

Our range of services

- Manufacturing of permanent-magnet synchronous motors (FlexoDirect®), including controlled water-temperature regulation Cooliflex®
- End-to-end drive engineering from A to Z – complete project handling from calculation to manufacturing and commissioning
- On-site assembly service (24/7)
- Design of multi-motor drives
- Structural implementation of the drive setup
- On-site project planning and management
- Parts and assembly for water-cooling piping systems
- Fixture and tool construction
- Multi-body simulations (FEM) and fluid dynamics CAD-to-CAM and mobile CNC systems

Operating equipment

- Test benches for motors and gearboxes
- Mobile measuring, scanning, and analysis systems
- Professional paint shop
- CNC machining



We are here for you

Drive specialists for over 30 years



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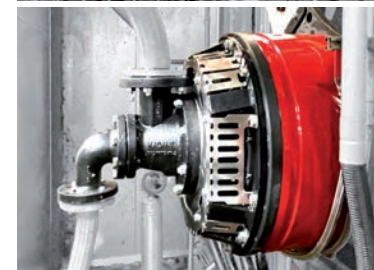
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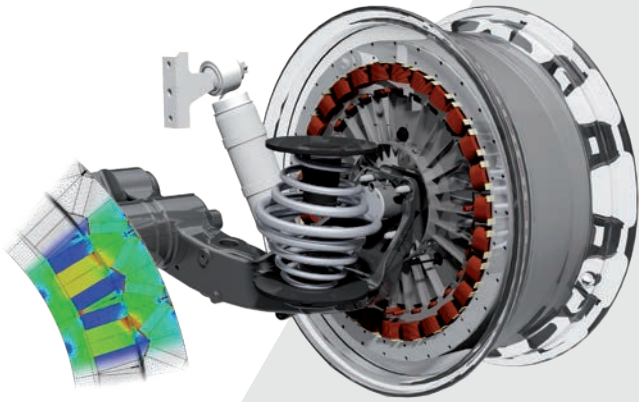
www.as-drives.com



Gearless drive technology FlexoDirect® Power Series

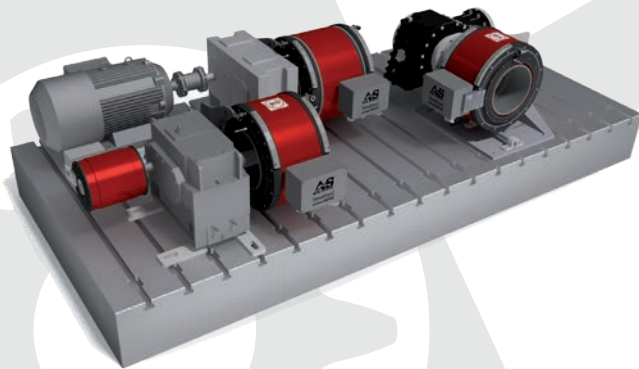


Design and calculation



- Nonlinear field calculation
- Manufacturing of polyphase winding systems
- FEM analysis of thermal processes
- Strength calculations (static/dynamic, linear/nonlinear FEM)
- Bearing calculations according to DIN/ISO
- Prototype and sample construction for industry, universities and research institutions

Test bench technology



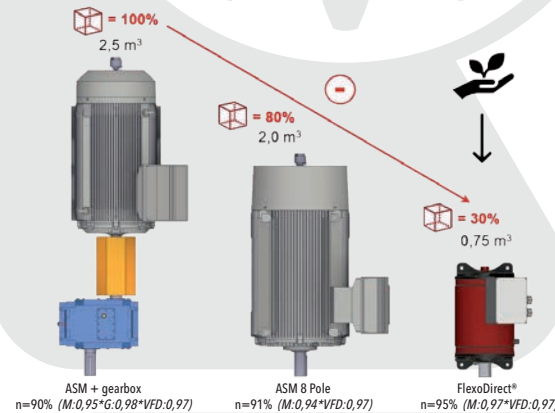
- In-house test benches (low voltage)
- Gearboxes and motors tested under load up to 100,000 Nm
- FAT and complete system commissioning (IBN) at AS Drives
- Commissioning at customer's site

FlexoDirect® Power Series



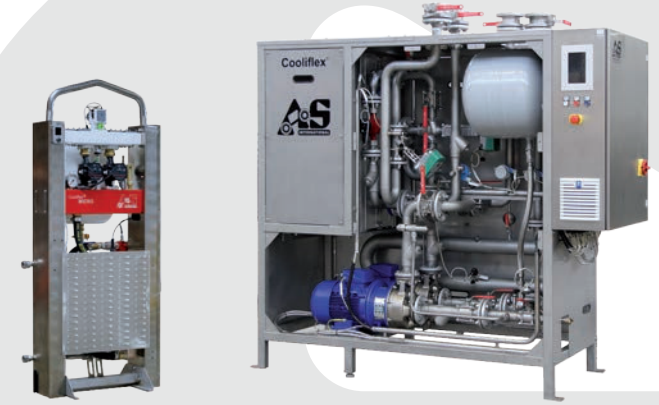
- Permanent magnet synchronous machines (PMSM)
- Center heights 150 to 600 mm
- Torque (S1) 0 - 100,000 Nm
- Voltage up to 690 V
- Available in foot, flange and hollow-shaft versions
- For special applications (high temp, IP-rated, vibration-resistant)
- Single and series production

Power density



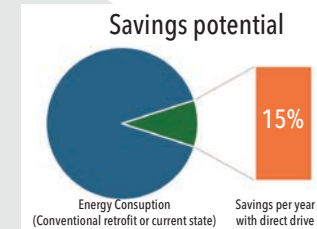
- ~70 % less installation space compared to conventional technology (gearbox and asynchronous motor)
- Fewer wear-prone components
- Highest efficiency
- High dynamics, low inertia

Cooliflex® temperature control



- Temperature control system for water-cooled motors
- System for creating a closed, flow-controlled water circuit
- Condition monitoring of all process parameters and motor temperatures
- Data connection via common bus systems
- Factory-tested: set up, connect, start

Energy savings



Return on investment

2 years

50.000 €

Savings per year with direct drive

100.000 €

One-time investment costs for FlexoDirect®

- Calculation of energy and saving potentials
- Determination of the Return on Investment (ROI)
- Reduction of maintenance and service effort
- Significant simplification of the drive train