PRODUCTS FOR

LINEAR APPLICATIONS
Gantry Systems
Controlling motion on all axes, Nexen’s Servomotor Brakes, Ball Screw Brakes and Profile Rail Brakes provide precise holding with little or no backlash. Also, Nexen’s Roller Pinion System enables gantrys to move long distances, at high speeds with no accumulated error and zero backlash.

Positioning System
A linear actuator is precisely coupled to a linear slide using a Nexen Linear Coupling. Once the guide rods have moved to their destination, a Nexen Rod Lock holds them in position.

Conveyor Transfer
As conveyor segments move vertically along guide rods, Nexen’s Rod Locks precisely hold position. The Mechanical Torque Limiter prevents damage to the ball screw-driven linear actuator from excessive conveyor loading.
Profile Rail Brake

**Linear Actuator Systems**
A Nexen Profile Rail Brake, mounted to a linear actuator’s carriage, precisely holds the carriage’s position when stopped.

**Linear Bridge Plate System**
Nexen’s Roller Pinion System enables bridge plates to move long distances, at high speeds with no accumulated error and zero backlash. Servomotor and Profile Rail Brakes compliment the system by providing e-stop and holding capabilities in all axes.

**Filling Operations**
As the container moves along a conveyor to the filling station, pneumatic cylinders accurately position the container under the product filling mechanism. Nexen Rod Locks hold the cylinder rods in precise position during the filling operation.
A true alternative to traditional linear drive systems, Nexen’s Roller Pinion System (RPS) is engineered to deliver accurate positioning, unlimited travel distances, extremely high speeds and zero backlash. Offering better performance and longer life than rack and pinion or ball screw systems, the RPS has models for a variety of linear motion applications.

Nexen’s high-performance Profile Rail Brakes are spring-engaged and air-released for power-off, e-stop and holding applications. Each rail brake clamps directly on the center of the guide rail to provide positive braking and holding in all axes. And, Nexen has rail brake configurations and sizes to fit most popular guide rails.

Mechanical Torque Limiters from Nexen eliminate torque overloads caused by material jams, operator error and a whole host of unforeseen reasons that contribute to machine downtime. Nexen’s Mechanical Torque Limiters are backlash-free and torsionally rigid, in a compact, simple design. They provide precise overload protection and are available in single- or multi-position re-engagement, and full disengagement designs.

Nexen Linear Couplings have a patented high capacity spring system that absorbs parallel misalignment up to 0.7 mm and angular misalignment up to 1.5 degrees. It has zero axial backlash under all operating conditions and is virtually maintenance free. Linear couplings can be used to provide angular and parallel alignment in a variety of precise linear motion applications; from linear actuators and motors, to positioning sensors and electric or pneumatic cylinders.