

SURFACE AND CORROSION PROTECTION FOR EXTREME AMBIENT CONDITIONS



Geared motors from NORD with nsd tupH are the optimal choice for use in challenging ambient conditions.

NO PAINT, NO FLAKING

Painted geared motor after 12 months of use in a damp and salty environment



Geared motor with nsd tupH surface treatment after 12 months of use in a damp and salty environment



nsd tupH

Sealed Surface Conversion System

- Easy to clean surfaces
- Resistant to acids and alkalis (wide pH range)
- No blistering, even if damaged
- Cannot flake
- Corrosion-resistant - prevents contact corrosion
- Alternative to stainless steel
- Complies with FDA Title 21 CFR 175.300
- Free from chromates



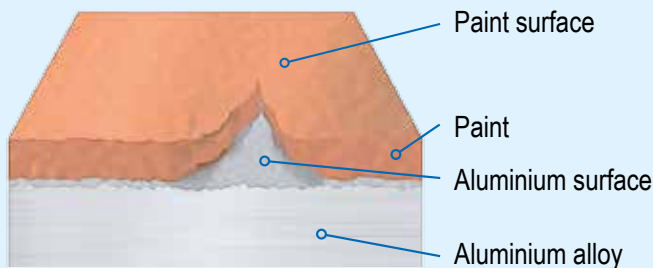
SURFACE AND CORROSION PROTECTION FOR EXTREME AMBIENT CONDITIONS



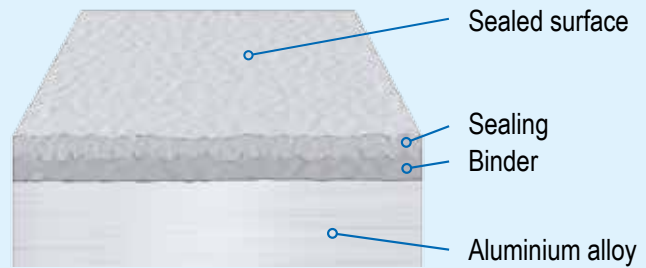
nsd^{tupH} – reduced costs, less weight, better process reliability

NORD DRIVESYSTEMS now has an answer for drive technology for extreme ambient conditions. Available for a wide range of familiar standard geared motors products - but with the resistance of stainless steel and an excellent price-performance ratio: nsd^{tupH} surface treatment.

How the nsd^{tupH} Sealed Surface Conversion System works:





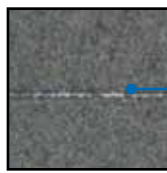
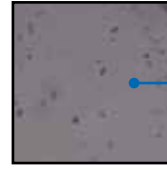




Paint is applied to the surface and can even conceal porous surfaces. Because the paint does not form a permanent bond with the material it can flake off, even with little use.



The nsd^{tupH} process uses a binder which forms a permanent bond with the aluminium alloy and creates a perfect basis for bonding with the surface treatment. This combination provides extreme resistance and a harder surface than untreated aluminium.

Extensive tests with nsd^{tupH}:

 <p>Sprinkling of the products with hot water at 38 ° – 45 °C.</p>	 <p>Spreading of corrosion in the region of a scratch test on a conventional painted surface.</p>	 <p>Gravelometer test for flaking resistance on a painted surface according to ASTM D3179.</p>
 <p>Foaming of the products with cleaning agents as well as 1.56 % acid.</p>	 <p>Example of an nsd^{tupH} surface after a scratch test without spreading of corrosion.</p>	 <p>Gravelometer test for flaking resistance according to ASTM D3179 on nsd^{tupH}.</p>
 <p>Soaking time of 10 - 30 min. for each cleaning cycle.</p>		
 <p>Spraying with hot water at 38 ° – 45 °C under high pressure. Spraying with cleaning agents with 0.26 % concentration.*</p>		

* A comprehensive list of the tested cleaning agents can be requested by e-mail.

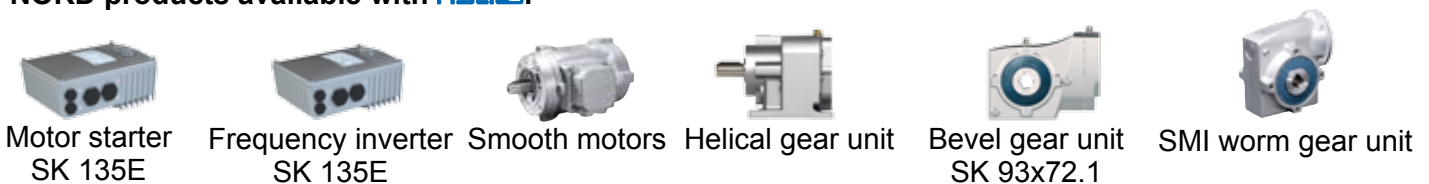
The complete solution for extreme conditions

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

nsd^{tupH} for extreme requirements

- Food and beverage industry
- Dairies
- Pharmaceutical industry
- Water and sewage plants
- Car washes
- Offshore and coastal areas
- Cleaning with chemicals (washdown, wide pH range)

NORD products available with nsd^{tupH}:



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