



PRODUCTS  
FOR THE

# MATERIAL HANDLING INDUSTRY

APPLICATION GUIDE

# NEXEN SOLUTIONS FOR YOUR CONVEYOR CHALLENGES

A leading manufacturer of motion control components for the conveyor industry, Nexen offers a wide range of products designed for use in a variety of material handling applications. Over the years this industry has come to recognize Nexen's Air Champ® line of pneumatic clutches and brakes for durability and reliability at economical prices. Our spring-engaged or air-engaged products provide more torque and last longer than comparable electrically-engaged units—we guarantee it. Nexen is committed to meeting the motion control needs of any powered conveyor application.

## Friction Clutches

Nexen's friction clutches are ideal for use in cycling/indexing, controlled acceleration, and soft start applications. Operating with static air, they are more efficient and last up to six times longer than electric clutches.

- Torque ratings from 5–10,000 in-lb
- Pilot mount (sprocket mounting)
- Simple design - few moving parts
- Self-adjusting for friction material wear
- Air engaged / Spring released
- Single & dual plate clutches available
- Mounts on drive shaft or jack shaft
- Low initial cost
- Inexpensive to operate, maintain, and repair



## Tooth Clutches

Nexen's tooth clutches provide fast non-slip engagement applications where high torque is needed. Inexpensive to operate, maintain and repair, these clutches provide all the torque you need in a small package.

- Torque ratings from 20–55,000 in-lb
- Fits shaft diameters from 5/8 – 3 1/16 in
- Positive engagement – no slippage
- Multi-position and single position
- Pilot mount (sprocket mounting)
- Air engaged / Spring released
- Standard open design or totally enclosed



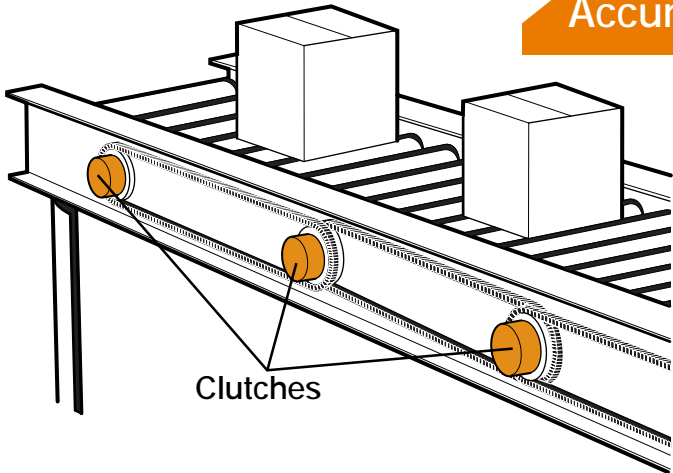
## Spring-Engaged Brakes

Designed for use in e-stop, controlled deceleration, and holding applications, Nexen's spring-engaged brakes have a high dynamic torque capacity that insures fast load response time.

- Torque ratings from 20–55,000 in-lb
- Straight and tapered bore shaft mounting
- NEMA C-face mounting
- Servo motor brakes available
- Spring engaged / Air released
- Few moving parts insure durability and dependability
- Enclosed units for dirty, dusty or wet environments

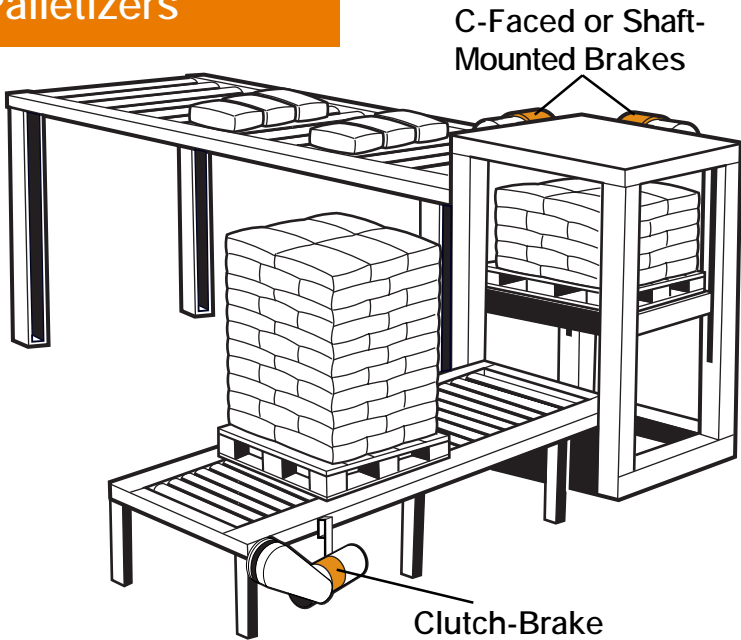


## Accumulating Conveyor



Clutches

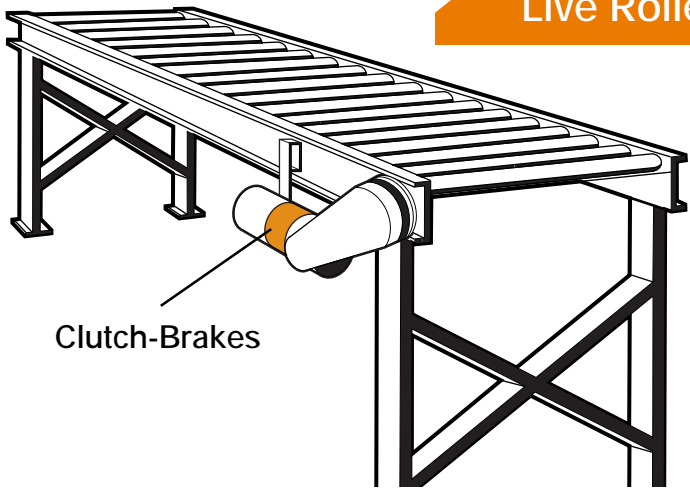
## Palletizers



Clutch-Brake

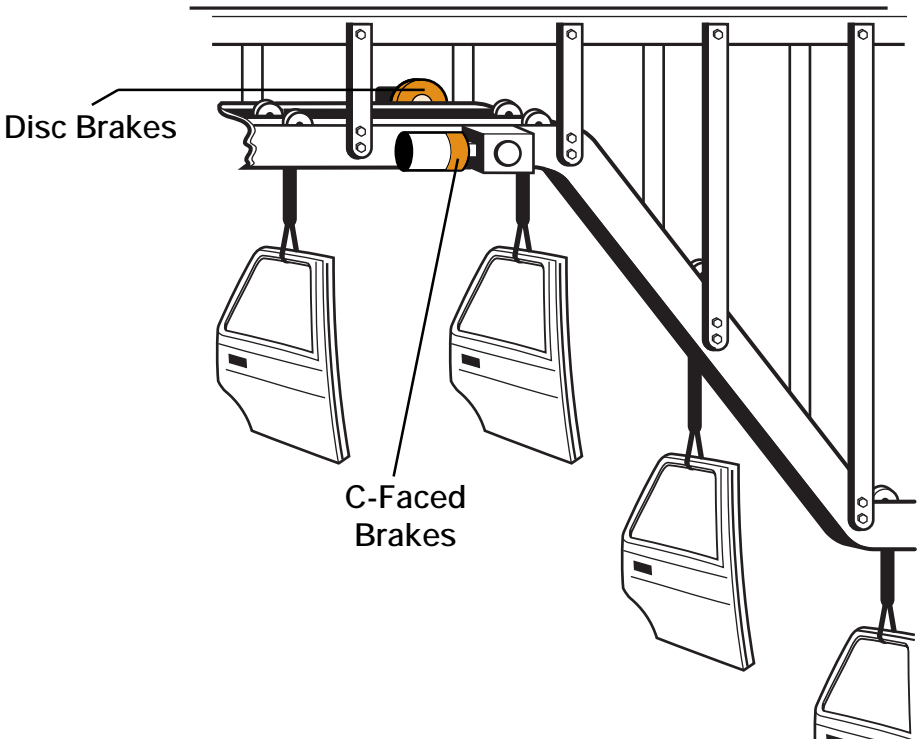
C-Faced or Shaft-Mounted Brakes

## Live Roller Powered



Clutch-Brakes

## Overhead Conveyor



Disc Brakes

C-Faced Brakes

## Flange-Mounted Clutch-Brakes

Nexen's flange-mounted clutch-brakes provide consistent control for cycling, accurate positioning, controlled acceleration and deceleration, high inertia start/stop applications.

- Torque ratings from 85–2,000 in-lb
- Fit NEMA frame sizes 48Y to 256TC
- Standard NEMA frame sizes make it easy to replace existing electric clutch-brake modules
- Accommodates 1/2–20 HP motors
- Self-adjusting for friction material wear
- Flange or foot mount capability
- Single piston design eliminates clutch-brake overlap
- Optional Locking Key eliminates key wobble and roll over
- Optional Integral Valve units allow for simple installation
- Up to six times longer operating life than electric units
- Simple design means easy, quick and inexpensive maintenance
- Enclosed units for dirty, dusty or wet environments



## Shaft-Mounted Clutch-Brakes

For controlled acceleration and deceleration, inching and jogging, stopping and holding, and accurate positioning applications, Nexen's shaft-mounted clutch-brakes provide high cycling rates and long unit life.

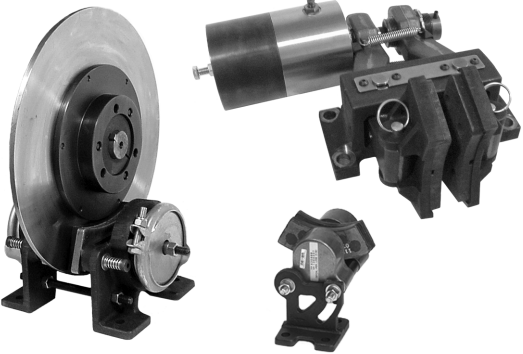
- Torque ratings from 10–2800 in-lb
- Through shaft mounting on driven shaft
- Friction brake and clutch combined into one compact unit
- Pilot mount, sprocket mounting
- Accommodate shaft diameters from 1/2 – 1 7/8 inches

- Air engaged / Spring released
- Maintains torque rating without manual adjustment
- Inexpensive to operate and maintain



Nexen's caliper brakes are ideal for holding, e-stop, and controlled deceleration situations. Choose from ten standard models, or we will custom design to fit your application.

- Torque rating from 20–50,000 in-lb
- Air engaged / Spring released models
- Spring engaged / Air released models
- Disc diameters from 6–24 inches
- Adjustable caliper spacing for various disc widths
- Detent pins for quick facing shoe removal
- Simple design— easy to maintain



## Caliper Brakes



**nexen®**

**Nexen Group, Inc.**

**Headquarters/North America**

Nexen Group, Inc.  
560 Oak Grove Parkway  
Vadnais Heights, MN 55127-8509  
Phone: 1-800-843-7445  
or 651-484-5900  
Fax: 651-286-1099

**Mexico/Latin America**

Frenar s.a. de c.v.  
Ave. Sor Juana Inés,  
De La Cruz # 14, D-105, 106  
Tlalnepantla, Edo México  
C.P. 54000, México  
Phone: 52-55-65-45-06  
Fax: 52-53-90-54-83

**Europe**

Nexen Europe Group  
Koningin Astridlaan 59, B12  
1780 Wemmel,  
Brussels, Belgium  
Phone: (32) 2 461-0260  
Fax: (32) 2 461-0248

**Japan**

Nexen Japan Group  
3-3-1-403, Midori-Cho  
Fuchu-City, Tokyo 183 Japan  
Phone: 81-423-36-3533  
Fax: 81-423-36-6534

**Australia**

Norman G. Clark (A/Asia) PTY. LTD.  
44 Kylta Road  
West Hiedelberg, Victoria 3081 Australia  
Phone: 61-3-9457-5833  
Fax: 61-3-9457-5781

In accordance with Nexen's established policy of constant product improvement, the specifications contained in this document are subject to change without notice. Technical data listed in this document are based on the latest information available at the time of printing and are also subject to change without notice. For current information, please consult [www.nexengroup.com](http://www.nexengroup.com).