NORD DRIVESYSTEMS – The company

Intelligent drive solutions since 1965
Since 1965, our family business has developed into one of the world’s leading complete suppliers of mechanical and electronic drive technology. We supply individual drive solutions and our innovations set global standards.

Our focus is to provide you with added value.
The Gear Unit

Our gear units have a high power density and are equipped with exceptionally strong bearings. This ensures high reliability, trouble-free operation and a long service life. Excellent production quality also ensures quiet running.

The Drive Electronics

Our motor starters and frequency inverters are compact, easy to commission and have a consistent programming/parameter structure throughout the range. A comprehensive selection of versions with scalable features and functions ensure that applications are efficiently fulfilled according to requirements.

The Motor

Our high-efficiency motors comply with the highest standards in all regions and therefore can be used globally. We offer drive solutions for the most diversified operating conditions: indoor and outdoor, hot and cold, high hygiene requirements, explosive environments, and more.
History

1965 G. Schlicht and G. A. Küchenmeister establish the company.

1977 Own gear production in Glinde.

1981 Invention of the UNICASE™: “Pioneering invention for the industry.”

1984 Own electronics production in Aurich.

1985 Austria

1986 Canada

1987 Belgium

1987 Italy: Motor factory and assembly

1988 UNICASE™ Invention for the industry.

1989 Denmark

1990 Start of global networking: “Global NORDnet ensure fast response capability and high flexibility.”

1991 Production of housings and shafts in Godebusch

1992 Spain

1993 Switzerland

1994 Great Britain, Czech Republic

1995

1996

2000 Product introduction of decentralized drive technology: “A significant benefit for many sectors.”

2001 Indonesia

2002 Product introduction of the NORD worm gear unit modules: “Top flexibility and fast availability.”

2003

2004 China: Production and assembly

2005 Poland: Gear production and assembly

2006

2007

2008 Australia

2009 Product introduction: NORD industrial gear units up to 242,000 Nm.

2010

2011

2013 Morocco

2015

2016

2017 NORDAC LINK

2018

2020 Product introduction of decentralized drive technology: “A significant benefit for many sectors.”

2021

2022

2023

2024

2025

2026

2027

2028

2029

2030

3,600 employees worldwide

540 Mio. EUR sales
Production facilities located in Germany, Italy, Poland, the USA and China

The latest technology for the production of gear units, motors and drive electronics

Highest quality standards at all facilities

Dependability, flexibility and always with a view to customer benefits

Production which is environmentally friendly and saves resources is of vital concern to the management:

Energy-saving thanks to high efficiency

Produced in environmentally and climate-friendly plants

We are considered to be a technological leader in the development and production of motors, gear units and drive electronics, and work to the highest quality standards. To dependably comply with these standards, we have set up a global network of production facilities for all drive components.

Our headquarters with its technology and logistics centre and offices is located in Bargteheide near Hamburg. In addition, we have seven production facilities in Germany, Italy, Poland, the USA and China. Whether it’s gear wheels, shafts, housings, motors or drive electronics – all components are produced in our own production facilities with great dependability and flexibility. We therefore offer our customers throughout the world the best possible quality, regardless of the location and circumstances.
Production

Global presence

- Subsidiaries in 36 countries
- Agencies in 52 countries
- Fast and reliable service in the national language, thanks to local contact partners

Global presence

Corona, California, USA
Charlotte, North Carolina, USA
Guarulhos São Paulo, Brazil

Brampton near Toronto, Canada
Vieux Thann, France
Zandhoven, Belgium

Hillegom near Amsterdam, Netherlands
Olis Aveiro, Portugal

Abingdon, Great Britain
Linz, Austria

Sabadell, Spain
Uppsands Väsby near Stockholm, Sweden

Tianjin, China
Seoul, South Korea

Guarulhos Sao Paulo, Brazil

Agencies also in:
- Croatia
- Morocco
- Norway
- Romania
- Slovenia
- Ukraine
- Vietnam
Our production features:

- Great depth of production
- All quality-relevant components from our own production
- State-of-the-art production engineering
- NORDPro (production and quality systems)

For our customers this means:

- Fast delivery
- High operational reliability
- Low maintenance

We have always placed the highest priority in quality, efficiency and economy in the development and production of gear unit components, motors and drive electronics. We use the latest production and quality systems, consisting of KAIZEN, 5S, Visual Management, Shopfloor Management and Quality Circles. On the basis of Lean Production, we are well on the way to Industry 4.0.

We have a great depth of production: all quality-relevant components of our drive solutions are produced in our own factories using advanced machinery and highly qualified employees. Our products therefore provide great operational reliability, low maintenance and an especially long service life.
Manufacturing

Our quality is based on:

- The latest production methods in all production facilities
- Qualified employees
- Global quality management
- DIN ISO 9001, DIN 3990, NIEMANN, AGMA, ATEX

For our customers this means:

- Dependability
- Safety
- Long service life for our products

With all of our products, our customers can depend on the very highest quality. We have the procedures, products and especially hold customer benefits in full view, in every phase of development and production.

Quality
Quality

Mechanical quality testing with networked measuring equipment

Automatic visual quality assurance of populated circuit boards - individual assessment by employees

Measurement of castings with 3D scanner

Acoustic chamber for noise emission testing

Application test area for testing of NORD drive solutions
From the three components - gearbox, motor and drive electronics - the NORD product package provides an optimal and individual drive solution. The modular products are perfectly matched and can be combined in many variants. In addition, we offer planning, project management, installation, and service from a single source. If desired, industry solutions can be configured as a complete logistics package, programmed and ready for use. Each of the modular NORD products combines: highest product quality, short planning and assembly times, high delivery availability, and a good price/performance ratio. Our products are also available in ATEX certified versions.
NORD is the only manufacturer which produces modular industrial gear units with an output torque of up to 250,000 Nm in a one-piece UNICASE™ housing.

- Foot or flange mounted
- Long life, low maintenance
- Optimum sealing
- UNICASE™ housing

### Geared motors

<table>
<thead>
<tr>
<th>UNICASE™ helical gear units</th>
<th>NORDBLOC.1 helical gear units</th>
<th>UNICASE™ parallel geared units</th>
<th>UNICASE™ bevel gear units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foot or flange mounted</td>
<td>Foot mounted, flange mounted</td>
<td>Foot mounted, flange mounted</td>
<td>Foot mounted, flange mounted</td>
</tr>
<tr>
<td>Long life, low maintenance</td>
<td>mounted or hollow shaft</td>
<td>mounted or hollow shaft</td>
<td>mounted or hollow shaft</td>
</tr>
<tr>
<td>Optimum sealing</td>
<td>mounted</td>
<td>mounted</td>
<td>mounted</td>
</tr>
<tr>
<td>UNICASE™ housing</td>
<td>UNICASE™ housing</td>
<td>UNICASE™ housing</td>
<td>UNICASE™ housing</td>
</tr>
</tbody>
</table>

### Industrial units MAXXDRIVE®

- All bearing contact and sealing surfaces are machined in one operation
- No separating joints in the housing, therefore no sealing surfaces subject to torque
- High-precision axis alignment, quiet running
- Long life, low maintenance
- Gear ratio range 5.0 to 400:1 with the same foot dimensions
- Parallel axis and right-angled gear units

### Sizes

<table>
<thead>
<tr>
<th>kW</th>
<th>Nm</th>
<th>i</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.12</td>
<td>10</td>
<td>1.30:1 - 14,340:31:1</td>
</tr>
<tr>
<td>37</td>
<td>3,300</td>
<td>1.07:1 - 456.77:1</td>
</tr>
<tr>
<td>120</td>
<td>100,000</td>
<td>4.03:1 - 6,016.79:1</td>
</tr>
<tr>
<td>1,5</td>
<td>15/20/25/30/40/50/75/110/150/190/250</td>
<td>8.04:1 - 13,432.68:1</td>
</tr>
</tbody>
</table>

### ATEX versions

NORD gear motors and industrial gear units are also available in ATEX certified versions.
## Drive electronics

### Functions
- High precision regulation with current vector control
- Compatible with all common bus systems
- 4-quadrant operation
- PLC functionality for tasks close to the drive unit
- Energy-saving function for partial load operation
- Control and parameterization tools and simple parameter structure
- Integrated line filter for compliance with EMC regulations
- Operation of asynchronous and synchronous motors
- Control and closed loop regulation
- POSICON – Integrated positioning mode and synchronization
- STO and SS1 – integrated functional safety
- Integrated brake rectifier for motor brake control

### Advantages
- Scalable functionality – flexible configuration and function
- High torque capability for every drive application
- Simple commissioning and operation

NORD drive electronics is available in ATEX certified versions.

NORD remains a solution provider for all types of soft starting. With integrated motor protection and reversing function for flexible integration into the system.

### Motors
- Energy-saving motors
- Switchable pole motors
- Single phase motors
- Smooth motors

Explosion protected motors
- Gas atmospheres
- Dust atmospheres

Special features
- Motors developed and produced by NORD
- We produce energy-efficient products for all parts of the world
- Products available at all international sites

### Nominal ratings:
- Power range up to 7.5 kW
- Wall or motor installation
- IP55, IP65

### Nominal ratings inverters:
- Power range up to 160 kW
- Control cabinet installation
- IP20

### Nominal ratings starter:
- Power range up to 3 kW
- Field installation
- IP65
- Lean Production: NORDPro production system at all locations
- Global network via ERP system
- Fully integrated and automated production control
- 100% transparent assembly
- RFID-controlled painting system
- Reliable delivery: orders are fully tracked
- Continuous development

For our customers this means:

- Future-proof products

We took the essential steps on the road to Industry 4.0 at a very early stage. For example: the networking of all our motor testers worldwide, the use of articulated arm robots since 1988 and the implementation of Lean Production in 2008. Our NORDPro production and quality system now controls processes worldwide. All factories are linked via SAP, each order starts an automatic system from the configuration of the product up to dispatch. Our objective is to make our processes even more efficient and also transparent for our customers. In cooperation with universities and institutes we develop new technologies for the further digitalization of production and logistics.
For our customers, we are represented on all five continents.

We are your reliable partner, 24 hours a day, 7 days a week.

From planning through production and assembly to service – we offer everything from a single source. We are experienced and complete suppliers of mechanical and electronic drive solutions and a dependable partner for our customers throughout the world in every phase of the project. We utilise our know-how and experience and from the first stages of development and conception. We orient ourselves to the individual requirements of our customers in their particular industries. During assembly and commissioning, we are only satisfied when everything runs smoothly – even if things are needed fast. Afterwards our service is available to our customers around the clock.
- Solutions for more than 100 industries
- Satisfied customers around the world
- Security from planning to commissioning
- Flexibility due to the world’s largest modular system

Our drive technology keeps things moving all over the world, safely and with flexibility: we offer a wide range of mechanical, electrical and electronic drive solutions for more than 100 industries. From the steel industry to logistics, from the food industry to handling of bulk materials — we have the necessary knowledge and offer both standardised and individually configured solutions for all areas. Our expertise is our knowledge gained over decades of experience in producing, processing and transporting industries. Customers around the world appreciate the efficiency, safety and reliability of our products.
Conveyor technology with networked drive technology for parcels in postal distribution centre

Drive solution for agitator technology

Drive solutions for the beverage industry

Drive solution for cable lifts

Drive solutions for breweries

Conveyor technology with networked drive technology for parcels in postal distribution centre
Satisfied employees are the key to our worldwide success.

We provide first-class working conditions at each of our sites:

- We focus on comprehensive occupational safety, individual training and advanced training options for our employees.

- Year on year we pave the way for many young people to enter the working world.
The myNORD portal provides quick and practical support for your day-to-day work.

- Simple, intuitive configuration of drive units
- All standard products with 3D models, dimension sheets and outline drawings
- Rapid order tracking in real time
- Immediate issue of proposals and offers

For our customers this means:

- Future-proof products

Via our myNORD customer portal we are available to our customers and business partners at all times. Information, configuration, ordering and checking: everything is possible around the clock. With our online service, customers can select their drive solutions, generate CAD models, view offers, check their order status as well as obtain information from electronic catalogues, manuals and brochures.

Register now at: my.nord.com
Technical complexity of product solutions

Size of enterprise
Headquarters:
GETRIEBEBAU NORD GMBH & CO. KG
Getriebebau-Nord-Straße 1
22941 Bargteheide
Tel. +49 4532 289-0
Fax. +49 4532 289-2253
info@nord.com

NORD Gear Corporation - United States
800 NORD Drive
Waunakee, WI USA 53597
Tel. 888-314-6673, Fax. 800-373-6673, info.us@nord.com

Member of the NORD DRIVESYSTEMS Group

© 2018 NORD Gear Corporation. All rights reserved. UNICASE is a trademark and NORD DRIVESYSTEMS and MAXXDRIVE are registered trademarks of NORD Gear Corporation.