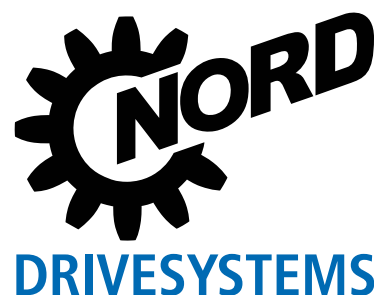


INTELLIGENT DRIVESYSTEMS, WORLDWIDE SERVICES



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**DRIVESYSTEMS FOR THE
INTRALOGISTICS INDUSTRY**



NORD DRIVESYSTEMS GROUP SERVING THE INTRALOGISTICS INDUSTRY



NORD DRIVESYSTEMS GROUP



Headquarters and Technology Center

→ close to Hamburg, Germany



Innovative drive solutions

→ for more than 100 industries

Mechanical Products	Electrical Products	Electronic Products
Gear units	Motors	Inverters and motor starters
		
Gear production	Motor production	Inverter production

7 state-of-the-art production plants

→ providing full-scale drive systems from a single source – geared motors, suitable electronics and software for required functionality



36 subsidiaries on 5 continents

→ providing local stock, assembly, production, technical support and customer service



More than 3.100 employees around the world

→ providing application-specific solutions for our customers



www.nord.com/locator

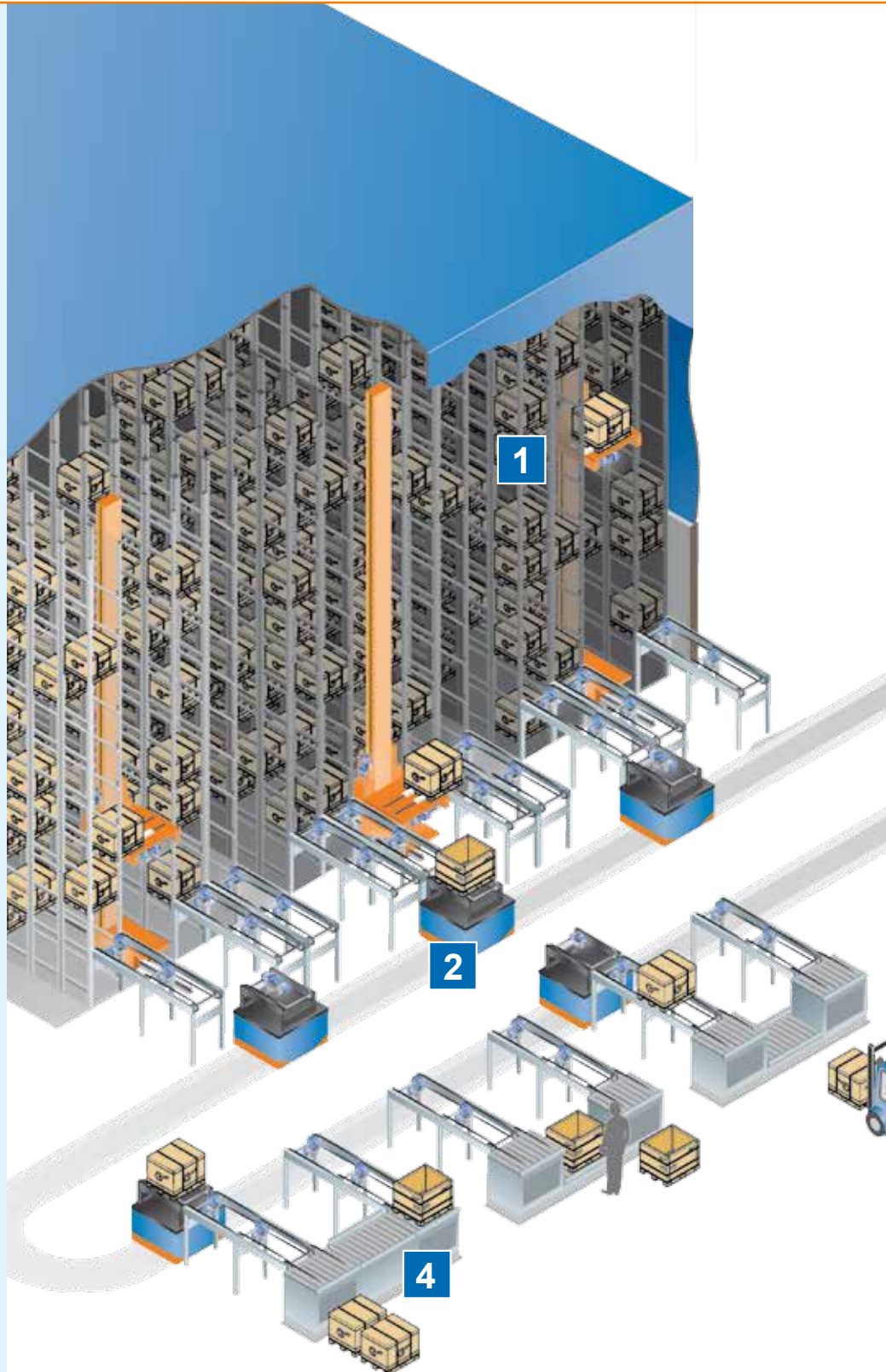
DRIVE SOLUTIONS FOR AUTOMATED STORAGE SYSTEMS

NORD Drivesystems is a global leader in drive solutions that are utilised in many applications and industries throughout the world. NORD provides:

- Strong application knowledge and technical support
- Complete drive solutions from a single source
- Strong global presence and support
- Thousands of installed units in the intralogistics industry
- Large product portfolio with high quality standards
- High reliability, efficiency and durability
- Recognised production quality according to global standards

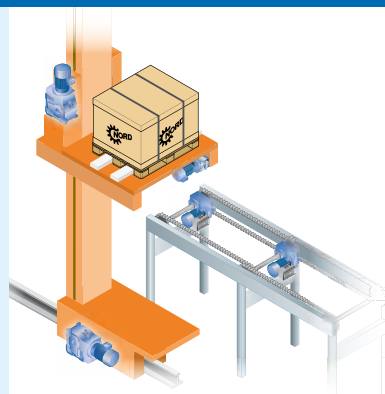
NORD's innovative drive solutions are specified and utilised for a large range of intralogistics applications.

With reputation in the balance, we are here to completely understand your requirements. We believe in building long term business relationships based on reliability and trust.



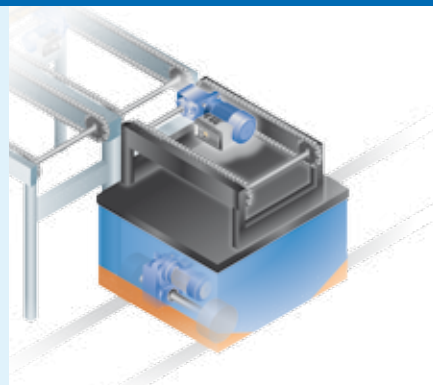
1 | Stacker Cranes

Automated storage facilities feature high storage density in order to maximise usage of available floor space. Agile Stacker Cranes are therefore indispensable to quickly fetch and deposit goods. Top-performance systems depend on dynamic drive technology in order to achieve a high rate of movement and accomplish excellent storage and retrieval throughput.



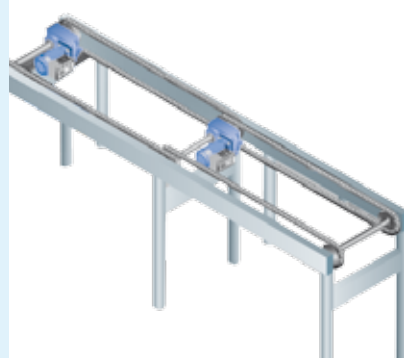
2 | Automated Guided Vehicle

Automated Guided Vehicles are used to transport loads from a conveyor to designated storage area within a facility. As an AGV stops at a destination and aligns itself with a Stacker Crane, NORD drives ensure that loads are precisely positioned for a swift and smooth transfer.



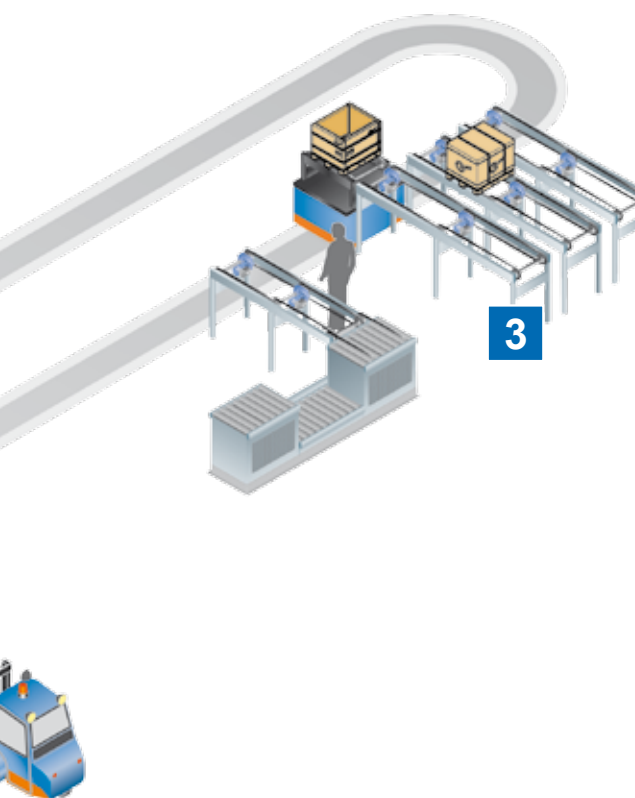
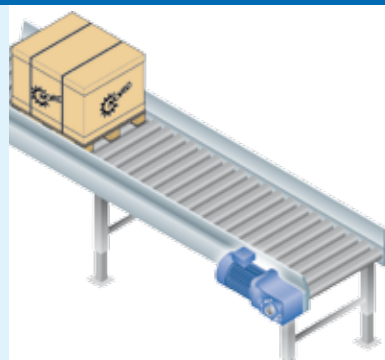
3 | Chain Conveyor

Chain Conveyors are primarily used to transport heavy unit loads and industrial containers. NORD supplies robust drive solutions with a proven track record of durability and reliability - in both single and double-strand configurations.



4 | Roller Conveyor

Roller Conveyors are versatile transport systems suited for light or medium-weight pallet handling. Separate conveyor sections may be fitted with dedicated NORD drives for intelligent, differentiated speed adjustment along the conveyor line, which provides operators with precise, dynamic control over the spacing and accumulation of loads.



FLEXIBLE COMBINATIONS FOR THE INTRALOGISTICS INDUSTRY



GEAR UNITS



Durable gears in UNICASE™ single-piece housings shoulder every load.

- High efficiency
2-stage bevel design
- High power density
- Long service life

MOTORS



Powerful motors keep drive systems in motion under all conditions.

- Designed to global standards
- High overload capacity
- Wide voltage range

FREQUENCY INVERTERS



Intelligent drive electronics provide exactly the control you need.

- Scalable functionality
- Full field bus connectivity
- Wide power range

QUICK SETUP TOOLS / BUS SYSTEMS



Comprehensive communication options enable access to the drives from any level to allow for versatile means of parameterisation.

- All common bus systems
- Quick and easy commissioning with a plug-in operating box or NORDCON software
- Convenient handheld ParameterBox for local operation

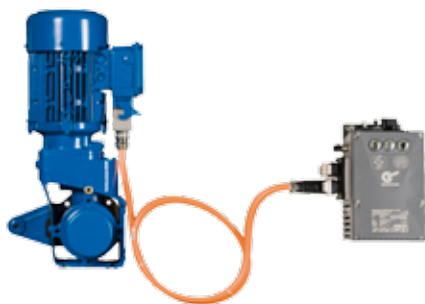
LOCAL CONTROLS



Switches and buttons are available directly at the drive units to immediately initiate starts, stops, mode adjustments.

- Mains isolator switch
- Selector switch remote or local
- Switch for start/stop and forward/reverse

QUICK CONNECTORS



All interfaces are designed for easy handling to ensure that drive systems can be very comfortably configured and installed.

- Easy plug & play solution with all common quick connectors
- Supply cable and motor output
- Pluggable sensors and encoders
- Ready-made cables



EFFICIENT, RELIABLE & PROVEN DRIVE SOLUTIONS FOR INTRALOGISTICS



Efficient

NORD drive solutions demonstrate a commitment to eco-friendly designs that reduce overall carbon emissions that are harmful to our environment.

- Premium-efficient helical and helical-bevel gear solutions with 95-97 % efficiency.
- NORD's low-inertia, inverter-rated motors are designed to meet the latest global energy requirements.
- NORD frequency inverters help to guarantee efficient operation, improved process control and optimised motor performance.
- Choosing NORD's energy efficient drive solutions leads to longer equipment service life and lowers the total cost of ownership.

Reliable

Downtime. It's the last word you can afford to hear when you work in the Intralogistics Industry. Reliability is a direct result of NORD's unique design and our components work in unison to keep key operations safe and profitable.

- Unicast gear housings provide accurate positioning of bearings and shafts.
- Autovent helps ensure a leak-free design.
- Infinite-life, high quality gearing, up to AGMA Class 13.
- Exceptional durability, quiet operation and long service life.

Proven

NORD's electronics provide a manageable and flexible system with superior functionality. Proven throughout the world, the intralogistics industry relies on the dependable and economical products from NORD Drivesystems.

- NORD's mechatronic drive systems are based on efficient 2-stage bevel geared motors which are light weight, easy to handle and energy efficient.
- NORD's range of electronics include power connectors, bus systems, and software tools in either wall mounted or motor-mounted frequency inverters.



Gear Unit

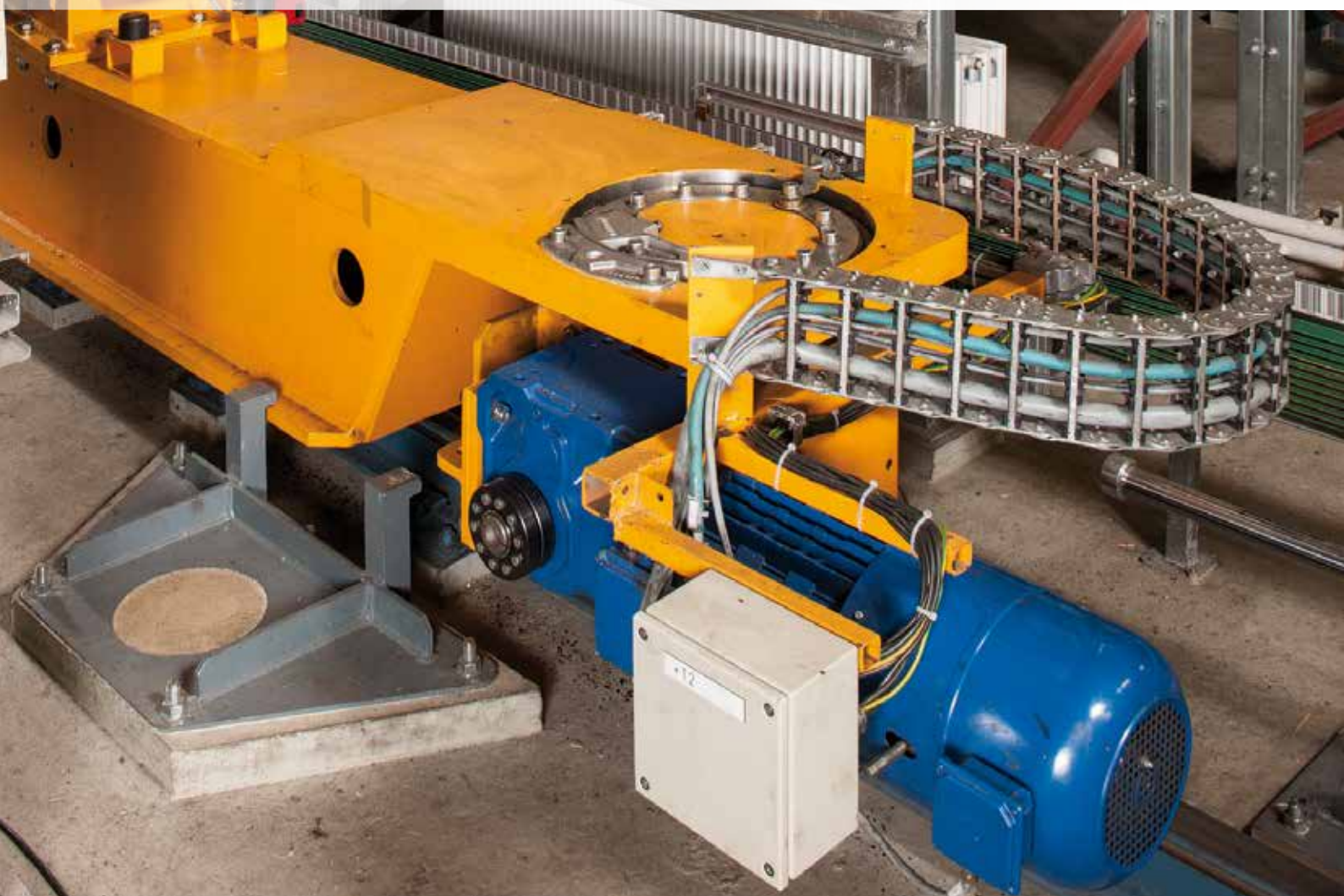
- High efficiency
2-stage bevel design
- High power density
- Long service life

Motor

- Designed to global standards
- High overload capacity
- Wide voltage range

Frequency Inverter

- Scalable functionality
- Full field bus connectivity
- Wide power range



NORD DRIVE SOLUTIONS FOR THE INTRALOGISTICS INDUSTRY



Motor Starter SK 135E (Catalogue F3015)



- ✓ Integrated electronic brake rectifier
- ✓ Consistent parameter structure
- ✓ Reversing starter with soft start function

U[V]	3~200 ... 500
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P[kW]	0.25 – 7.5
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Frequency Inverter SK 180E (Catalogue F3020)



- ✓ Stand-alone operation
- ✓ 4 parameter sets (switch over online)
- ✓ Sensorless current vector control (ISD control)

U[V]	1~110 ... 120 ± 10%
	1~200 ... 240 ± 10%
	3~200 ... 240 ± 10%
	3~380 ... 480 -20% / +10 %

P[kW]	0.25 – 2.2
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Frequency Inverter SK 200E (Catalogue F3020)



- ✓ Energy-saving function
- ✓ Integrated "Posicon" position control

U[V]	1~100 ... 120 ± 10%
	1~200 ... 240 ± 10%
	3~200 ... 240 ± 10%
	3~380 ... 500 -20% / +10 %

P[kW]	0.25 – 22
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Frequency Inverter SK 500E (Catalogue F3050)



- ✓ Energy-saving function
- ✓ "Posicon" positioning control
- ✓ Plug-in modules, for communication (field bus)

U[V]	1~110 ... 120 ± 10%
	1~200 ... 240 ± 10%
	3~200 ... 240 ± 10%
	3~380 ... 480 -20% / +10 %

P[kW]	0.25 – 160 kW
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Helical Gear Unit (Catalogue G1000 & G1012)



- ✓ Foot or flange mounted
- ✓ Long life, low maintenance
- ✓ High quality sealing
- ✓ UNICASE™ housing

kW	0.12 – 160
Nm	23 – 23,160
i	1.24:1 – 14,340.31:1

Parallel Shaft Gear Unit (Catalogue G1000)



- ✓ Foot, flange or shaft mounted
- ✓ Hollow or solid shaft
- ✓ Short design
- ✓ UNICASE™ housing

kW	0.12 – 200
Nm	65 – 90,000
i	4.03:1 – 6,616.79:1

Bevel Gear Unit (Catalogue G1000 & G1014)



- ✓ Up to 97 % efficiency
- ✓ Foot, flange or shaft mounted
- ✓ Hollow or solid shaft
- ✓ UNICASE™ housing

kW	0.12 – 200
Nm	90 – 50,000
i	3.58:1 – 13,432.68:1


SI Worm Gear Units (Catalogue G1035)



- ✓ Modular
- ✓ Universal mounting
- ✓ Lifetime lubrication
- ✓ IEC versions

kW	0.12 – 4.0
Nm	21 – 427
i	5.00:1 – 3,000.00:1





Whether for automated guided vehicles,
stacker cranes, or any type of conveyor system,
NORD DRIVESYSTEMS provides the optimum
drive solution for every application.

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Member of the NORD DRIVESYSTEMS Group

