Intelligent Drivesystems, Worldwide Services





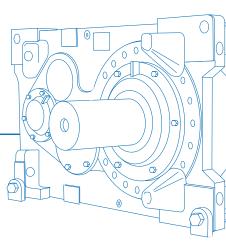




# Advantages of NORD industrial gear units

- Greater manufacturing precision due to FEM optimised, torsionally rigid housing
- UNICASE housing design up to 242,000 Nm
- Lower weight than jointed housing gear units
- Longer bearing life than with jointed housing gear units
- Various seal systems, e.g. Taconite
- Noise-optimised bevel gears (HPG/Wiener)
- Optional axial fan
- Greater reliability though the use of synthetic oils; lower maintenance due to longer oil life
- Modular system
- Option for attaching a flange-mounted pump (for oil supply to the bearings) for longitudinal inclination angles > 5° / and transverse inclination angles > 3°
- Symmetrical design. For conveyor systems (double drive) the gear units can be exchanged without conversion (see page 4)
- 2- and 3-stage gear units have identical dimensions, subsequent modification of the gear ratio is possible using the same housing, as the distance between the shafts remains constant.
- Additional oil-air cooler possible
- Optional torque-limited back stop (double drive unit)
- Additional modules can be attached to the standard housing (e.g. heater cartridges)
- Stock components (including spare parts) for short delivery times







## **NORD UNICASE design since 1981**

In the 1980s NORD DRIVESYSTEMS engineers developed the most important innovation in gear unit construction: the Complete machining in one step UNICASE concept, which unites all gear unit elements in a single closed housing. This innovative concept rapidly became established and is now standard. NORD is the only manufacturer which produces modular industrial gear units with an output torque of 242,000 Nm in a one-piece UNICASE housing.

- Single housing which integrates all bearings
- High output torques
- High axial and radial loads
- High reliability
- Long service life
- Quiet running

### Main fields of application

- Cranes and lifting devices







INDUSTRIAL GEAR UNITS (Catalogue G1050)		
<ul> <li>All bearing points and sealing surfaces are machined in one operation</li> <li>No separating joints in the housing, no sealing surfaces subject to torque</li> <li>High-precision axis alignment for quiet running</li> <li>Long life, low maintenance</li> <li>Short, compact design</li> <li>Gear ratio range 5.54 to 400:1 with the same foot dimensions</li> <li>Parallel axis and right-angled gear units</li> </ul>	kW	2.2 – 1,000
	kNm	25/30/40/50/74/101/141/242
	i	5.54:1 – 1,600.00:1 and larger

In addition to positive parallel key fitting, the gears also have a press-fit between the shaft and the hub. Standard shaft seals are NBR quality. Shaft seals made of FKM (Viton) are available as an

option. For special ambient conditions, other sealing systems such as gamma-ring seals, labyrinth seals and Taconite seals are available. In case of other specialised sealing requirements please contact us.





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# **Options and installation orientations**

## Monitoring devices and sensors

The following monitoring devices are available:

- Oil inspection glass
- Oil level glass
- Dipstick
- Pt 100 (temperature)
- Temperature sensor, PTC thermistor Motor Options
- Temperature sensor, bimetal switch
- Particle counter (oil)
- Water content (oil)
- Electrical contamination indicator for oil filter
- Visual contamination indicator for oil filter
- SPM nipple (vibration)
- Bearing condition monitor with evaluation unit
- Pressure monitoring (oil circulation)
- Special requirements on request

#### Temperature management

The following features are available:

- Fans, 3 options (Axial, radial or electric fans)
- External oil/air cooler
- External oil/water cooler
- Internal cooling coils (water)
- Heating cartridges

#### Sealing systems

- Single seal NBR/FKM
- Double seal NBR/FKM
- Dust protection seal
- Taconite seal (re-lubricated labyrinth seals)
- Gamma-ring seal, dust protection
- Special requirements on request

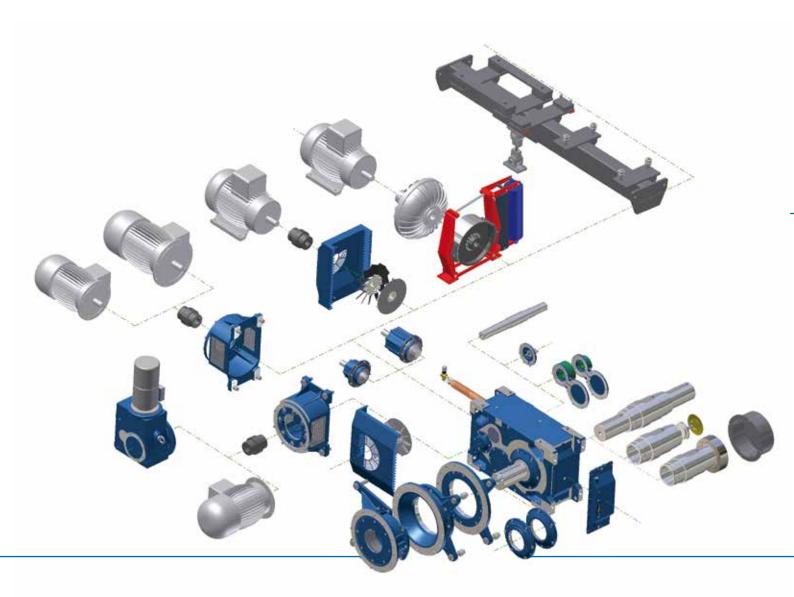
# 6 installation orientations

NORD industrial helical or bevel helical gear units can be mounted in 6 orientations without an additional adapter.

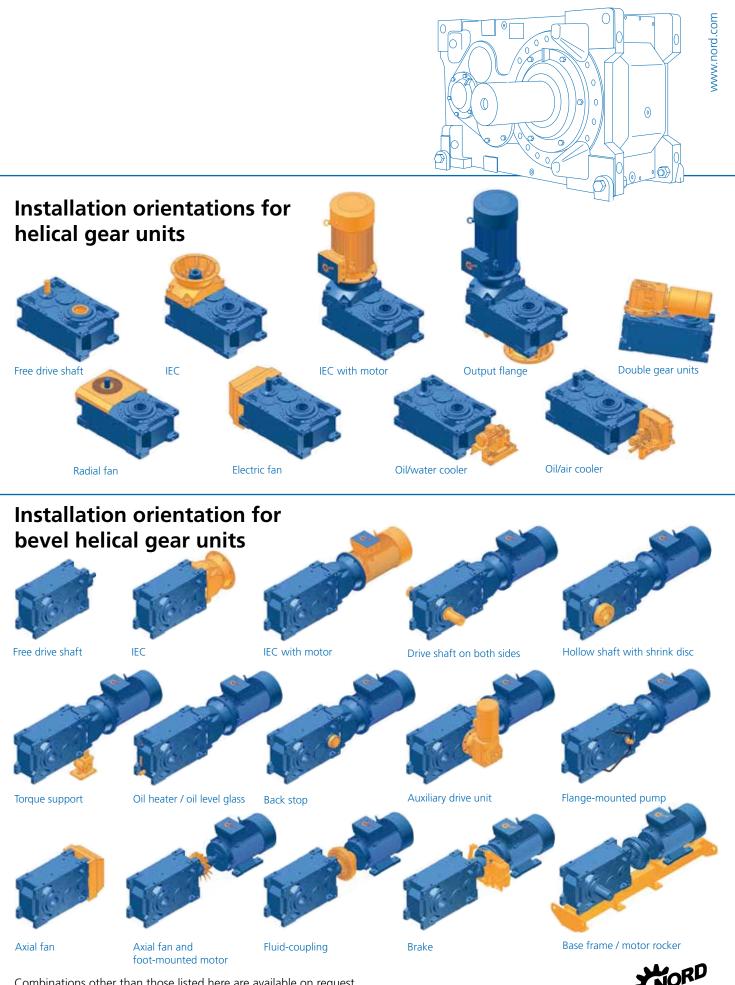


## **Industrial gear unit modules**

Users do not just need drive components, but rather complete solutions and functioning systems. Because of this, NORD DRIVESYSTEMS pursues a consistent system philosophy, which is reflected in the perfectly matched modules of our range of industrial gear units. The optimally matched individual components form the basis for a wide range of versions, great flexibility and short planning and installation times. This enables the drive solutions to be individually tailored to the customer's requirements with short delivery times, even for large gear units.







Combinations other than those listed here are available on request.

Industrial Gear Units

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DRIVESYSTEMS



#### Headquarters:

#### Getriebebau NORD GmbH & Co. KG

Rudolf-Diesel-Straße 1 D - 22941 Bargteheide Fon +49 (0) 4532 / 289-0 Fax +49 (0) 4532 / 289-2253 info@nord.com www.nord.com

Member of the NORD DRIVESYSTEMS Group

