

Under the Compact Automation Products brand, ITT is a market-leading manufacturer of space-efficient linear actuator solutions including, industry standard and custom pneumatic cylinders, hydraulic cylinders and accessories. With Compact's 16 patents, ITT has manufactured over 50,000 modified and custom designs.

With over 12 patents within the Turn-Act brand, ITT is a leading manufacturer of rotary actuators and multi-motion devices. We sell our products through a highly capable distribution network. They can assist you with application specifications and product support.

ITT is dedicated to producing quality products. We have over 3 million standard products available with a large percentage of our sales being application specials.

**Common Applications:**

- Municipal/Industrial Valve Actuation
- Manufacturing Process Systems
- Semi-Conductor Manufacturing
- Tooling and Machining Systems
- Energy Production Tooling
- Robotics and Automation
- Component Assembly
- Automotive Assembly
- Medical Equipment
- Conveyor Systems
- Packaging

**Industry Leading  
Quality and Value –  
On Time Every Time**



# ITT Actuator Capabilities



ENGINEERED FOR LIFE

Compact Automation Products, LLC  
105 Commerce Way  
Westminster, SC 29687  
Tel: 864.647.9521  
Fax: 864.647.9574  
[www.compactautomation.com](http://www.compactautomation.com)



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# ITT Actuator Solutions

## Cylinders (Inch, Metric and Clean-Act®)

COMPACT® cylinders are designed for limited space and weight applications. Cylinders are up to 60% smaller than conventional types and are ideal for clamping fixtures, robotics, parts feeders, and medical devices.

COMPACT®'s unique space efficient, patented design makes these products perfect for the semiconductor, packaging, medical and factory automation industries.



## Workholding (Grippers, Twist Cylinders, Collet Closers, Intensifiers)

ITT Grippers are designed for use in industrial applications such as robotics, automated assembly and manipulator/tooling. All units feature self-contained, double-acting ITT actuators. All models feature low unit weight, high output and compact size.

ITT Twist Cylinders are linear motion cylinders with internal cams that provide 90° swing motion. Twist cylinders are ideal swing clamps for automated and semi-automated assembly.

ITT Collet Closers are stationary fixtures for metalworking, bench top assembly, precision robotics and assembly machine applications. With an output gripping force ranging from several pounds to 4 tons, collet closers can also be used for crimping, forming and staking.

ITT Intensifiers are simple boosters that utilize large pneumatic pistons to intensify oil pressure with a smaller piston. All intensifiers are designed to be light weight and space efficient.



## NFPA

ITT NFPA cylinders feature the patented Enersorb® piston which provides exceptionally low breakaway, high energy absorption and reduced noise output. The Floating Bearing design allows for minor misalignment and superior wear characteristics. 1-1/2" to 24" Bore.



## Accessories

ITT Round, Standard and Husky Sensors are offered with a variety of options to meet your situational needs.

ITT Flow controls are available for metered out, metered in or needle valve operations.

ITT Alignment Couplers are built from hardened steel with a black oxide finish in standard and metric sizes.



## Slides (Guided Slides, Ball Slides)

ITT Slides are designed to outperform conventional non-rotating cylinders. Our slides are designed for short and long stroke. They are perfect for limited space applications where a cylinder is needed that guides and supports its own load.

The ITT design of these slides makes them compatible with semiconductor, packaging and assembly applications.

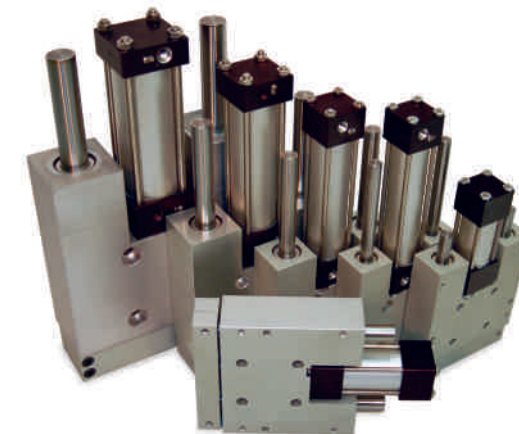


## Z-Series Slides

Z-Series Slides provide pinch type tooling plate connection improving rigidity with a sturdy system ideal for precise movement and accurate location.

Materials consist of Standard Hardened Carbon Steel, Hardened Stainless Steel, Ceramic Coated Light Weight Aluminum and Corrosion Resistant Coated Hardened Steel.

Standard guide rods/bushings offer solid performance with linear ball or composite bushing options. Oversized guide rods/bushings provide greatest rigidity with minimal deflection. Our Z-Series slides offer a longer life and repairable design.



## C-Series Slides

ITT C Series Slides offer 2 body styles with composite or ball bearings and 3 Guide Rod options to address the broadest range of guided linear motion applications. Available Bores: 3/4", 1-1/16", 1-1/4", 1-1/2" and 2". An extensive list of options is available including switches, shock absorbers and more. The C-Series is readily modifiable for custom applications with a more economical and non-repairable cylinder design.



## Guided Rod Cylinders (GRC)

ITT Turn-Act Guided Rod Cylinders combine high strength, lightweight extruded bodies and the rigid support of composite or roller ball bearings with the Enersorb® piston that provides an unparalleled guided cylinder product. The Enersorb® piston from ITT Turn-Act provides precise repeatability, smooth operation, high noise reduction and energy absorption all with an extended cycle life and non-lube service. Four base models ranging from 1/2", 3/4" 1-1/4" and 2-1/2" bore sizes with lift forces from 6 to 490 lbs.



## Turn-Act Rotary Vane Actuators

ITT Turn-Act Rotary Vane Actuators have only one moving part which produces rotary motion with ZERO Backlash, 100% repeatability and continuous full torque. The actuator utilizes patented urethane seals which permit long cycle life and non-lube service. Numerous switch and stroke sensors, adjustable stroke control, special fixed rotations, various shaft styles and materials, and many other options are available to address your specific application requirements. Torque range is from 1.4 – 5200 in.-lbs.



## Val-U-Act® & Class-Act®

ITT Val-U-Act® and Class-Act® are double acting and spring return pneumatic valve operators. Operates 1/4" through 12" ball, plug and butterfly valves.



## Turn-Dex®

ITT Turn-Dex® is a Turn-Act Rotary Vane Actuator with an overrunning clutch providing unidirectional output shaft rotation, either clockwise or counter clockwise. Torque range is from 13 to 350 in.-lbs.



## Multi-Act® Actuators

ITT Multi-Act® Actuator's exclusive design generates linear and rotary motion. The motions may be operated independently and/or simultaneously. Both, the linear and rotary strokes are fully adjustable. The load is carried by an oversized shaft and heavy duty guide rails.



## Gate Valve Actuators (GV)

2-1/2" through 24" bore models have end plates and pistons that are made from high strength aluminum or steel materials.

Combined with an aluminum or composite cylinder tube, the ITT GV actuators are over 50% lighter than actuators constructed from steel components alone. The end plates are black hard coat anodized for high corrosion resistance.

