

Power & Process Products and Services



About Curtiss-Wright

Curtiss-Wright is a trusted provider of unique bolting solutions for operating reactors and new build projects. With over 30 years of experience supporting nuclear utilities, DOE, DOD, and industrial projects, Curtiss-Wright's bolting solutions line is a proven option for saving time and improving safety. Our offerings include both nuclear safety-related and commercial grade products that support operational efficiency. Curtiss-Wright's bolting solutions offerings for the industrial market include the HydraNut High-Temperature Hydraulic Nut, PlasmaBolt Anti-Galling Fasteners, Superbolt Mechanical Tensioners, and Boltight Hydraulic Tensioners.

Bolting Solutions Product Line

Our bolting solutions product line combines proven performance with innovative designs for bolted flange joints and critical equipment assets. With over 30 years of technical experience, we work side-by-side with customers in the field to understand their challenges and operational needs. Whether you're looking to improve an existing set-up or need a completely new solution, our team has the design capabilities to provide off-the-shelf solutions and develop custom systems tailored to your specific requirements. You provide the application details, design parameters, and end-user requirements, and we'll deliver a reliable, engineered bolting solution that meets both application and operational demands.

The Benefits of Collaborating with Curtiss-Wright

- We maintain ISO 9001:2015 certification.
- We deliver high-quality products on-time to help maintain your schedule.
- Our bolting solutions team is well-experienced and highly knowledgeable, manufacturing and distributing products since the 1980s.
- We offer both standard and custom product designs to meet the requirements of your application.

The Advantages of Tensioning

Tensioning applies a direct axial force to stretch the bolt, achieving accurate and uniform preload across the fasteners. Unlike torquing, which can vary due to friction between threads and nut faces, uniform tension creates consistent clamping force and even loading of the gasket or seal, which minimizes leaks, joint failures, or gasket blowouts. Direct tension ensures a more accurate and uniform preload by eliminating the uncertainties introduced by torque, such as rotational forces and friction. Hydraulic tensioning systems require less manual effort and eliminate the need for heavy torque wrenches. This increases safety by reducing operator fatigue and injury risks. Multi-stud tensioners or the HydraNut tensioning system can tension all or most bolts simultaneously, drastically reducing assembly and maintenance time. These advantages make our tensioning systems effective and efficient solutions for critical bolting applications, balancing speed with safety and repeatability.

For More Information

Scan the QR code below to visit our website.



Bolting Solutions

For Industrial Applications

**CURTISS -
WRIGHT**

HydraNut®

The HydraNut bolting system consists of high-temperature hydraulic nuts used in flange closures for applications up to 700°F. HydraNuts replace existing hex nuts and remain on the flange during operation. Connected together, they directly tension all studs simultaneously, making installation and removal easier, faster, and safer while ensuring an even clamping load for reliable sealing. The HydraNut provides highly accurate and repeatable preload, making it ideal for critical applications. Its flexible design can be adapted to specific use cases, including overhead clearance challenges, environmental considerations, or robotic operation.

Applications

- Heat Exchangers
- Pumps
- Valves
- Reactors
- Any Flanged Application

Features

- Shortens maintenance schedules, increasing uptime
- Reduces heavy equipment and improves worker safety
- Improves joint integrity to ensure equipment reliability

PlasmaBolt

PlasmaBolts are threaded fasteners equipped with our proprietary PlasmaBond® anti-galling engineered surface. PlasmaBond is designed to aid in installation and removal of fasteners by maintaining its anti-galling properties during maintenance intervals and will not breakdown under temperatures up to 1100°F. PlasmaBolts are reusable for up to 3 removals.

Applications

- Any threaded fastener material or design up to 7" in diameter and 8' in length

Features

- Reduces thread friction and galling on installation and removal
- Eases fastener removal, resulting in faster maintenance intervals
- Extends component life and improves equipment reliability by reducing destructive removal of fasteners

Superbolt®

The Nord-Lock Superbolt Multi-Jackbolt Tensioners can secure any bolted joint, regardless of size, location, operating environment, preload requirement, or application. They simplify heavy duty bolting by reducing large torque preload requirements to smaller torque values distributed evenly across the jack bolts.

Applications

- Valves
- Pumps
- Heaters
- Turbines
- Pulverizers
- Manway Doors

Features

- Tremendous clamping force available
- Low torque requirement - only hand tools needed
- Increased worker safety
- Fits in restricted areas

Boltight®

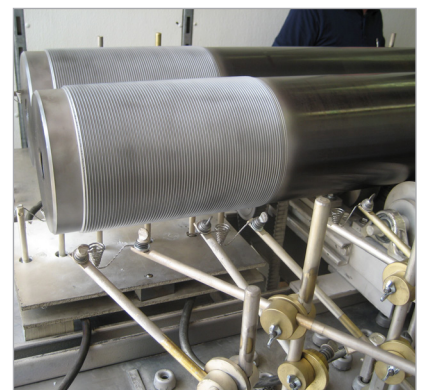
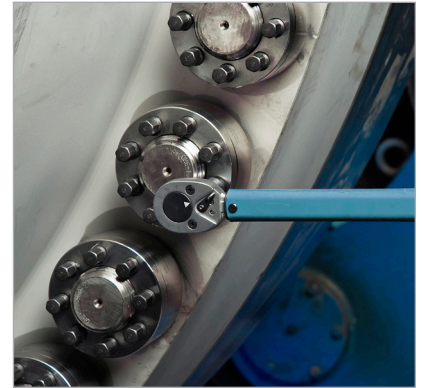
Boltight hydraulic bolt tensioners are high-quality tools for tightening flanges and other critical bolted connections. These tools apply controlled pressure to axially stretch the bolt, then rotate the nut down to the joint face to lock the load. Multiple tensioners can be used to deliver an even, accurate pre-load. A wide range of products are available for all market segments.

Applications

- Pumps
- Valves
- Turbines
- Reactors
- Any Flanged Application

Features

- Strong and robust designs, ensuring durability and long operating life
- Lightweight, ensuring easy operation
- Precise engineering, offering smooth, trouble-free operation
- Spring return tensioners to save time



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LC - 1405 - 09.2025 - NV - IND