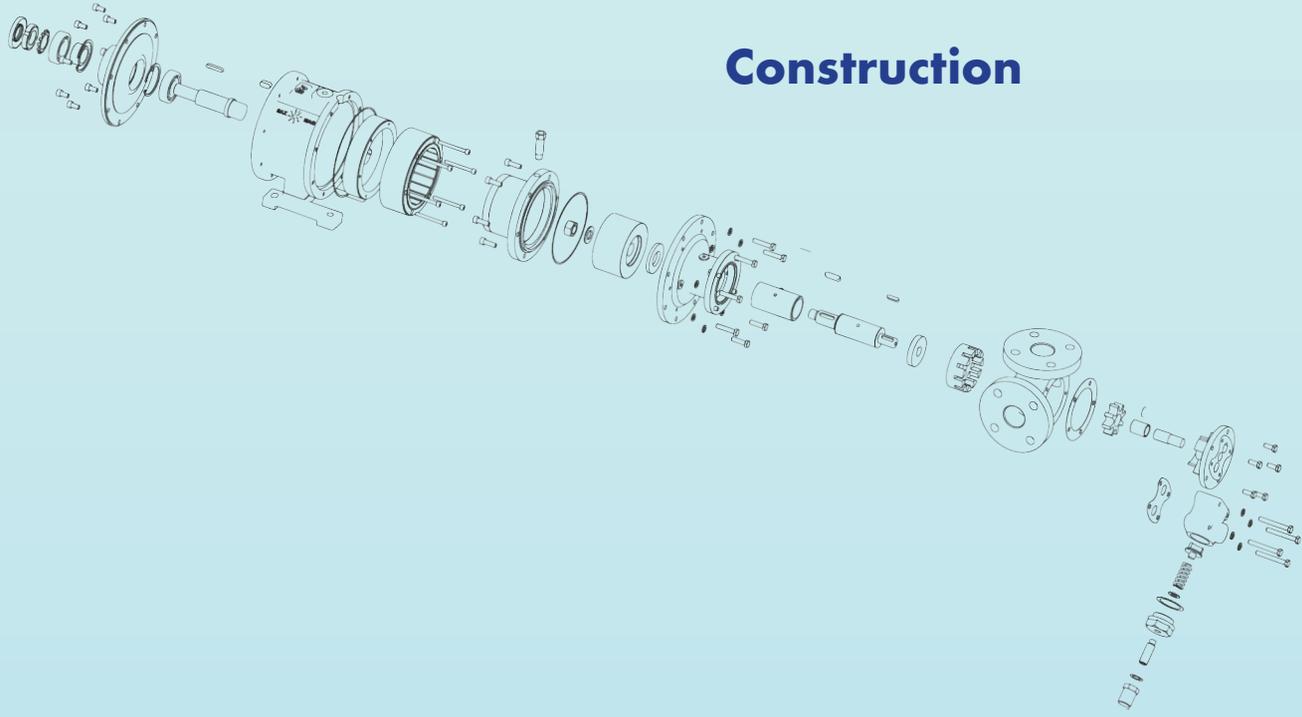
The magnetic coupling is used for contactless torque transmission. Its advantage is that there are no physical connections. The coupling consists of an internal (rotor end) and an external (drive end) magnet, which are only separated from each other by a stainless-steel containment shell. The pump shaft of the magnetic coupling is of ceramic-coated stainless steel. It runs in a carbide sleeve bearing, which is lubricated by the fluid. The thrust washers on the rotor and internal magnet are of wear-resistant carbide. The heat generated by the eddy-current losses is dissipated through designated cooling and lubricating grooves. The magnetic coupling is completely leak-proof and maintenance-free, thus enabling savings to be made on maintenance costs.



Cutaway view



Construction



Standard foot for different pump types



Magnet casing 110-180 Nm



Foot 110-320 Nm

Magnet casing 320 Nm



Fluids pumped

Additives
 Petrol
 Bitumen emulsion
 Chloroparaffins
 Dispersions
 Epoxy resins

Points/ varnishes
 Isocyanates
 Adhesives
 Synthetic resins
 Solvents
 Methanol

Phenolic resins
 Sulphates
 Sulphuric acid
 Impregnating resins
 Vinyl acetate

Pump types

| Pump type | Connection DN | Flow rate m ³ /h (max) | Pressure bar (max) | Viscosity mPas (max) | Torque Nm | Temperature °C (max) |
|-----------|---------------|-----------------------------------|--------------------|----------------------|-----------|----------------------|
| V25-2 | 40 | 3,5 | 12 | 20.000 | 50-320 | 250 |
| V30-2 | 40 | 7 | 12 | 20.000 | 50-320 | 250 |
| V50-3 | 50 | 10 | 12 | 20.000 | 50-320 | 250 |
| V60-2 | 50 | 22 | 12 | 20.000 | 110-320 | 250 |
| V70-2 | 80 | 28 | 12 | 20.000 | 180-850 | 250 |
| V80-2 | 80 | 43 | 12 | 20.000 | 180-850 | 250 |
| V85-2 | 100 | 57 | 8 | 20.000 | 180-850 | 250 |
| V90 | 100 | 75 | 12 | 20.000 | 320-850 | 250 |
| V100-2 | 100 | 82 | 12 | 20.000 | 550-1500 | 250 |
| V120-2 | 125 | 120 | 8 | 20.000 | 850-1900 | 250 |
| V150-2 | 150 | 145 | 8 | 20.000 | 850-1900 | 250 |

V 25-2 (50 Nm)



V 30-2 Block (60 Nm)



V 50-3 (110 Nm)



V 60-2 (180 Nm)



V 80-2 Block (320 Nm)



V 100-2 (1500 Nm)



Examples of industrial applications





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