

Intelligent Drivesystems, Worldwide Services



**DRIVE SOLUTIONS FOR  
THE BULK GOODS INDUSTRY**





# DRIVE SOLUTIONS FOR THE BULK GOODS INDUSTRY

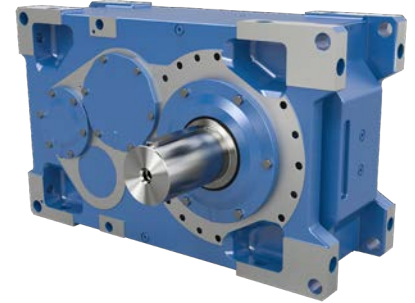
## From Processing...



## ...To Packaging

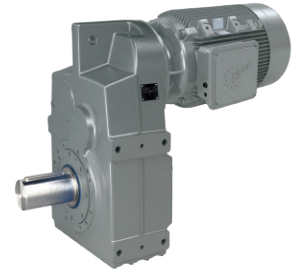
### NORD Delivers

NORD offers full-featured drive solutions that can tackle the toughest requirements. All components are carefully selected and precisely configured to meet your exact specifications. In the rare case that standard components won't meet your needs, our in-house engineering team will work with you to design custom components or a complete customized system.



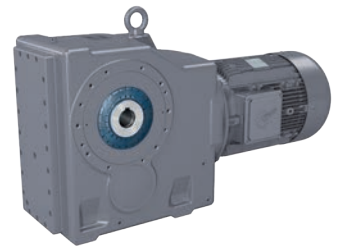
### Reduce Lead Times and Decrease Inventory

- 25% of orders ship same day or next day with NO expedite fees
- 47% of orders ship within 5 working days
- 81% of orders ship in 2-3 weeks



### Global Product Designs, Standards, and Support

- Innovative product range (one-stop shop)
- Global connected presence
- Mechanical and electrical application engineers ready to assist you
- Online resources



### Increase Efficiency and Reduce Operation Costs

- First-class customer service and support, plus myNORD online tools
- Product flexibility through standard components and customizations
- Program personalization, such as weekly shipment schedules and custom nameplates
- Partner with a company that is easy to do business with and wants to see you succeed!



*\*Due to their complexity, additional lead time is required for MAXXDRIIVE® products.*

# NORD DRIVESYSTEMS Group

## High-performance Solutions

NORD's extensive product portfolio is continuously evolving to meet the needs of today's fast-changing markets, but NORD does far more than manufacture the world's finest drive components. We provide our customers with optimum drive configurations for their specific purposes, providing each and every one of them with complete and efficient systems at a price/quality ratio that's unmatched.

By continuing to invest in the latest research, manufacturing, and automation technology, we are able to deliver innovative drive systems with the highest quality, reliability, and value found in the marketplace today. In short, we never stop improving.

## On-time Delivery

NORD's linked global network of assembly and manufacturing operations gives you the best of both worlds – a world leader with local representatives. NORD has subsidiaries and sales partners in 98 countries on five continents, ensuring local inventory, assembly centers, technical support, and customer service.

This approach also allows us to provide the shortest lead times in the industry. As a NORD customer, you can rest assured that your order will be delivered on time and on spec. We offer our customers:

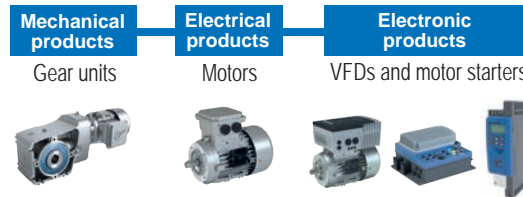
- Fast, accurate, reliable service
- Unmatched product versatility and customizations
- Short lead times
- Technical guidance from experienced engineers
- MyNORD online tools (configure, price, quote, and track your order)
- 24/7/365 after hours emergency support via the NORD 911 hotline

## Peace of Mind

NORD's customer-first approach means superior drive solutions and peace of mind are just a call or click away. Put NORD's global team of engineers, manufacturing, service and support technicians to work for you. Together, we'll build something great!



**Headquarters and technology center**  
in Bargteheide,  
near Hamburg



**Innovative drive solutions**  
for more than  
100 branches of  
industry

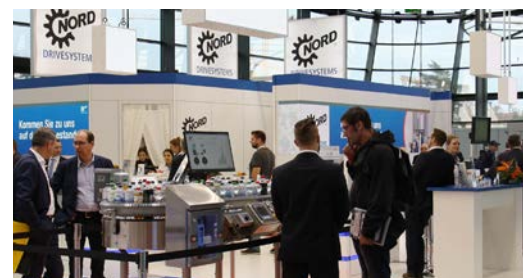


**7 production locations with cutting-edge technology**  
produce gear units,  
motors, VFDs, and  
more to provide  
complete drive  
systems from a  
single source.



The map shown above is for information only and does not claim to be created for or applicable to any legal purpose. For this reason, we do not assume any liability for legality, correctness and completeness.

**Subsidiaries and sales partners in 98 countries on 5 continents**  
provide local inventory,  
assembly, technical  
support, and  
industry-leading  
customer service.



**More than 4,000 employees throughout the world**  
create customized  
solutions.



# FLEXIBLE SOLUTIONS FOR THE BULK GOODS INDUSTRY

## 1 Storage

Bulk goods are intermediately stored (and homogenized) in storage compound systems (longitudinal or rotary blending beds) or silos/bunkers before they are conveyed to the next process step. Different bulk goods require different plant arrangements that need customized drives.

## 2 Conveying

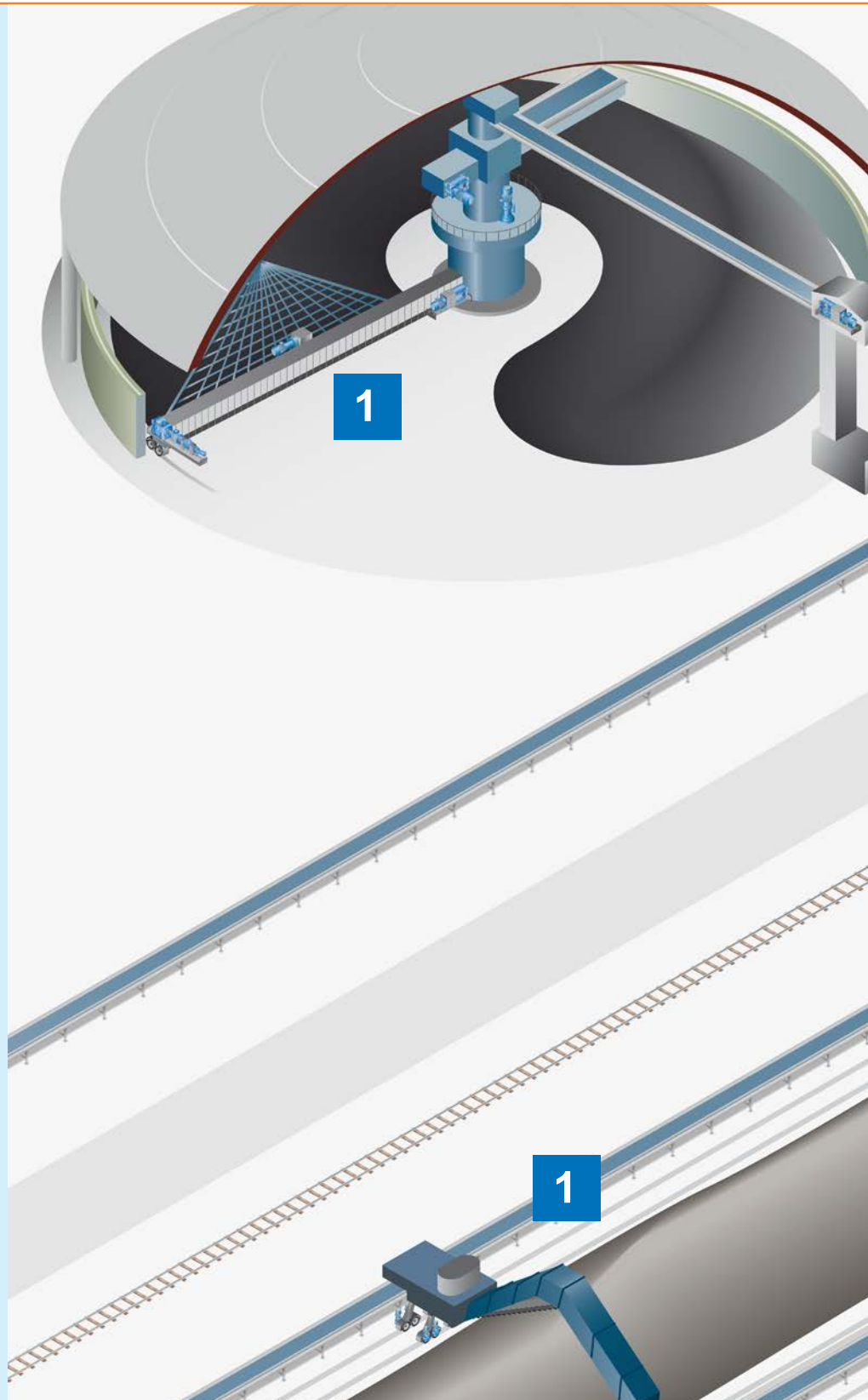
Different types of conveyors in terms of conveying direction (horizontal, vertical, inclining, declining), mass flow, conveyor length, and construction are needed to convey the bulk goods from process step to process step. Reliable and robust drive systems ensure uninterrupted material flow.

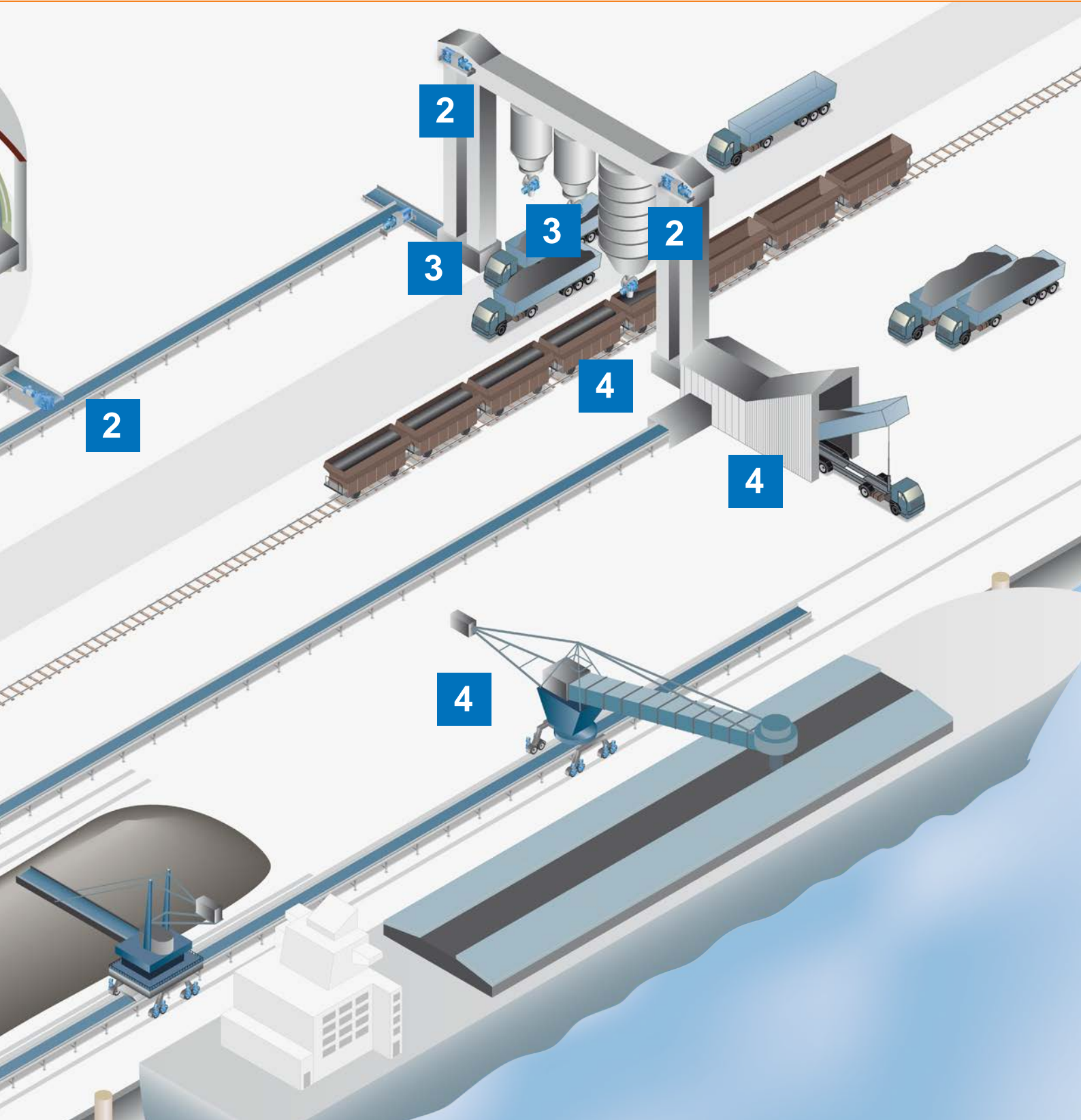
## 3 Weighing and Metering

Before reaching the next process step, the bulk goods are usually metered (and weighed) to ensure the correct amount is added to the process. NORD drives can be controlled individually to intelligently adjust the mass flow for precise, dynamic bulk goods infeed control.

## 4 Loading and Unloading

Ships, trains, and trucks must be loaded and unloaded for global bulk goods transport. Reliable NORD drives make sure this is done quickly and safely.





# EFFICIENT, RELIABLE, AND PROVEN IN DEMANDING CONDITIONS

## GRIPMAXX™

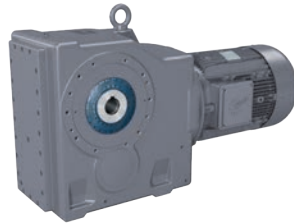
A keyless bushing system for shaft-mounting drives that can accommodate a wide range of solid shaft sizes while ensuring a high-capacity, zero-backlash fit. Eliminates assembly and disassembly challenges by offering generous clearances for easy installation and removal of the gearbox.



- Extensive bore flexibility\*
- No special shaft tolerances: utilize readily available cold finished shaft stock\*
- Simplified installation and removal
- Bushings are corrosion resistant
- Optimally designed for shaft mounted or torque arm mounted units

*\*Shrink disc keyless bore offering available for non-stock bore sizes. Assembly tolerances require more precision than shafts connected with GRIPMAXX bushing kit.*

## Helical Bevel Gear Units



- Foot, flange, foot/flange, and CEMA mount
- Hollow or solid shaft, keyless shaft designs with Shrink Disc and GRIPMAXX™
- Long service life, low maintenance
- Available with integrated backstop
- Various bearing designs for high axial and radial load capacities

Power	0.16 – 200 HP
Torque	Up to 442,500 lb-in
Speed Ratio	8.04 – 13,432.68:1
Efficiency	Up to 95%

## Two-stage Bevel Gear Units



- Foot, flange, or shaft mounted
- Hollow or solid shaft, keyless shaft designs with Shrink Disc and GRIPMAXX™
- Compact aluminum alloy housing



Power	0.16 – 12 HP
Torque	Up to 5,800 lb-in
Ratio	3.03 – 70:1
Efficiency	Up to 97%

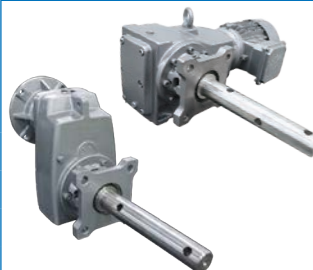
## Clincher™ Parallel Shaft Gear Units



- Foot, flange, shaft, and CEMA mount
- Hollow or solid shaft
- Hollow or solid shaft, keyless shaft designs with Shrink Disc and GRIPMAXX™
- Compact design; quiet operation

Power	0.16 – 200 HP
Torque	Up to 638,000 lb-in
Speed Ratio	4.03 – 15,685.03:1
Efficiency	Up to 97%

## Screw Conveyor Package

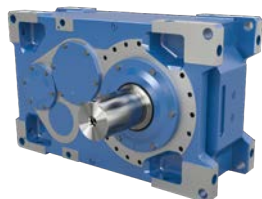
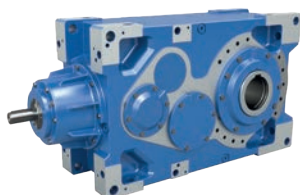


- No top mounts, pulleys, belts, or guards
- Closely stepped speed reduction ratios
- Compact and cost effective

Power	0.16 HP – 60 HP
Torque	Up to 53,100 lb-in
Speed Ratio	4.32 – 4,246.38:1
Efficiency	Up to 97%



## MAXXDRIVE® Industrial Gear Units



- All bearings and sealing surfaces are machined in a single process (promoting quieter operation and a long service life)
- No separating joints in the housing, no sealing surfaces subject to torque
- High-precision axis alignment
- Low maintenance
- Gear ratio range 5.54 to 400:1 with the same foot dimensions
- Parallel axis and right-angle

Power	50 – 2,000 HP
Torque	130,000 – 2,250,000 lb-in
Speed Ratio	5.54 – 400:1 ( <i>Parallel Shaft</i> )
	12.5 – 630:1 ( <i>Right Angle</i> )
	>1600:1 ( <i>Compound Assembly</i> )

## NORDAC® FLEX Variable Frequency Drive



- Motor or wall mount
- Sensorless current vector control (ISD control)
- Energy saving function
- Integrated PLC and POSICON positioning
- Safe stop function
- Protection Class IP55/IP66



Voltage	1 ~ 110 – 120 V
	1 ~ 200 – 240 V
	3 ~ 200 – 240 V
	3 ~ 380 – 500 V
Power	0.33 – 30 HP (0.25 – 22 kW)

## NORDAC® PRO Variable Frequency Drive



- Stand-alone operation
- Sensorless current vector control (ISD control)
- Integrated PLC
- Protection Class IP20

Voltage	1 ~ 110 – 120 V
	1 ~ 200 – 240 V
	3 ~ 200 – 240 V
	3 ~ 380 – 480 V
Power	0.33 – 200 HP (0.25 – 160 kW)

## Hazardous Locations



**Class I, Division 2**  
Groups A,B,C, and D

**Class II, Division 2**  
Groups F and G  
Temp Code T3B

## ATEX



**Drive systems for explosion hazard Zones 1, 2, 21, and 22**

- Versions and equipment according to individual requirements
- Configuration processes validated according to ISO 9001
- Safe, SAP-supported modular system

## Motors - Dust Explosion

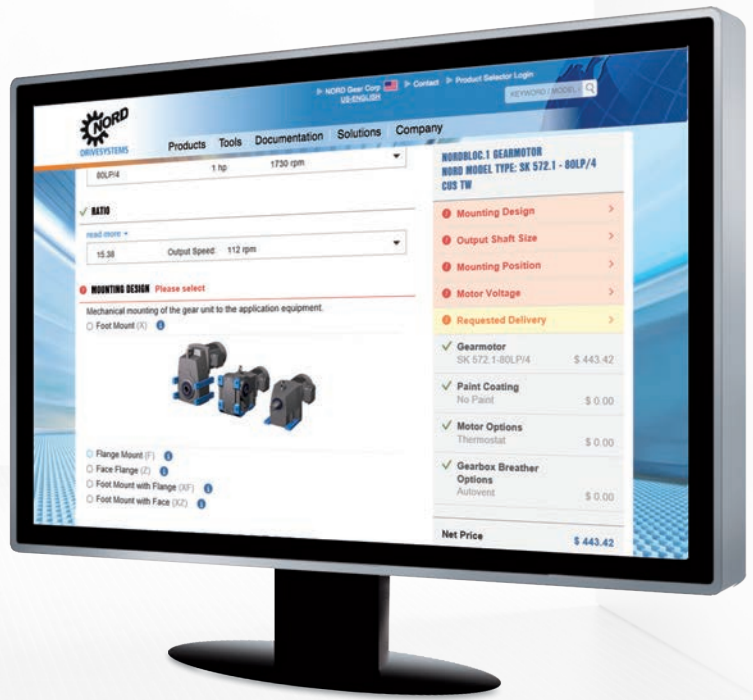
Categories 2D and 3D  
For Zones 21 and 22  
According to EN 60079-31  
Ignition Protection Class EX T  
(*protection with housing*)

## Gear Units - Dust Explosion

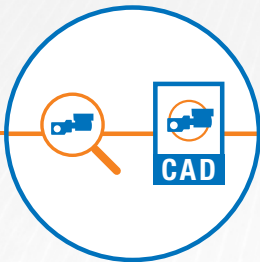
Categories 2D and 3D  
For Zones 21 and 22  
According to EN 13463  
Ignition Protection Class C  
(*constructional safety*)

# Ordering is Easy With myNORD Online Tools!

- Obtain drawing files direct from quote configuration
- Effortlessly select & configure customized drive solutions
- Create quotes with account-specific net pricing
- Order-specific documentation
- 24/7/365 order tracking
- Select and order spare parts



Register now at [myNORD.com](http://myNORD.com)!



[www.nord.com](http://www.nord.com)

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