



Mechanical Motion Solutions by Thomson
Trusted provider of optimized motion solutions for more than 70 years

Thomson – Your Trusted Partner

Thomson invented anti-friction linear technology more than 70 years ago and has continued to lead the industry ever since. The Thomson brand is recognized as the global leader in motion technology.

Talk to us early in the design process to see how Thomson can help identify the optimal balance of performance, life and cost for your next application. Visit www.thomsonlinear.com and find a wealth of product and application information as well as 3D models, software tools, our distributor locator and global contact information.

Unmatched Product Range

Over the past several years, our family of motion products has grown significantly and now includes BSA, Neff, Tollo, Micron, Deltran and Cleveland – all now part of Thomson.



THOMSON BSA **THOMSON TOLLO** **THOMSON NEFF**
MICRON **DELTRAN**

Worldwide Service and Support

Thomson field service engineers and support teams are available to assist wherever and whenever they are needed. The broadest product offering and unbiased technology expertise enable us to bring you the optimal balance of performance, life and cost. That's why design engineers turn most often to Thomson products to meet their motion control requirements.



THOMSON[®]

Linear Motion. Optimized.[™]



Linear Ball Bushing® Bearings and 60 Case LinearRace® Shafting

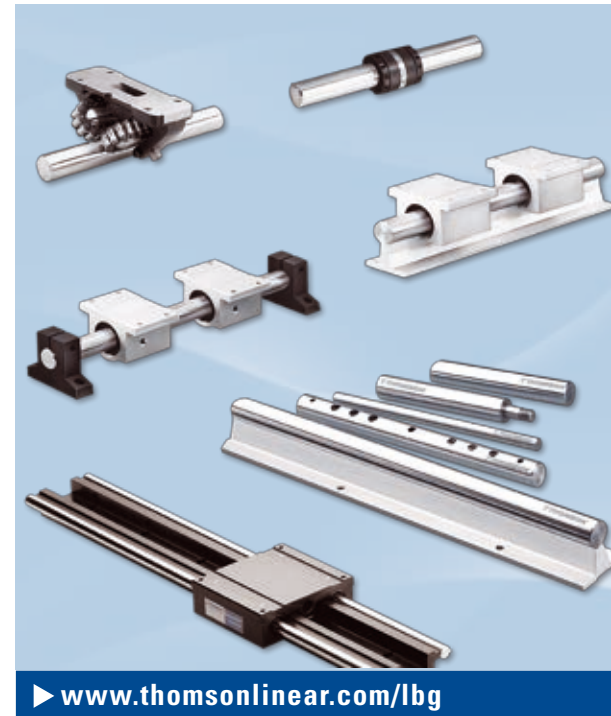
Thomson invented the ball bushing bearing more than 70 years ago and has since been the recognized leader in this field. Offering the widest range of bearings and accessories, we easily satisfy an even broader set of requirements with the best performing product for the application.

RoundRail™ Linear Ball Bushing Bearings

- Most extensive product offering in the industry
- Pre-assembled, ready-to-install stages provide low friction and smooth, accurate motion
- Cutting-edge segmented technology

60 Case LinearRace Shafting

- Manufactured to the highest quality standards
- Life extends as much as 50% over the competition
- Available in a number of materials and coatings
- Custom machining capabilities



Profile Rail Linear Guides

Thomson has a complete offering of rails and carriages in a broad range of styles and sizes and is a “one-stop shop” for all of your profile rail needs.

Profile Rail 400 Series

- Wide product offering in industry standard sizes
- Double-faced ball bearing design

Profile Rail 500 Series

- Exceptional straightness, rigidity and accuracy
- Double-backed design for high moment load capacities

MicroGuide® Series

- Miniature linear guides in 440C stainless steel
- Available as small as 5 mm

T-Series

- Lightweight rail made from aircraft-grade aluminum
- Easy and fast installation



Ball Screws

We offer the most complete line of industrial ball screws. Our products range from standard to high-precision assemblies, and our custom capabilities range from hollow to telescoping ball screws.

Miniature Precision Rolled Series

- Efficient, cost-effective solution in a small envelope

FineLine Precision Rolled Series

- Offers low cost and high precision

Precision Rolled Series

- The most comprehensive imperial-based ball screw offering in the industry

NEFF Precision Rolled Series

- A wide range of metric ball screws

Precision Plus Ground Series

- High repeatability, accuracy and stiffness



Lead Screws

Thomson precision lead screws are the highest quality lead screw assemblies in the industry and an excellent economical solution for your linear motion requirements.

- Rolled precision stainless steel screws
- V-Thread screws for high positioning resolutions
- Threaded and flange mounted nuts in several models and configurations
- Anti-backlash nuts for highest accuracy
- Bronze nuts for heavy duty applications
- Custom screw end machining



Glide Screws

The Glide Screw™ combines the features of a linear bearing and a lead screw in one smooth operating package, thus creating something better than both. The patented* Glide Screw delivers high performance, fast installation and less complexity in a small package.

- Easy and fast to install and maintenance free
- Reduced footprint, improved equipment uptime and lower cost of ownership
- Metric and inch options available
- Integrated lubrication block
- Optional configurations for harsh environments



Motorized Lead Screws

Motorized Lead Screws from Thomson combine a hybrid stepper motor and a precision lead screw together in one compact envelope. Patent-pending Taper-Lock technology allows quick decoupling and secure, properly aligned connections. This combination offers several advantages over a traditional solution.

- Five standard motor sizes and a large number of screw leads and diameters available
- Improved torque density and efficiency
- Reduced noise
- Taper-Lock design provides the ability to quickly decouple the lead screw from the stepper motor
- Rotating nut or rotating screw configurations



* Patent No. 9400047

True Planetary® Gearheads

With seven product families and more than 3000 size and ratio combinations, Thomson offers a True Planetary gearhead solution for virtually every application.

- UltraTRUE** – Smoothest operating on the market
- ValueTRUE** – High-performance at a competitive price
- DuraTRUE** – In-line, right angle, dual and hollow shaft options available
- NemaTRUE** – Optional front faces
- EverTRUE** – Continuous duty, higher speeds and lower temperature
- XTRUE** – Economical precision design
- AquaTRUE** – Stainless steel gear with up to IP69K protection



Linear Motion Systems

Thomson invented the linear motion system and offers the largest range in the industry. These systems are ideal for handling, packaging and other factory automation applications that require high speed and/or long stroke capabilities.

- Modular, self contained and self supporting
- Can easily be assembled into X-Y and gantry configurations using multi-axis mounting accessories
- Sizes ranging from the smallest to the biggest in the industry
- Ball screw or belt-driven models
- Ball-, wheel- or prism-guided models
- Large range of options and accessories
- Sealing and washdown options are available for harsh environments



Linear Actuators

Our linear actuator range is one of the broadest on the market, and we can offer a suitable model for almost any imaginable application. Thomson also has a long experience in designing custom solutions and build more custom actuators than anyone.

Electrak® HD

- Industry-leading, on-board electronics, including J1939
- Superior performance, higher loads and longer stroke length
- Unrivaled environmental protection (IP69K/IP67 static and IP66 dynamic)

Throttle Series

- Specially designed for throttle applications
- Multiple control, feedback and environmental options, including CANBUS communication

Max Jac Series

- Designed for tough and corrosive applications
- IP69K protection ensures operation in even the most harsh conditions and environments



Lifting Columns

Thomson lifting columns are ideal for medical applications such as wheelchair lifts, x-ray machines, and surgical tables as well as ergonomic automation applications such as workstations and desk lifts.

LC1600 Series

- Two-piece extrusion with 1600 N loading capacity
- Ideal for cost-sensitive applications where extension-to-retraction ratio is not as critical

LC2000 Series

- Three-piece extrusion with 2000 N loading capacity
- Telescoping leadscrew mechanism to provide an ideal extension-to-retraction ratio

LC3000 Series

- Three-piece extrusion with ballscrew drive to allow for 3000 N loading capacity and high moment loading



Precision Linear Actuators

The compact design and higher load capacities of our precision linear actuators make them ideal for the replacement of hydraulic and pneumatic cylinders.

T Series

- Robust, high-accuracy, 100% duty cycle actuators
- Three sizes and a multitude of accessories available
- Mounting kits according to hydraulic standards available

ECT Series

- Fully motorized precision linear actuators
- Choose between a large number of motor, gear box and mounting alternatives

PC Series

- Built to replace pneumatic cylinders
- High power density, accuracy and life expectancy
- Visit www.thomsonlinear.com/conversion to learn more about the PC Series



Miniature Systems and Components

Thomson produces the widest selection of miniature linear and rotary components that are engineered to work together. They all benefit from our long experience in motion control engineering and have all the advantages and features offered for standard-size products.

- Smaller components enable designers to reduce the size and weight of their end product, resulting in products that are smaller, lighter and less expensive to manufacture
- Widest variety of miniature motion products on the market
- Products are designed to work together
- Thomson offers easy and fast customization



Worm Gear Screw Jacks

The Thomson worm gear screw jacks set new standards of precision and engineering and meet all of today's requirements for safety, cost-efficiency and durability.

MULI® and JUMBO® Series

- Models for loads from 5 to 500 kN
- Designed for easy installation of motors, gears and shaft encoders
- All models designed for tensile and compressive loads
- Complete range of motors and accessories is available
- Synchronization of several jacks is easily accomplished



► www.thomsonlinear.com/wgsj

Precision Balls

Thomson has more than 60 years as a leader in supplying standard precision balls, precision ball bearings and unique stainless steel balls for specific applications. Thomson offers a large variety of precision ball types, unique precision ball bearings technologies and a high quality in both materials and workmanship.

- Most complete variety of materials and technologies
- More than 27 high-performance materials
- Ceramic, hollow and specialty balls
- ISO9001:2000 registered
- A2LA certified measuring lab



► www.thomsonlinear.com/pb

Clutches and Brakes

Thomson has more than 100 years of experience in manufacturing quality clutches and brakes. Today, our ISO9000 certified clutch and brake products are working in a wide range of applications and in almost all types of products.

- We offer mechanical and electromechanical wrap spring clutches and brakes
- Electromechanical power on/off spring set friction brakes and clutches, permanent magnet brakes, and multiple disc/tooth clutch brakes
- Friction, multiple disc, tooth, spring set and other types are available
- A large range of technical and value-add options are available
- Custom solutions



► www.thomsonlinear.com/cb

Customization and White Paper Designs

Applications often have unique challenges that cannot always be solved by an off-the-shelf solution. Thomson specializes in providing custom-engineered solutions quickly and cost effectively to address these requirements. We frequently develop and ship products that have been altered in one or several ways such as:

- Custom materials
- Custom surface treatment
- Custom size or geometry
- Custom assemblies
- Custom services
- New designs



► www.thomsonlinear.com/contactus

Innovation, Engineering and Customization Excellence

Often the ideal design solution is not about finding the fastest, sturdiest, most accurate or even the least expensive option. Rather, the ideal solution is the optimal balance of performance, life and cost.

Thomson continues to innovate, both in products and tools necessary for design engineers to select, size and specify the optimal component for any application – regardless of industry or market. From standard products to “white sheet” designs, Thomson has the engineering expertise and manufacturing capabilities to optimize the balance between performance and cost to suit your specific needs. Our engineered, custom designs, as well as our multitude of free, online tools, set us apart from other manufacturers and create a benchmark in the component industry.

Decades of Application Expertise

Since 1936, Thomson has been one of the forerunners in the motion technology industry. Our inventions and products have been supplying optimized motion solutions to a broad range of companies and application areas.

Thomson is the name you can trust for high-quality, innovation, on-time delivery, controlled costs and reduced risk regardless of your industry. With extensive experience in numerous industries, including mobile off-highway, medical and health, packaging, food processing, material handling, factory automation, clean energy, and machine tools, Thomson offers the widest selection of mechanical motion components designed to work together to provide the optimal solution for your specific application.



▶ www.thomsonlinear.com/materialhandling

Material Handling

Improve speed, accuracy and reliability by using the broad range of Thomson products in robots, manipulators, lifting aids and pick-and-place equipment.



▶ www.thomsonlinear.com/medical

Medical and Health

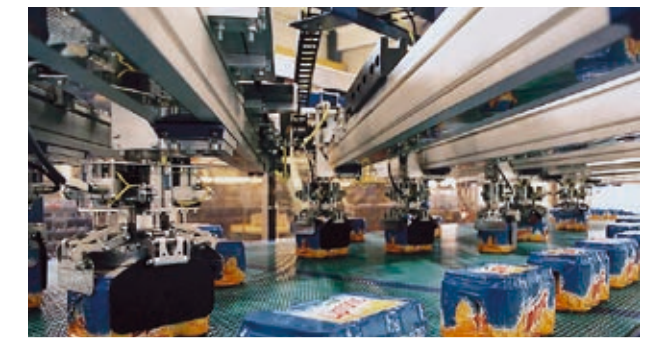
Both patients and caregivers will benefit from easier-to-use, safer, lighter, smaller and more precise machines made possible by Thomson products.



▶ www.thomsonlinear.com/moh

Mobile Off-Highway

Thousands of actuators – many of them customized – are delivered each year by Thomson to manufacturers of combines, tractors, bulldozers, trains and other vehicles.



▶ www.thomsonlinear.com/packaging

Packaging

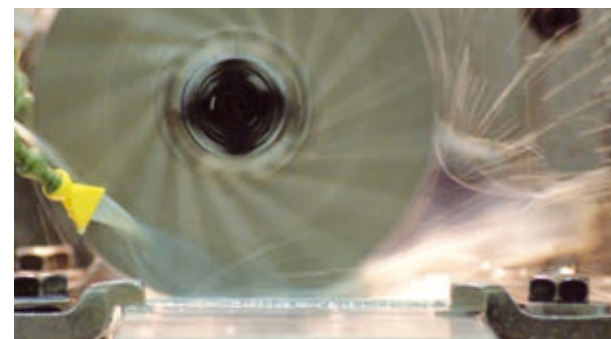
Packaging is a demanding market where Thomson can offer unique products that will improve quality and productivity while lowering manufacturing costs.



▶ www.thomsonlinear.com/foodprocessing

Food Processing

Our large range of washdown and non-contaminating components makes Thomson a perfect partner to the food processing industry.



▶ www.thomsonlinear.com/machinetools

Machine Tools

Thomson has supplied high-performance lead screws, linear guides and clutches and brakes to machine tool manufacturers for decades.



▶ www.thomsonlinear.com/automation

Factory Automation

Wherever you need to control a linear motion in a production process, Thomson has the broadest range of suitable products on the market.

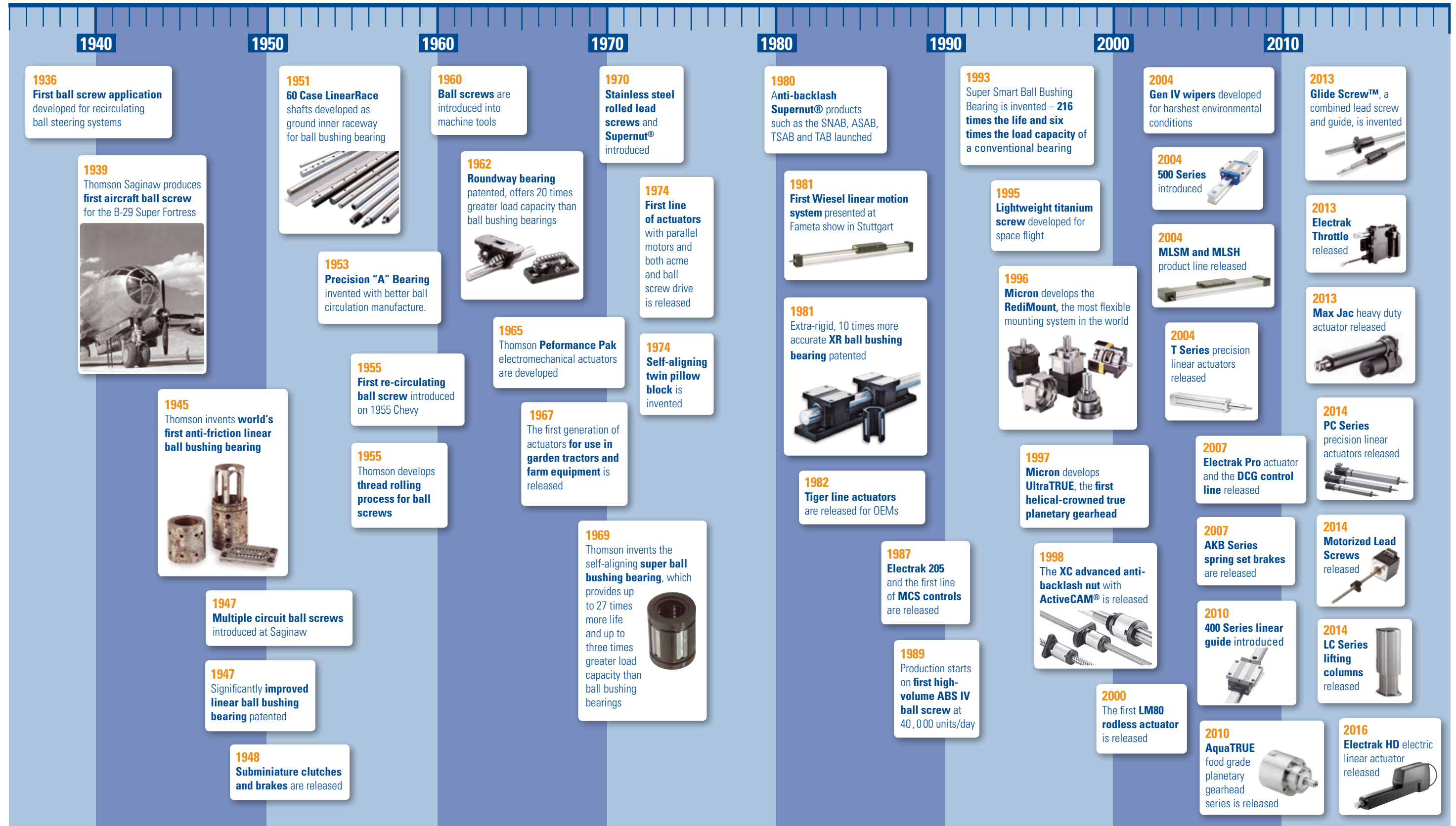


▶ www.thomsonlinear.com/energy

Clean Energy

The clean energy market is a fast-growing industry to which Thomson has been supplying standard and customized, high-quality products for many years.

70+ Years of Innovation, Quality and Trust in Motion Technology



USA, CANADA and MEXICO

Thomson
203A West Rock Road
Radford, VA 24141, USA
Phone: 1-540-633-3549
Fax: 1-540-633-0294
E-mail: thomson@thomsonlinear.com
Literature: literature.thomsonlinear.com

EUROPE

United Kingdom

Thomson
Office 9, The Barns
Caddsdow Business Park
Bideford
Devon, EX39 3BT
Phone: +44 (0) 1271 334 500
E-mail: sales.uk@thomsonlinear.com

Germany

Thomson
Nürtinger Straße 70
72649 Wolfschlügen
Phone: +49 (0) 7022 504 0
Fax: +49 (0) 7022 504 405
E-mail: sales.germany@thomsonlinear.com

France

Thomson
Phone: +33 (0) 243 50 03 30
Fax: +33 (0) 243 50 03 39
E-mail: sales.france@thomsonlinear.com

Italy

Thomson
Largo Brughetti
20030 Bovisio Masciago
Phone: +39 0362 594260
Fax: +39 0362 594263
E-mail: sales.italy@thomsonlinear.com

Spain

Thomson
E-mail: sales.esm@thomsonlinear.com

Sweden

Thomson
Estridsväg 10
29109 Kristianstad
Phone: +46 (0) 44 24 67 00
Fax: +46 (0) 44 24 40 85
E-mail: sales.scandinavia@thomsonlinear.com

ASIA

Asia Pacific

Thomson
E-mail: sales.apac@thomsonlinear.com

China

Thomson
Rm 2205, Scitech Tower
22 Jianguomen Wai Street
Beijing 100004
Phone: +86 400 6661 802
Fax: +86 10 6515 0263
E-mail: sales.china@thomsonlinear.com

India

Thomson
c/o Fluke Technologies Pvt. Ltd.
#424, Deodhar Center,
Marol Maroshi Road,
Andheri – E, Mumbai – 400059 India
Phone: +91 22 29207641
E-mail: sales.india@thomsonlinear.com

Japan

Thomson
Minami-Kaneden 2-12-23, Suita
Osaka 564-0044 Japan
Phone: +81-6-6386-8001
Fax: +81-6-6386-5022
E-mail: csjapan@scgap.com

Korea

Thomson
F7 Ilsong Bldg, 157-37
Samsung-dong, Kangnam-gu,
Seoul, Korea (135-090)
Phone: +82 2 6917 5049
Fax: +82 2 528 1456
E-mail: sales.korea@thomsonlinear.com

SOUTH AMERICA

Brazil

Thomson
Av. Tamboré, 1077
Barueri, SP – 06460-000
Phone: +55 (11) 3616-0191
Fax: +55 (11) 3611-1982
E-mail: sales.brasil@thomsonlinear.com