

## With ,Know-how' and **Passion**

Know-how and competency of the present-day Company are founded on nearly 100 years history of manufacturing motors and reducer gears. GROSCHOPP considers experience, passion and capability of its staff as one of the fundamental components of success and invests, therefore, intensively in systematic basic and further educational programmes. Customers as well as partners of GROSCHOPP both home and abroad inure the benefit of this qualified and dedicated team.





# Our Drive is Efficiency and Reliability

GROSCHOPP AG in Viersen was founded in the year 2000 as a result of company restructuring. Imbedded in this structure is a production site in China and company-owned subsidiaries both home and abroad.

The business activities comprise R&D, production and sales of innovative motors, reducer gears and controllers. Under the company motto "Drives & More" the firm offers not only customer-tailored drive solutions but also finishes these as a final application.

As an OEM-supplier the company develops drive units for use in specific applications. In these cases the drive units are designed and integrated directly at the application. Thus, both cost-reduction and improvement in efficiency can be achieved.

In addition, GROSCHOPP offers far-reaching qualified advice in both service and application.

#### Our customers are involved in the following sectors:

- **■** Energy distribution
- Medical engineering
- Foodstuffs industry
- Chemical and Pharmaceutical industry
- Measuring- and pump-techniques
- Automation techniques
- Conveyor techniques
- Textile-machine industry
- Robotic techniques
- Packing machinery
- Weighing techniques
- Hand-held motors

and lots more ...



# Our standards for your application

- Servo motors
- **■** Brushless DC-/AC-motors
- Induction motors
- **■** Permanent magnet motors
- Commutator motors

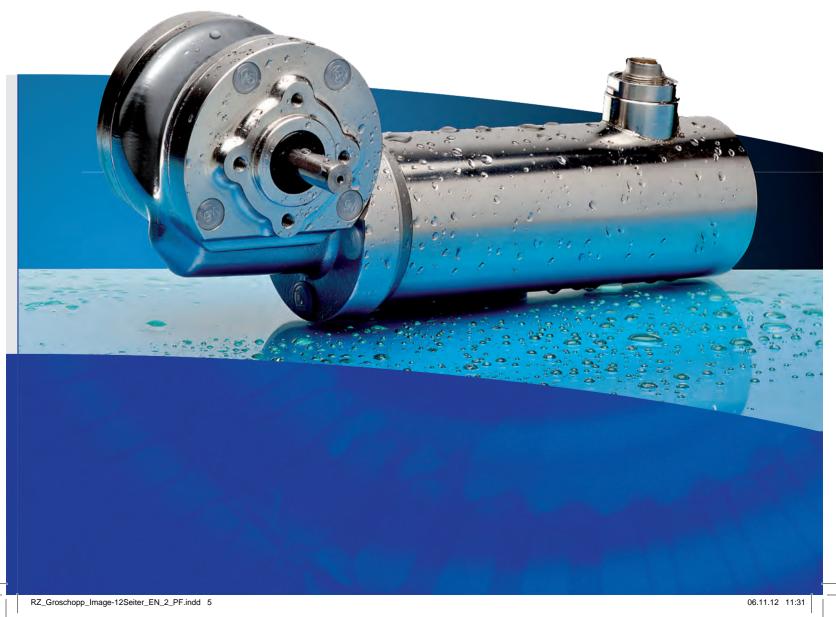
- Worm-reducer gears (single, twofold, threefold)
- Spur gears
- Bevel helical gearboxes
- Drive controllers (de-centralised or axially integrated)
- **Drive controllers** (externally)



#### Induction motors



Stainless steel drives



### Our applications....



## Energy distribution

- Low-, Medium- and High-voltage switchgear units
- Vacuum-switchgear units
- Stepping switchgear units for transformers



Chemical & Pharmaceutical /Measuring - & Pump-techniques

- Plastic checking equipment
- Granulate equipment
- **■** Extrusion machines
- Rubber- and plastic-machinery
- Compressors and pumps for vacuum
- Fluid technique
- Bottling plants



Medical techniques

- X-Ray equipment
- Centrifugal equipment
- Laboratory mills
- Laboratory compactors
- Plaster saws



Foodstuffs industry / Weighing techniques

- Grill equipment
- Honey extractors
- Egg-sorting equipment
- Butchery equipment
- Cheese-stirring machines
- Baking equipment
- **■** Cutting equipment

- Potting scales
- Processing scales
- Scales for foodstuffs-Packing



Packing industry / Conveyor techniques

- Bag-closing equipment
- Foil-packing machinery
- Beverage container packing machinery
- Labelling equipment
- Rope-factory equipment
- Conveyor equipment

- Drives for conveyor belts
- Conveyor belt weighing scales
- Belt conveyors
- Automatic drives for stock withdrawal

**Applications** 

Industry

## ... for your standard

**Commutator motors** 

Commutator with gear

**Permanent magnet** motors

**BLDC** motors







Induction motors \*

Servo motors \*

Induction motors\*

Induction motors\*









**Stainless steel motors** with gear

Induction motors\*

Servo motors \*

**Induction skeleton** motors









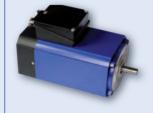
**Induction skeleton** motors

Induction motors\*

**Stainless steel motors** with gear

Induction motors\*









Induction motors\*

Induction motors\*

Servo motors \*

**Permanent magnet** motors









\* The drives can be produced in various coatings. DURNI-COAT®, HART-COAT®, SILA-COAT®. Brand name of AHC Oberflächentechnik GmbH.

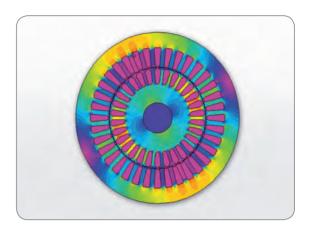
# Research & Development put in a nutshell

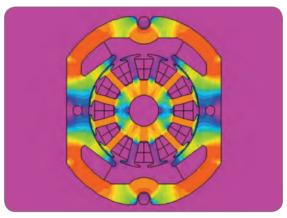
GROSCHOPP, being a High-Tech-Enterprise, considers inhouse-R & D as the foundation of their marketing success. For this reason, whenever developing new, innovative products or satisfying customer-tailored demands, a team of highly qualified staff members from the departments R & D, product design, production, product management and sales build the base for success and looks at and considers all various aspects from every possible angle. While doing so, they are in constant inter-communication with the respective customer in order to adapt service and products continually and promptly to any emerging demands.

By doing so, these specialists use most modern Software tools and analysing methods for exact simulation, planning and R & D. In this way the electrical designs are calculated in advance, mechanical loads, heat calculations and magnetic flux-distribution are simulated by means of 'Finite-elements' (FEM)-programmes and subsequently motor designs in 2-D and 3-D systems are executed. That is why customer-specific problems can be solved in a relatively short time.

These specialists are supported by the specifically furnished prototype-manufacturing and the laboratory. Hence, not only prototypes in the







classical sense can be produced, but also "rapidprototyping" for new designs as well as extensive tests and longterm examinations of such drive system during the development phase.

The development of own drives is founded on basic research, which is being used by GROSCHOPP in regular cooperation with renowned institutes and specialised companies of the newest technologies and results of the latest research.

## **Production** on demand

GROSCHOPP produces customer-specific drive solutions exclusively according to customer demands. Out of this there emerge approximately 500 drive variations of the highest quality level.

Standard products are available from a 'preferential types store' and can be had at short notice.

Thanks to an optimised supply chain, a 'Lean-Management-production'-system and an orderrelated collection system (BDI) all products can be supplied in a short time.

Components of all drives are manufactured on highly-modern machines and automised production assembly lines.

For instance, a fully automated winding line is available for electronically commutated motors, as well as a fully automated production line for field coils and armature windings for all other motors. This guarantees all customers efficient and speedy production of their respective products, be it for smaller or larger quantities, and the highestpossible flexibility in case of specific requests or demands.

Furthermore, a systematic endurance test is carried out in a separate run-in-area, guaranteeing the high quality standard of GROSCHOPP-drives.

Continuous investments in modern production equipment, e.g. CNC-manufacturing, windingcenters and assembly increase efficiency and flexibility.

The proximity to design and development frees up innovation potential in production. In that way, GROSCHOPP is one of the forerunners of the tooth-wound coil, which increases both efficiency factor and power density of the motor.



### Quality without Compromises

The highest demands are placed on drive units, not merely to fulfil technical requirements, but also to comply with accuracy and reliability.

In that respect, the highest quality is absolutely essential in branches like energy-, medical-, textile-, foodstuffs-, chemical-, pharmaceutical- and packing-techniques.

Customers will be satisfied in the long run by quality, technology, reliability, delivery, dependability, cost-effectiveness and dedicated service.

The success of the House of Groschopp is based upon this.

The thinking and actions of the entire staff is focussed on this goal. This is a fundamental principle for the teamwork within the House of Groschopp. That is why processes are continually improved with the aim of achieving a "Zero-fault" production. The ultimate ambition is to meet the customers expectations and requirements.





#### Continuous No-Limit Service

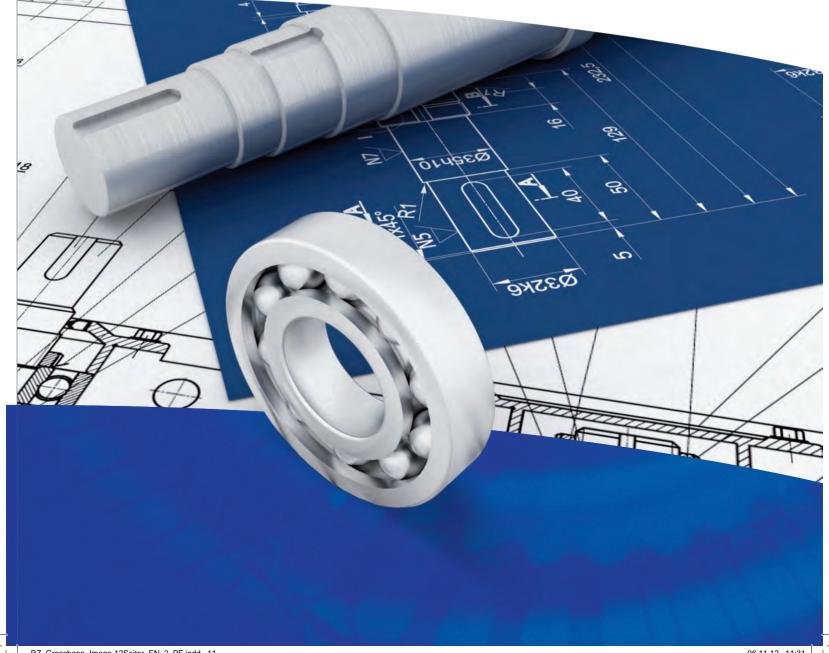
#### **Dual customer liaison and support**

In all marketing and sales activities of GROSCHOPP, the customer always takes centre stage. Thanks to well-founded analyses and detailed knowledge of demands and applications of customers the company is in a position to offer optimal solutions and products. Whether via GROSCHOPP direct or via numerous representatives locally, an extensive support service in the respective vernacular is guaranteed.

#### **Extensive technical support**

Whether for general enquiries or new development applications, our product managers, design engineers or R & D-team are always in close proximity to our customers.

Even at the initial installation customers are supported extensively.





#### Talk to us

# GROSCHOPP GROSCHOPP AG

#### **Drives & More**

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