

OUR STANDARD IS SPECIAL SOLUTIONS



**MOTOR TECHNOLOGY AND DRIVE SYSTEMS
MADE IN GERMANY. MADE IN SALZBERGEN.**





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THE COMPANY CEDS DURADRIVE.



From left to right: Ansgar Voss, Hans-Herrmann Krick, Marc Knief, Michael Machnitzke, Christoph Hülsing-Stroot, Günther Oehler



MADE IN GERMANY. MADE IN SALZBERGEN.

We have been producing durable and individual drive solutions for over 40 years. Founded in 1970 as SSB Antriebstechnik, we build for you continuous quality electric motors. Our motto is „Made in Germany. Made in Salzburg“. We tailor the motor to meet your individual needs in quantities from one to 1000. Thanks to high productivity we can do this in a very good cost-performance ratio.

We are recognized specialists for the customer-specific development of highly efficient electric drives and hybrid engines.

Synchronous or asynchronous motors, servo or DC motors, torque motors, air or liquid cooled - your individual needs decide.

CEDS DURADRIVE will find the solution for every application and drive for you. According to your requirements, we develop drives and generators from prototypes and single units to series motors.

We look forward to working for you and with you on drive solutions.


GÜNTHER OEHLER



OUR MISSION & VALUES.

CUSTOMERS.

- ✓ The individual needs and wishes of our customers form the basis of our actions. We love to meet this challenge.

WILLINGNESS TO LEARN.

- ✓ Only when we are willing to learn from our customers do we have the chance to develop the best solutions in the best quality for our customers. Thus we secure our organic growth.

TEAM ORIENTATION.

- ✓ Respect, honesty, helpfulness, competence and quality awareness are the most important foundations for team-oriented cooperation and ensure a positive corporate culture.

PROSPECT.

- ✓ We want to strengthen the success and competitive capacity of the CEDS Group by continuously optimizing our business processes as well as by merging and integrating suitable companies within the drive technology sector.



POWERFUL



PERSISTENT



FLEXIBLE



TOLERANT



LOYAL



RELIABLE

CORE COMPE

OUR STANDARD IS SPECIAL SOLUTIONS



TENCIES.



CORE COMPETENCIES.

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PROTECTION CLASS



PLANNING & CONSTRUCTION

MONITORING

Sensors for temperature, angular position, speed, vibration, electricity ...



ATTACHMENT PARTS

Brakes, Encoders ...



APPROVALS

Atex, Germanischer Lloyd, Lloyd's Register, Buerau Veritas ...



FORM FACTOR



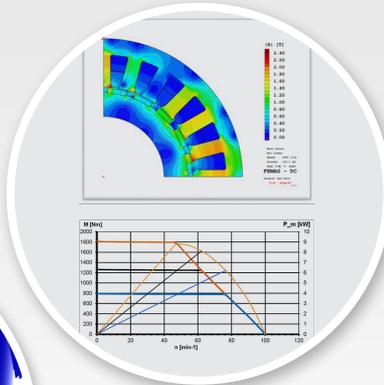
MECHANICAL CONNECTION



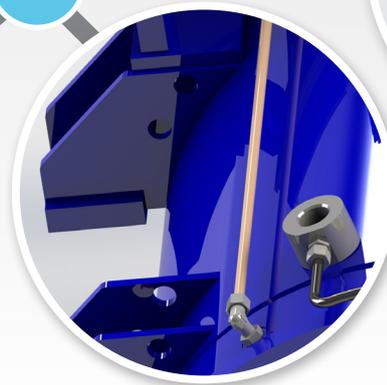
ELECTRONIC CONNECTION
Cables / Connectors ...



MOTOR DESIGN
Characteristics / Overload capacity



COOLING TYPE
Active-passive (air, oil, water)



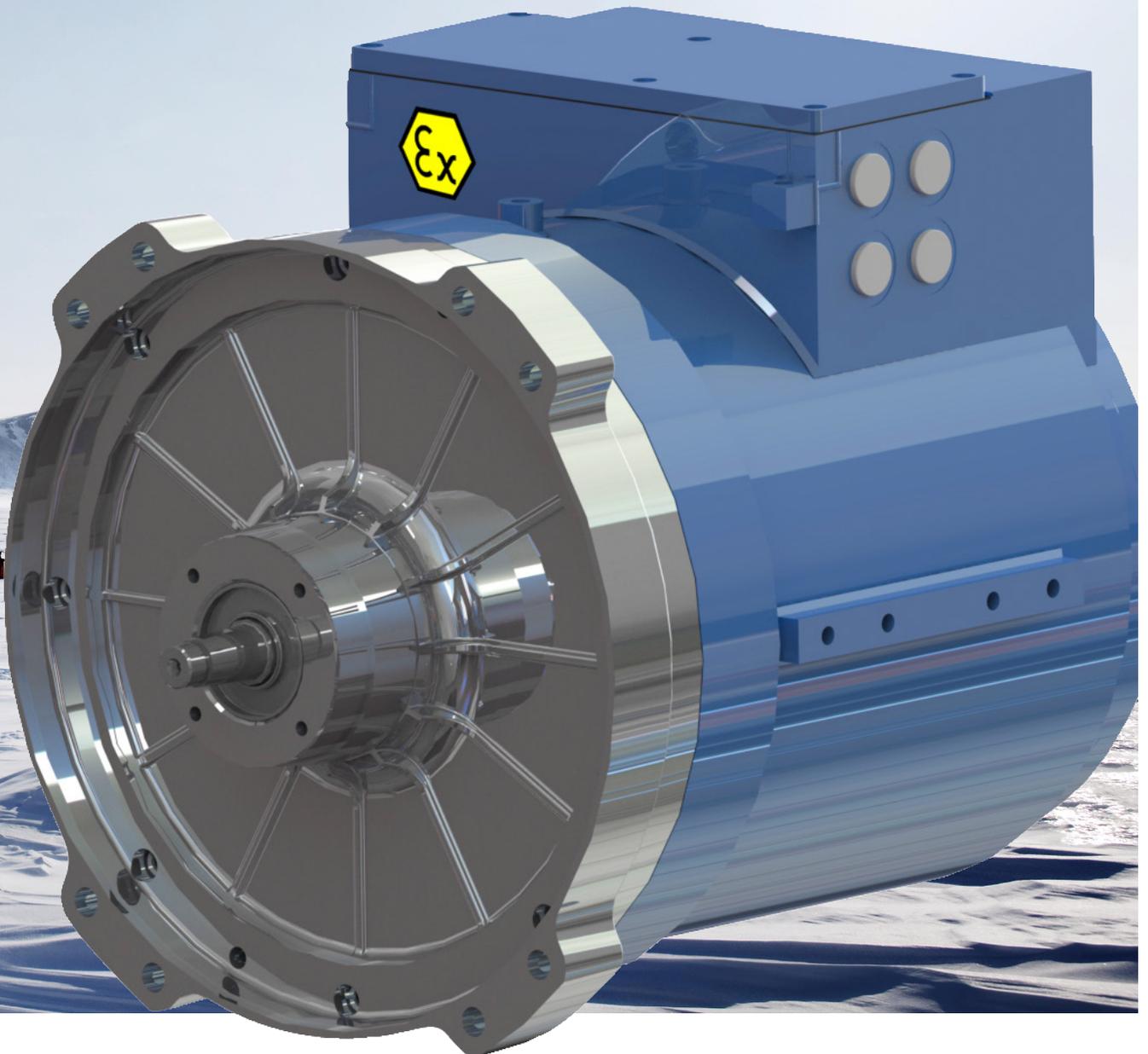
TECHNOLOGY

ASYNCHRONOUS, SYNCHRONOUS, TORQUE, SERVO,



ES.

DIRECT CURRENT AND GEARED MOTOR



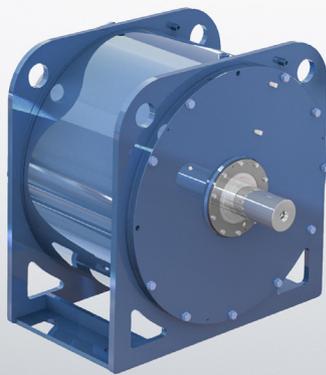
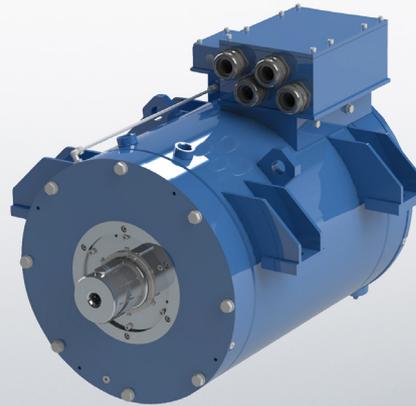
TECHNOLOGIES / APPL

DRIVES & GENERATORS.

ASYNCHRONOUS

Areas of application:

- conveyor technology
- fans and air conditioning
- compressors
- pumps
- mixers and kneading machines
- hoisting technology
- machine tools
- travel drives



SYNCHRONOUS

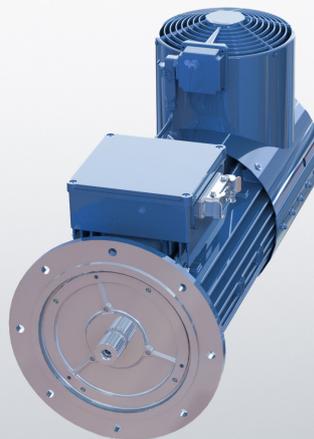
Areas of application:

- paper industry
- cleaning facilities
- belt drives
- synchronism
- parallel operation w/o feedback

DIRECT CURRENT

Areas of application:

- wind power industry
- textile industry

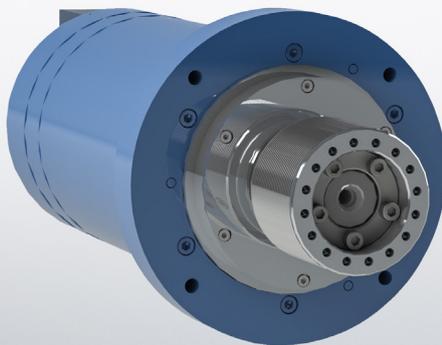


APPLICATIONS

TORQUE

Areas of Application:

- radar systems
- rotary plate for machine tools
- powerful rotary drives
- construction machinery
- tunnel boring machine



SERVO

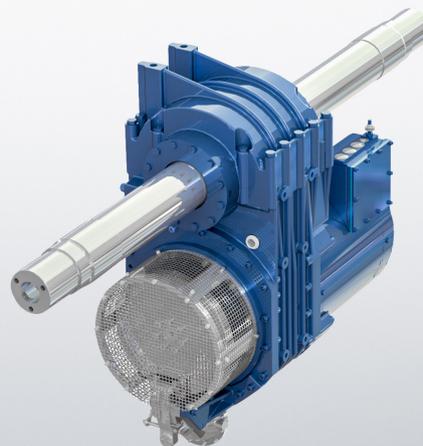
Areas of Application:

- machine tools
- for very limited installation space
- compressor / extruder
- highly dynamic applications
- travel drives

GEARED MOTORS

Areas of Application:

- cleaning facilities
- rail vehicles
- conveyor technology
- textile industry



DRIVES & GENERATORS

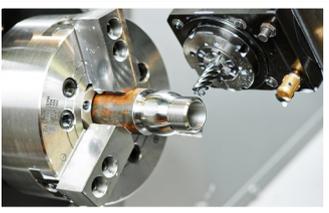
TECHNOLOGY COMPARISON.

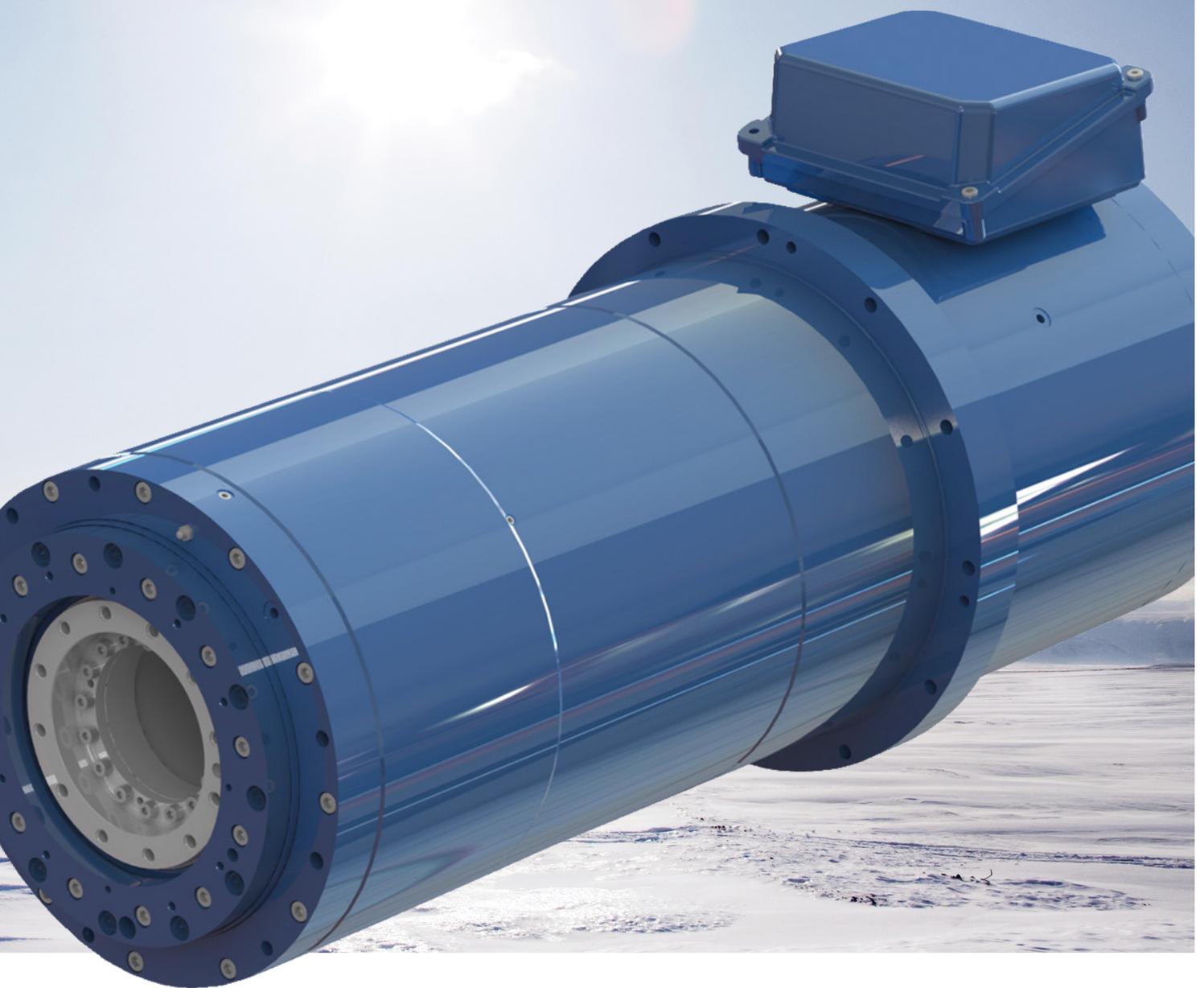
DRIVE MOTORS			
PARAMETERS	SYNCHRONOUS	ASYNCHRONOUS	SERVO
POWER [P]	up to 1MW	up to 600 kW	up to 100 kW
ROTATIONAL SPEED	up to 20.000 rpm	up to 30.000 rpm	up to 20.000 rpm
VOLTAGE	0 - 500 VAC	0 - 500 VAC	0 - 500 VAC
TORQUE	1 Nm - 10 kNm	1 Nm - 10 kNm	1 Nm - 10 kNm
EFFICIENCY	up to 97 %	up to 95 %	up to 98 %
TORQUE DENSITY	high	good	high
ADVANTAGES	<ul style="list-style-type: none"> + light and compact design + efficient in relation to size + high efficiency with small rotational speeds + grid operation possible 	<ul style="list-style-type: none"> + cost-effective + very long service life + low maintenance + high rotational speed + can deliver 3 times the rated power for a short time 	<ul style="list-style-type: none"> + high positioning accuracy + high acceleration capability + light and compact design + efficient in relation to size
LIMITS	<ul style="list-style-type: none"> - frequency inverter required for rotational speed variance - limited rotational speed due to rotor design 	<ul style="list-style-type: none"> - size - no braking torque in case of power failure - no speed stability without feedback system 	<ul style="list-style-type: none"> - frequency inverter required - limited rotational speed range - design - peripheral costs (peripheral devices)

S

			GENERATORS
AC/DC	TORQUE	DIRECT CURRENT	A-/SYNCHRONOUS
up to 1 MW	application-specific	up to 20 kW	up to 500 kW
up to 1800 rpm	application-specific	application-specific	up to 1.800 rpm
0 - 500 VAC	0 - 500 VAC	0 - 500 VDC	application-specific
up to 20 kNm	up to 20 kNm	application-specific	application-specific
up to 97 %	application-specific	application-specific	up to 97%
high	very high	low	high
accuracy	+ very high torque	+ direct battery emergency operation in	+ high efficiency (synchronous)
capacity	+ compact design (packet lengths)	case of power failure	+ rotational speed independent of load
design	+ high positioning accuracy	+ high starting torque	(synchronous)
size			+ low maintenance
required	- expensive periphery	- relatively maintenance-intensive	- expensive permanent magnets
needed due to rotor	- peripheral costs (permanent magnets)	- limited rotational speed due to collector	necessary
permanent magnets)		- limited efficiency	- increased acquisition costs
			- peripheral costs (permanent magnets)

INDUSTRIES.





INDUSTRIES AND THEIR APPLICATIONS.



RENEWABLE ENERGIES

Safety and controllability of drive technology play a major role in wind energy. For this reason, DC motors are still traditionally used.

In the field of water energy, the efficiency of the generators is still essential.

For this reason, gearless permanent magnet synchronous generators are predominantly used here.



TRANSPORTATION ENGINEERING SPECIAL ELECTROMOBILITY

We provide a robust power development designed to meet or exceed safety standards.

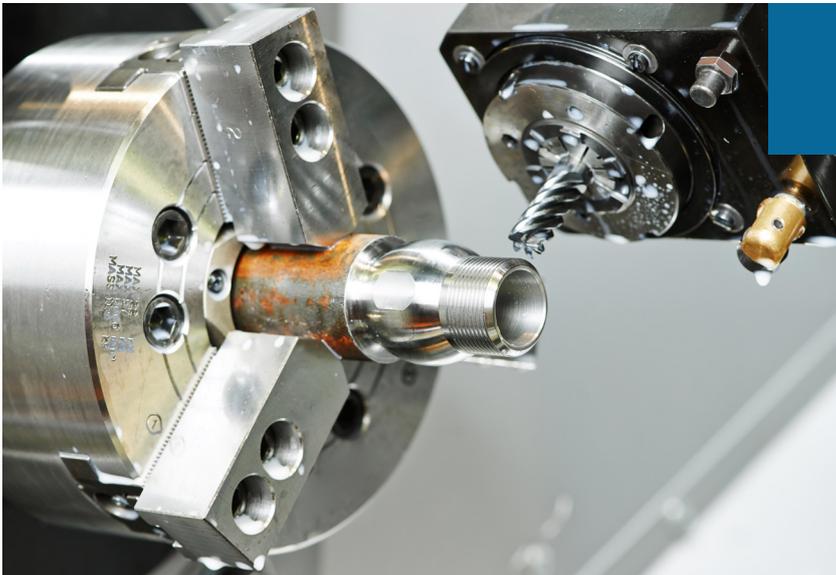
Special gears and drive units are often required.

Mostly high-performance gear units are flanged to the motor.



Different industries require different needs for the respective drive technology. Safety, efficiency, compact dimensions, high rotational speeds or power development are factors that need specification for a drive. Each drive is specifically designed and constructed to meet your exact needs.

With our know-how from over 40 years of product and industry experience, we plan, design, develop and produce a wide variety of specific customer solutions. We offer you the perfect drive for your industry and application.

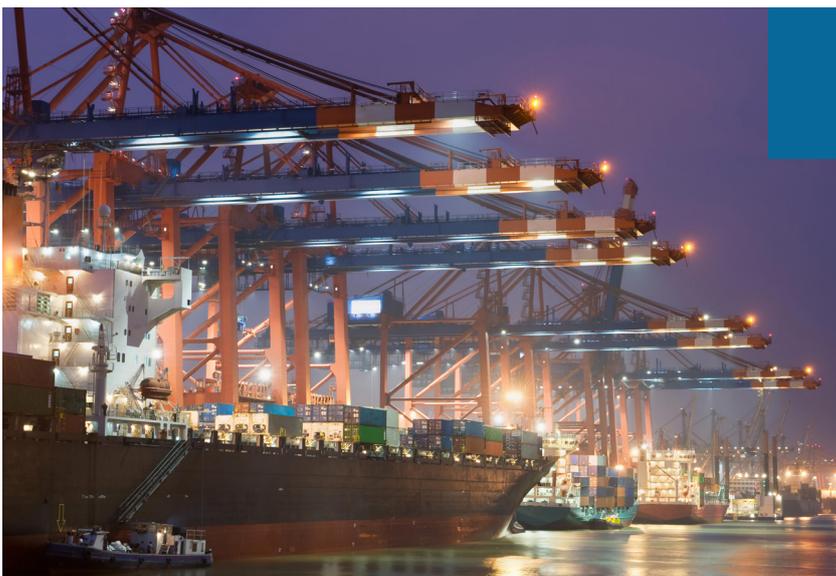


MACHINE TOOLS



When drives are used in machine tools, factors such as high rotational speeds, compact dimensions and thermal robustness play a major role.

In order to meet those needs, liquid-cooled synchronous servo motors are used almost exclusively.



HOISTING TECHNOLOGY



High conveying speeds, short-term overload capability with energy efficiency at the same time represent a particular challenge in crane technology.

These requirements are met by modern asynchronous motors, which are also designed with a high power reserve.

INDUSTRIES AND THEIR APPLICATIONS.



MARINE SHIPBUILDING

Today, efficient synchronous drives are linked to the ship's diesel engine. This results in state-of-the-art hybrid systems.

The servo drive technology used here is characterized by a high power density, energy efficiency and compact design.



DEFENCE

In radar technology, high torques, acceleration capability, position accuracy, low weight and a compact design are required of the motor.

Modern and compact torque drives cover these specifications perfectly.



OF COURSE
WE ALSO OFFER SOLUTIONS
FOR YOUR INDUSTRY.



PLEASE ASK US!

CONTACT

WE ARE HERE FOR YOU.

Developing solutions together with our customers is our constant focus. Together we can achieve the goals we have set with you. Together can we learn from each other, grow and develop further. Where others reach their limits, you can rely on us 100% to go further, supporting you as a company with our core competencies, so that your specifications for individual drive technology are fulfilled.

We would love to get to know you!



GÜNTHER OEHLER

CEO

**“You don’t have to see the perfect drive.
But it’s reassuring to know it’s there.”**

Günther Oehler



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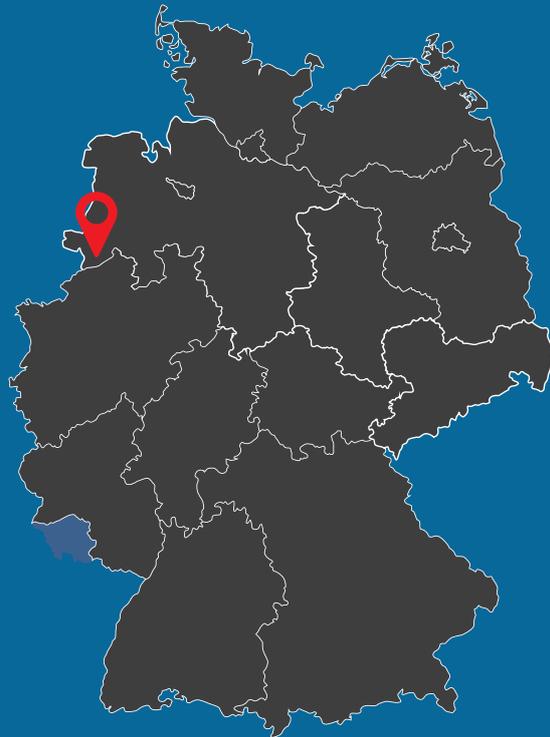
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