

Drive solutions for drag /chain conveyors



NORD DRIVESYSTEMS offers robust drive solutions for all types of drag conveyors.



Grain

Cement/Minerals

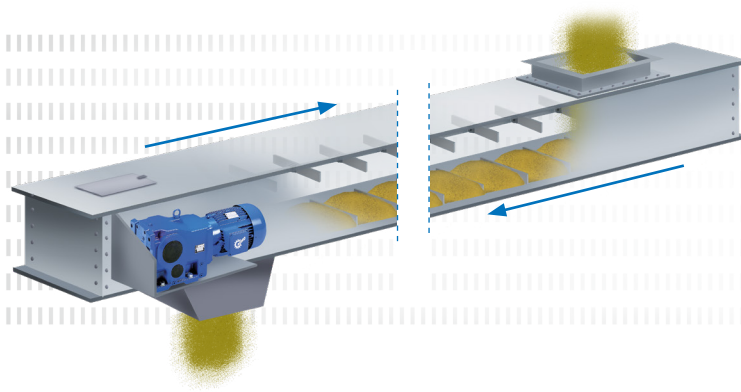
Biomass Power Generation

Fertilisers

Chemicals

Reliable under all conditions

Drag conveyors provide an optimum method for conveying grain and other bulk materials horizontally or on inclines. Available in flat or round bottom designs and options such as by-pass inlets, multiple discharge points and wear-resistant linings, these conveyors are ideal for outdoor installations and can cope with many applications, as well as having significant advantages over other conveyor types with regard to safety, environmental protection and efficiency.



NORD drive solutions are suitable for all drag conveyor applications that require e.g. multiple loading or discharge points such as transferring and removing products from bulk storage bins.

Flat Bottom Drag Conveyors

Especially suitable for handling free flowing bulk materials. Designed and engineered to provide long life and durability with minimum maintenance. Gentle and fast movement of the transferred material via a fully enclosed dust-tight conveyor.

Round Bottom Drag Conveyors

Designed with an elevated head and tail section, this version helps to reduce noise, vibration and chordal action.

L-Path or S-Path Drag Conveyors

A single (L-Path) or multiple (S-Path) direction change adapts the conveyor to the plant design. Expensive changes to the plant layout can be avoided. The system can also discharge from a vertical position.

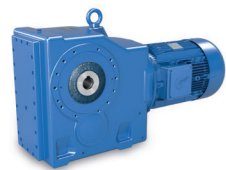
Mill Duty Drag Conveyors

Ideal for handling heavier, abrasive products such as aggregate, limestone and sand.



Reliable and robust gear units for all types of drag conveyors

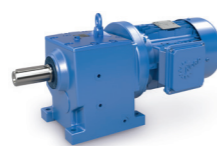
UNICASE bevel gear units (Catalogue G1000)



- ✓ Foot, flange or face mounted
- ✓ Hollow or solid shaft
- ✓ Long life, low maintenance
- ✓ UNICASE housing

Sizes: 11
Power: 0.12 – 200 kW
Torque: 180 – 50,000 Nm
Speed ratio: 8.04 – 13,432.68:1

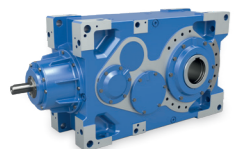
UNICASE helical in-line gear units (Catalogue G1000)



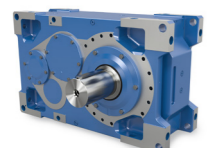
- ✓ Foot or flange mounted
- ✓ Long life, low maintenance
- ✓ Optimum sealing
- ✓ UNICASE housing

Sizes: 11
Power: 0.12 – 160 kW
Torque: 10 – 26,000 Nm
Speed ratio: 1.35 – 14,340.31:1

MAXXDRIVE® industrial gear units (Catalogue G1050)



- ✓ Universal gear units
- ✓ Helical gear units 2- and 3-stage
Helical bevel gear units 3- and 4-stage
- ✓ Multiple mounting and cooling options
- ✓ Modified bearing options for high radial and axial load capacity
- ✓ Compact design
- ✓ All installation positions



Sizes: 11
Power: 1.5 – 6,000 kW
Torque: 15,000 – 282,000 Nm
Speed ratio: 5.54 – 30,000:1

UNICASE parallel shaft gear units (Catalogue G1000)



- ✓ Foot, flange or face mounted
- ✓ Hollow or solid shaft
- ✓ Compact design
- ✓ UNICASE housing

Sizes: 15
Power: 0.12 – 200 kW
Torque: 110 – 100,000 Nm
Speed ratio: 4.03 – 15,685.03:1

Driven by energy efficient motors for all types of environment

Motors:

Standard motors with recommendable options such as:



IP66 Protected against water and dust

RD/RDD Rain Drip Canopy/
Double Fan Drip Cover

PTC / KTY / Resistance thermometers
PT100

IE2 motors for inverter driven motors

IE2 motors for direct online driven motors



Hazardous area ATEX

All gear units are also available as:
Dust explosion protected drive solution
Gas explosion protected drive solution

Energy efficient

NORD drive solutions are environmentally friendly and help reduce operating costs and minimise CO₂ emissions.

- ▶ High efficiency helical and bevel gear units achieve optimum power transmission performance.
- ▶ NORD motors comply with international energy efficiency classes up to IE4.



- ▶ NORD frequency inverters have energy saving functions to effectively reduce energy consumption.

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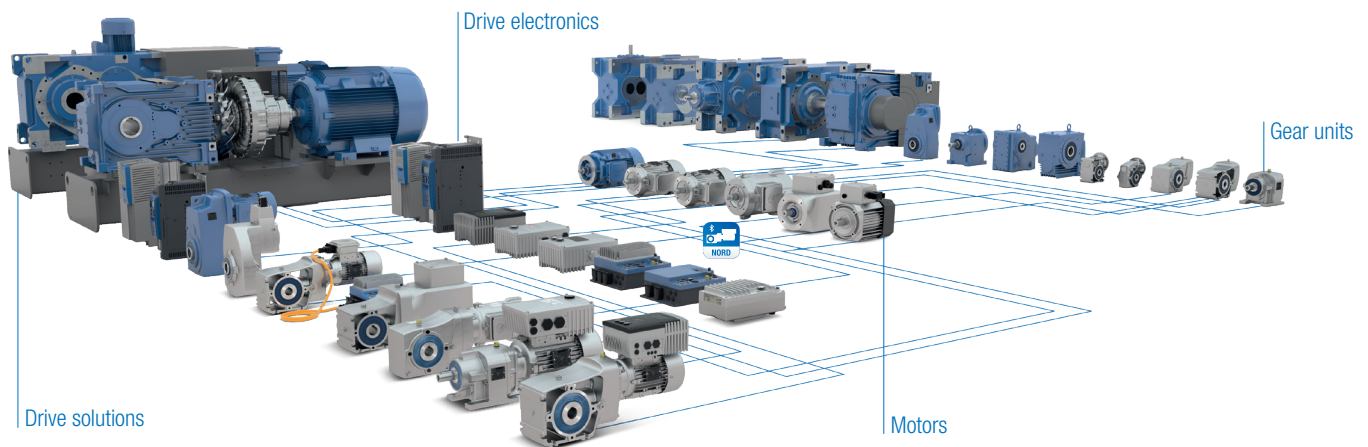
Available options and solutions

- ▶ Direct mounting, elastic coupling or belt-driven input shaft to transfer torque
- ▶ Backstop to avoid return of material in case of power failure
- ▶ Special seals to protect the gear unit e.g. in case difficult ambient conditions
- ▶ Hollow shaft, solid shaft depending on drag conveyor connection
- ▶ Fixing element for attaching the hollow shaft
- ▶ Shrink disc for attaching the hollow shaft
- ▶ Cover (IP66) to provide additional protection
- ▶ Stainless steel shafts for corrosion protection
- ▶ ATEX for explosive atmospheres
- ▶ NORD soft starter for smooth start and stop and reverse operation
- ▶ NORD frequency inverter for speed and torque control and process control

Our most popular version for chain/drag conveyor applications is the right-angle shaft arrangement of gear units with hollow shaft design. Alternative other shaft arrangements are available, as well as free input shafts or direct mounted motors.

Optional features are available to protect against harsh environmental conditions such as dust, high temperature and moisture.

Complete drive solutions from a single source



NORD DRIVESYSTEMS Group

- ▶ Family business from Bargteheide near Hamburg with more than 4,900 employees
- ▶ Drive solutions for more than 100 branches of industry
- ▶ 7 production locations worldwide
- ▶ Present in 98 countries on 5 continents
- ▶ More information: www.nord.com

Headquarters:
Getriebebau NORD GmbH & Co. KG
Getriebebau-Nord-Str. 1
22941 Bargteheide, Germany
T: +49 45 32 / 289 0
F: +49 45 32 / 289 22 53
info@nord.com