



- High corrosion resistance
- Easy to clean
- Increased energy savings

EN

**NORD DRIVE SYSTEMS
WITH SMOOTH SURFACES**



NORD DRIVE SYSTEMS WITH SMOOTH SURFACES

Optimal for use in extreme ambient conditions thanks to smooth motors and **nsd tupH**

APPLICATION	Easy to clean	Resistant to chemicals	Damp environments	Permanently aggressive or corrosive	No transport of bacteria	Quiet running	Low weight
Offshore / coastal areas			✓ nsd tupH	✓ nsd tupH		No fan	
Beverage / food industry	✓	✓ nsd tupH	✓ nsd tupH		✓		✓
Dairies	✓	✓ nsd tupH	✓ nsd tupH		✓		✓
Pharmaceuticals	✓	✓ nsd tupH	✓ nsd tupH			✓	✓
Water / sewage plants	✓	✓ nsd tupH	✓ nsd tupH	✓ nsd tupH			✓
Car wash	✓	✓ nsd tupH	✓ nsd tupH	✓ nsd tupH			
Chemicals	✓	✓ nsd tupH	✓ nsd tupH	✓ nsd tupH			✓




Drive technology for extremely corrosive conditions. Suitable for use in a variety of applications where the corrosion resistant properties of stainless steel are required with an excellent cost-benefit ratio.. NORD has a solution for these requirements: **nsd tupH** Sealed Surface Conversion System.

Find out for yourself and ask about our nsd tupH test set.

Order now and experience nsd tupH "live": 0 45 32 / 289-0 keyword nsd tupH-Test.

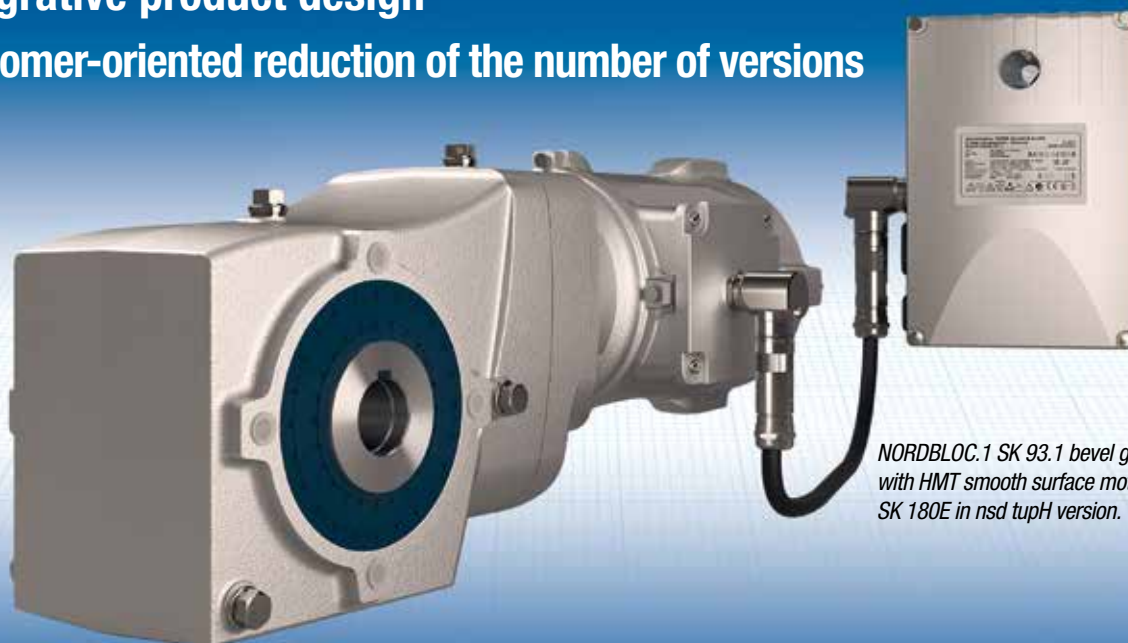
Products available in the NORD modular product range with **nsd tupH**.



NORD GEARED MOTORS	NORD MOTORS	NORD FREQUENCY INVERTERS
 <p>NORDBLOC. 1 helical gear units (Up to size 6, 55 – 640 Nm) SK 92 bevel gear units (from 50 – 660 Nm) SK 93 bevel gear units (from 50 – 660 Nm) UNIVERSAL SMI Worm Gear Units (from 21 – 427 Nm)</p>	 <p>Smooth motors Sizes 80, 90, 100, from 0.37 – 2.2 kW, IP66/IP69K (optional)</p> <p>IE2 IE3 IE4</p>	 <p>SK 135E (from 0.12 – 7.5 kW) Motor starter with soft start and reversing function Optional integrated Profibus or AS interface Wall or motor installation SK 180E (IE2, from 0.25 – 2.2 kW) Sensorless current vector control (ISD control) PLC functionality Energy-saving function</p>

ADVANTAGES OF DRIVE SYSTEMS WITH SMOOTH SURFACES

- **Easy to clean** *due to smooth surfaces*
- **Increased energy savings** *with IE3/IE4*
- **Reduced weight** *in comparison with stainless steel due to aluminium housing*
- **Significantly lower surface temperature**
- **Quiet running** *due to motors without fans*
- **High corrosion resistance** *no spreading of corrosion*
- **Resistant to acids and alkaline** *wide pH range*
- **Complies with FDA Title 21 CFR 175.300**
- **No transport of bacteria** *thanks to motors without fans*
- **Great versatility** *due to extensive range of modular products*
- **Integrative product design**
- **Customer-oriented reduction of the number of versions**



*NORBLOC.1 SK 93.1 bevel gear unit
with HMT smooth surface motor and
SK 180E in nsd tupH version.*

The complete solution for drive systems in extreme conditions

- Surface-treated housing components
- DIN and standard components made from stainless steel
- Washdown housing (gear unit and motor)
- Stainless steel shafts
- Special shaft sealing rings
- Food-compatible oil

Tests performed on surface-treated aluminium housing components:

- ASTM D714 Blister formation
- ASTM D610-08 Corrosion
- ASTM D1654-08 Scratching
- ASTM B117-09 Salt spray test
- ASTM D3170 Gravelometer test
- DIN EN ISO 9227 Salt spray mist test
- DIN EN ISO 2409 Cross-cut test

NORD DRIVESYSTEMS Group

Headquarters and technology centre
in Bargteheide, near Hamburg

Innovative drive solutions
for more than 100 branches of industry

Mechanical products
Parallel, helical, bevel and worm gear drives

Electrical products
IE2/IE3/IE4 motors

Electronic products
centralised and decentralised frequency inverters and motor starters

7 production locations with cutting edge technology
for all drive components

Subsidiaries in 36 countries on 5 continents
provide local stocks, assembly centres, technical support and customer service

More than 3,200 employees throughout the world
create customised solutions.

www.nord.com/locator

Headquarters:

Getriebebau NORD GmbH & Co. KG

Getriebebau-Nord-Straße 1
22941 Bargteheide, Germany
T: +49 (0) 4532 / 289-0
F: +49 (0) 4532 / 289-22 53
info@nord.com, www.nord.com

Member of the NORD DRIVESYSTEMS Group

