



POSITIONING & PROCESS SOLUTIONS

Screw Jacks • Linear Actuators • Electric Cylinders • Rotary Unions • Screws & Nuts

125 YEARS OF POSITIONING & PROCESS SOLUTIONS

Since our beginning in 1883, Duff-Norton has earned a reputation for reliable, high quality products meeting the industrial lifting, positioning and transfer needs of our worldwide customers. Setting new standards for product quality and reliability is shown by our Lifetime Warranty for Mechanical Actuators. The Duff-Norton Team is dedicated to customer service excellence. This is evident in our ISO 9001 certification, Quickship Programs, website 3D modeling and the high level of involvement of our Continuous Improvement Teams.

WORLDWIDE LOCATIONS



Manufacturing / Sales Facilities

- ★ **Duff-Norton**
Charlotte, NC USA
- ★ **Duff-Norton Europe**
Romeny-sur-Marne, France
- ★ **Pfaff / Alltec**
Kissing, Germany

Sales Offices

- 4 Chester, Great Britain
- 5 Beijing, China
- 6 Sao Paulo, Brazil
- 7 Toronto, Canada
- 8 Orissa, India
- 9 Johannesburg, South Africa
- 10 Melbourne, Australia

3D MODELING SOLUTIONS SAVE ENGINEERING TIME

Duff-Norton's 3D modeling page on www.duffnorton.com allows worldwide customers the ability to download Linear Actuator and Electric Cylinder Classic, Cubic and Bevel Gear Screw Jack models directly into their project designs in a format for their specific CAD system. Our modeling program results in greater accuracy and significant design time reduction for engineers.





SCREW JACKS (MECHANICAL ACTUATORS)

Product Range

- Machine Screw and Ball Screw Actuators (*Screw Jacks*) ranging in size from 1/4 to 350 tons
- Specialty Actuators: Stainless Steel, Anti-Backlash, Anode Jacks, Micro-miniature, Continuous Duty
- Powered Actuators: Gear Reducer Driven, C-face Driven, Handwheels
- Actuator Controls: Control Panels, Rotary Limit Switches, Potentiometer/Transducers, Encoders, Rotary Counters
- Power Transmission Components: Mitre Boxes, Couplings, Connecting Shafts, Pillow and Flange Blocks

Features & Benefits

- Broadest range of actuator capacities and types in the industry
- Modular Concept allows for unlimited number of configurations
- 3D Modeling capability on www.duffnorton.com
- Lifetime Warranty



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CUBIC & BEVEL GEAR SCREW JACKS

Product Range

- Cubic Screw Jacks: Capacities from 2.5kN to 510kN (1/4 Ton to 11 Ton)
- Bevel Gear Screw Jacks: Capacities from 15kN to 90kN (1.7 Ton to 10 Ton)
- Operating Temperature: 0°C up to 40°C
- Acme and Ball Screw models are available
- Translating screw (type 1) and rotating screw (type 2) models available

Features & Benefits

- Versatile Mounting: Unit can be mounted upright or inverted
- Bevel Gear Screw Jacks eliminate the need for mitre boxes
- Bevel Gear Screw Jacks are 4 times faster than "Classic Screw Jacks".



Products manufactured by Pfaff-silberblau and Alltec Antriebstechnik of Germany, sister companies of Duff Norton.



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ELECTRIC CYLINDERS

Product Range

- High Speeds up to 379 in/min (160 mm/sec)
- High Capacities up to 50,000 lbs. (222.5 kN)
- Stroke Lengths up to 13 feet (3.96 meters)
- Continuous Duty ratings (SCN Series)
- Low Power requirements (SCN Series)
- Aluminum Bronze Worm Gears (SCW Series)
- Helical & Helical Bevel Gears (SCN Series)
- Ball Screw or Acme Screw
- Clevis Mounting or Trunnion Mounting
- Controls

Features & Benefits

- Excellent replacement for hydraulic cylinders
- Broadest combination of speeds and capacities in the industry
- Durable construction means less maintenance and longer service life
- 3D Modeling capability on www.duffnorton.com



Aggregate & Mining • Food • Incineration
 Industrial Machinery • Packaging • Paper • Security
 Steel • Transportation • Water Sewage



LINEAR ACTUATORS

Product Range

Industrial Actuators:

- Capacities from 25 to 2500 lbs. (.11 to 11.13 kN)
- Speeds up to 2.4 in/sec (61 mm/sec)
- Stroke lengths up to 24 in (609.6 mm)
- Multiple AC & DC voltages
- Custom actuators available

Commercial Actuators:

- Capacities to 1350 lbs. (6 kN)
- Speeds up to 1.8 in/sec (45.7 mm/sec)
- Stroke lengths up to 24 in. (609.6 mm)
- Multiple AC & DC voltages
- Custom actuators available

Features & Benefits

- Manufacturing actuators for over 40 years
- 3D Modeling capability on www.duffnorton.com
- Excellent replacement for hydraulic cylinders
- QuickShip Program - 24 Hour Shipping



Automotive • Construction • Ergonomics
 Food & Beverage • Health & Fitness • Industrial Machinery
 Marine • Material Handling • Packaging • Transportation



ACME AND BALL SCREWS & NUTS

Product Range

- Acme Screws from 1/2" diameter to 9" diameter, many are centralizing class
- Precision ball screws from 1/2" diameter to 4" diameter
- Multiple screw lead options available
- Thread mounted acme nuts and flanges, many nuts are available in bronze or plastic
- Thread mounted ball nuts and flanges
- Full system integration with a complete line up of linear motion accessories available

Features & Benefits

- Acme & Ball Screws with excellent load ratings
- All screw products are provided with tight tolerances and lead control
- Acme nuts with made from excellent materials designed to yield high strength, long life, and low torque requirements.
- Ball screws are manganese phosphate coated for long life and smooth "break-in" periods.



Automation • Machine Tool • Aluminum & Steel • Paper
Entertainment • Food & Beverage • Plastics • Rubber
Packaging • Transportation



ROTARY UNIONS®

Product Range

Rotary Unions:

- Rotary Unions for water, steam, air, and hot oil applications.
- Available in sizes from 1/8 inch to 6-inch inside diameter
- Mono flow and dual flow designs
- Multi-port units for special applications

Swivels:

- Swivels for hydraulic and pneumatic applications
- Available in sizes from 1/8 inch to 12 inches inside diameter
- Pressures up to 10,000 psi (700 bar)

Features & Benefits

- Replaceable cartridge design
- Wide range of low maintenance, general purpose Rotary Unions
- Superior seal design
- QuickShip Program - 24 Hour Shipping



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PRODUCTS FROM COLUMBUS McKINNON



POWERED HOISTS

Electric & pneumatic in chain and wire rope styles, featuring a wide capacity range. Compensator hoists for flying decks/tables and load leveling applications. Monorail, Jib and Bridge Cranes.



MANUAL HOISTS

Lever Tools, Hand Chain Hoists and Wire Rope Pullers for precise positioning and lifting.



RIGGING

Shackles, Lifting Chain, Hooks, Plate Clamps, Wire Rope Clips, Hoist Rings, Spreader Beams and Specialty Lifters.



LOAD SECUREMENT

Binder Chain Assemblies, Ratchet Binders, Lever Binders and J Hooks.



ACTUATORS & ROTARY UNIONS

Screw Jacks, Linear Actuators, Electric Cylinders, Screws & Nuts, Rotary Unions.



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