GROSCHOPP

Drives & More

Sustainability through Quality

ELECTRICAL DRIVES FOR THE FUTURE

Durable. High Quality. Reliable.





„Groschopp is committed to success and sustainability. We manufacture electrical drives tailored to customer demands, ensuring the highest quality and service in accordance with applicable requirements. Our durable, energy-efficient and high-quality electric motors, reducer gears and controllers are optimised to meet any requirement or specific customer demand. We offer customers the complete solution tailored to their business needs. Throughout the entire enterprise, we ensure a sustainable process and application. Customer requests are processed in close collaboration with the client. We strive to ensure the best customer satisfaction experience..“

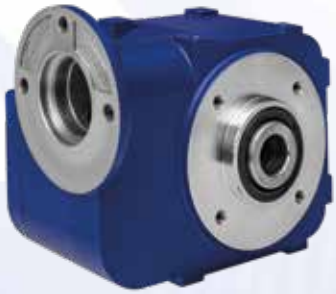
Wolfgang Pflug, MBE, CEO Groschopp AG Drives & More.

DRIVES & MORE

The spectrum of electric drives and components ranges from mechanical and plant engineering to a successful implementation according to customer specifications.
With the additional slogan Drives & More we prioritise on delivering more than standard drive techniques. Groschopp is a CEM manufacturer, providing application-specific Plug-and-Play solutions. Every drive is individually designed to suit its particular application. In addition, Groschopp offers comprehensive and qualified advice and much more – from development and design, via proto- type manufacturing with following testing, to final assembly, with subsequent serial production and commissioning.

THE PRODUCT PORTFOLIO COMPRISES:

GEARBOXES





ELECTRIC MOTORS







DRIVE CONTROLLERS



INDUKTIONSMOTOREN / AC-MOTOREN

Strong performance in the smallest possible space

AC Motors are alternating, or three-phase-current electric motors designed to achieve the highest demands in any industrial environment. They comprise a high economic efficiency, high power rating, reliability and minimal wear and tear. The robust AC Motors manufactured by Groschopp have been satisfying such demands for more than 75 years.
All drives have longevity and are maintenance-free; their low power consumption characterises, offering the highest power density in the smallest possible space.
Diverse mechanical and electrical adaptations as well as various surface coatings provide further application possibilities. In addition, the asynchronous motors of the IG-model range can be combined with various reducer gears and/or peripheral frequency converters.

Housed AC motors



- Closed housing
- Immune to detrimental environmental influences
- Convective/internal or external cooling
- Individual coating possible
- International Protection classes up to IP65

P:	up to 1.650 Watts
n:	up to 22.000 min^{-1}
U_v:	230 V – 400 V
f =	50/60 Hz
M:	up to 3,7 Nm

Built-in AC motors



- Sustained and versatile drive solution
- Seamless integration in any application
- Adaptable for various demands
- Robust, service-free and durable

P:	up to 1.250 W
n:	up to 22.00 min^{-1}
U_v:	230 V – 400 V
f =	50/60 Hz
M:	up to 4 Nm

Housed AC motors as Standard



- Simplified Design
- Convective/internal cooling
- High Power Output in the smallest possible space
- International Protection class IP54
- Optional available with B14-IEC-flange

P:	up to 600 W
n:	up to 2.850 min^{-1}
U_v:	230 V – 400 V
M:	up to 2,51 Nm

DC MOTORS

High precision and fast operational mode

Every time electrical energy has to be converted into mechanical energy, the DC motors made by Groschopp offer countless advantages. They are easy to install, have a high starting torque, a high-efficiency factor and a large range of rotational speed control.

They can be accelerated quickly from zero to maximum speed and can be automatically stopped at high speed without any need for external electronics depending on the application.
Every DC Motor made by Groschopp is equipped with a carbon brush set, and these DC Motors are individually configurable, thus offering a wide range of applications.

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Housed DC motors



- Precise and accurate mode of operation
- Constant running across the entire controlling range
- Solid, compact housing made of Al-casting, easily serviceable
- International Protection class IP44

P: up to 1.600 W
n: up to 20.000 min $^{-1}$
U_V: 24 V – 220 V
M: up to 5,1 Nm

Built-in DC motors



- Easy installation
- Good initial breakaway torque
- Individual adaptation of drive shaft and flange
- Single-pole reversible to some extent for uncomplicated adaptations

P: up to 1.600 W
n: up to 28.000 min $^{-1}$
U_V: 12 V – 220 V
M: up to 5 Nm

Permanent magnet motors



- Premium-quality magnet material
- High-efficiency factor
- Compact built, lightweight
- Extensive controllable speed range

P: up to 450 W
n: up to 5.000 min $^{-1}$
U_V: 24 V – 205 V
M: up to 2,39 Nm

SERVOMOTORS

Compact, Dynamic and precise

The active core elements of electronically commutated servomotors – namely the Black Panther® series – have been rigorously optimised, spearheaded by a modern single-tooth winding. In that way, the power density could be increased 2 to 3-fold compared to conventional servomotors. A constant torque is achieved when operated with a servo regulator.
Servomotors conform to the highest requirements regarding torque, dynamics and accurate positioning and are compactly designed. In addition, they can withstand extreme overloads and are available in stainless steel on request. In short, they represent an individually adaptable, sustainable and reliable drive solution for miscellaneous applications.
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Servomotors



- Brushless design, no sparking
- Able to withstand high overloading
- Optimal control of angular positioning, speed and acceleration

P:	up to 2.300 W
n:	up to 9.000 min $^{-1}$
U_V:	325 V – 560 V
M:	up to 21 Nm

BLDC-Motors



- Brushless DC motor
- Configurable using construction kit
- Optional available with integrated controller
- No sparking or dust formation
- Low maintenance requirements and long lifetime
- High speed, low power consumption and low heat development

P:	up to 650 W
n:	up to 12.000 min $^{-1}$
U_V:	24 V – 48 V
M:	up to 9 Nm

STAINLESS STEEL MOTORS

Robust drives for tough environments

In production lines of food, chemical, and pharmaceutical industries aggressive cleaning solvents are often used which would be detrimental for conventionally designed drives. For many years, Groschopp has been developing stainless steel motors tailored for these branches resulting in extensive Know-How in this area. Groschopp integrates electric motors, whether DC, asynchronous or Servomotors, of every functional principle in stainless steel housings.
The technical characteristics of stainless steel drives are compatible with drives in aluminium housings when appropriate heat dissipation is applied. In addition, they have a superb cost-performance ratio. The electronically commutated servo motors can be optimally equipped with an integrated controller and reducer gear in a stainless steel housing. They are highly resistant to chemicals, and their international protection class of up to IP65 permits intensive cleaning. Special designs, adhering to hygiene-design criteria, are available on request.

ESK-Motors



- Compact, modular design
- High positioning accuracy
- Low noise operation
- Optional with reducer gear and controller

P: up to 350 W
n: up to 9.000 min $^{-1}$
U_V: 24 V – 560 V
M: up to 1,1 Nm

ESKH-Motors



- Developed by EHEDG-guidelines
- Robust and easy to clean
- Highly resistant against chemicals
- IP69K
- Optionally available with integrated planetary gear
- Optionally available with integrated controller

P: up to 580 W
n: up to 6.000 min $^{-1}$
U_V: 24 V – 560 V
M: up to 100 Nm

ISKH-Motors



- DC or AC motor
- Robust and easy to clean
- At optimal cost
- Optionally available with external cooling (water or compressed air)

P: up to 220 W
n: up to 10.000 min $^{-1}$
U_V: 24 V – 560 V
f = 50/60 Hz
M: up to 0,8 Nm

GEARED MOTORS

Modular design kit for customer-tailored drive solutions

Groschopp offers from one source a vast selection of reducer gears attached to three-phase, DC, and servo motors. The modular gear motors with either spur wheel, worm, planetary or a combination of reducer gears can be adapted to suit any individual operational requirement and offer customer-tailored drive solutions for every application..

S-gearboxes spur wheel gearboxes



- excellent efficiency factor
- motor-shaft coaxial or parallel to gear output shaft
- heavy-duty design
- compact construction
- foot- or flange-mounted

M: up to 15 Nm
i: up to 996
η: up to 87 %

Vario-gearboxes single-stage worm gearboxes



- modular structure
- a hygienic design
- flexibly adaptable
- also available in stainless steel
- foot- or flange-mounted

M: up to 50,5 Nm
i: up to 80
η: up to 87 %

Z-gearboxes compound two-stage geaboxes



- for high ratios (20:1 up to 1,500:1)
- compact construction
- low noise operation
- foot- or flange-mounted

M: up to 60 Nm
i: up to 1.500
η: up to 60 %

ZK-compound gearboxes combined two-stage gearboxes



- combined worm step and spur wheel step
- for high ratios (25:1 up to 690:1)
- high loading capacity
- high-efficiency factor
- low noise operation
- available in aluminium or stainless steel
- foot- or flange-mounted

M: up to 50 Nm
i: up to 690
η: up to 87 %

PLZ-gearboxes planetary gearboxes



- single-, double- or triple step
- planetary gearboxes in five design sizes
- highest torque density
- high torsional strength and overload capability
- low moment of inertia

M: up to 500 Nm
i: up to 1.000
η: up to 94 %

CONTROL SYSTEMS | CONTROLLERS

Versatile functions for various applications

Groschopp offers control systems and controllers for various applications. The portfolio comprises switchboard control systems and high-efficiency peripheral servo-controllers which are continually developed further and adapted to meet any particular customer demand. They are synchronised to precisely match the servomotors made by Groschopp and they can be combined with motors of the model ranges Black Panther® or Silver Line® which are distinguished by their low torque of inertia, subsequent high dynamics and a high power density.

RBD-S+



- operation as high-performance speed-torque- or positioning controller
- can be operated intuitively using App
- optional with Bluetooth-interface
- extensive control functions guaranteeing smooth and time-optimised operation

P:	up to 1.000 W
P_{max}:	up to 2.000 W
U_V:	230 V
U_Z:	325 V
I:	up to 7 A

RBD 325-4/6-S



- Compact built
- closed housing (IP20) for assembly inside a control cabinet
- operation as torque controller, speed controller, or positioning controller
- high-quality precision control using top quality components

P:	up to 500 W
P_{max}:	up to 1.600 W
U_V:	230 V
U_Z:	325 V
I:	up to 4 A



LEADER IN TECHNOLOGY THROUGH RESEARCH & DEVELOPMENT

Groschopp considers experience, passion and the talent of every staff member as the most important support for its market success, and these attributes are fostered through purposeful training and professional development courses. In addition, Groschopp invests permanently in research & development, creating a basis for innovative products and integrable, customer-tailored drive solutions. The departments of R&D, design, production, product management and sales are working hand in hand at Groschopp. Individual staff members are in regular contact with customers to coordinate activities and products with the individual customer demands.





Software tools and analysing methods like FEM and CAD enable exact planning and development which paves the way to calculate the required electrical drive design beforehand and simulates any mechanical load, temperature rise, or magnetic induction.

Groschopp achieves sustainability through quality by demanding the most stringent quality and supply standards from suppliers and throughout the manufacturing processes.
A transparent delivery chain conforming to the law and the development of sustainable concepts along the value chain are obligatory.



MANUFACTURING ON DEMAND

Groschopp offers about 500 drive solutions, customer-tailored for various branches, and invests continuously in modern machines and equipment..

Advantages

- Speedy call-off of standard products available from a preferential type store and supplied by Groschopp representatives
- Short delivery times through an optimised supply chain, shop floor control and progress monitoring
- Fully automated winding production line for electronically commutated motors and fully automated production line for field coils and armature windings
- Semi-automated winding production line for the production of stators of asynchronous motors
- Manufacturing of drive components in a state-of-the-art machinery
- Support for the production of components and installation work on request
- Systematic long-time test for high-quality standards in a separate laboratory area





Objective

Efficient and quick production of electric drives from small batch to high volume as well as highest flexibility and quality – including special type production.

Groschopp stands for high-quality and sustainable drive solutions for many different branches. As a long-term partner of manufacturing systems and plant engineering Groschopp possesses intensive application Know-How and solution competence for the implementation of specificapplication.

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Face-to-face Consultation

Are you looking for a suitable drive for your application? Together we will find an efficient and sustainable solution.
Our application engineers are available to answer any questions you may have.

Individual Development

Our customers benefit from our individually tailored drive solutions from one source, providing perfectly coordinated components.

Prototype Manufacturing

We offer product development on request within a short time:
Not just for electric motors, but likewise for all other components shown in our drive-products portfolio.

Contact us! We would like to hear from you.

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