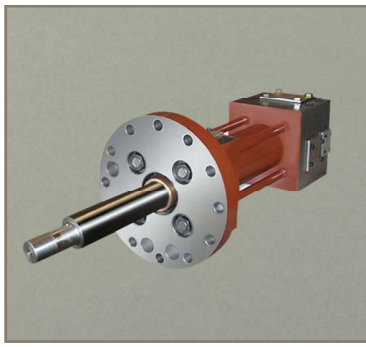
aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding

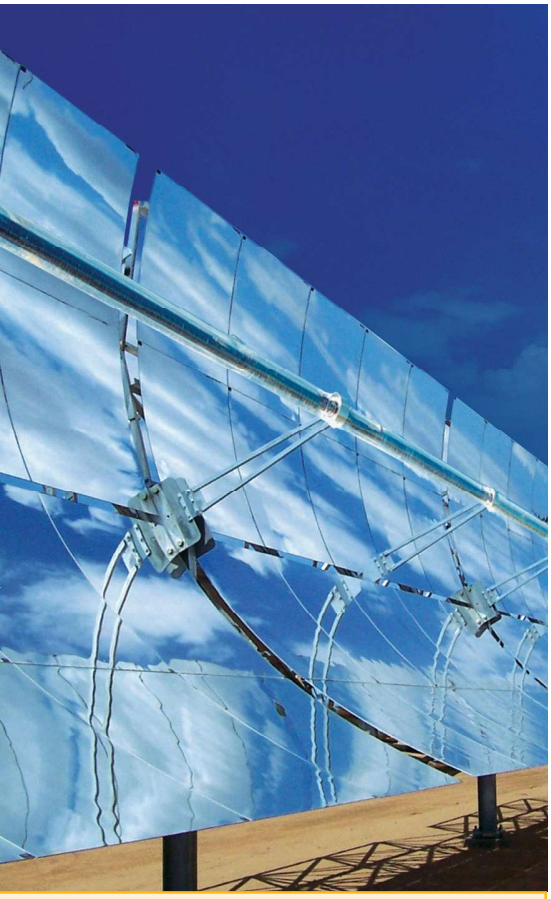
Cylinder Solutions

Standard & Custom



Parker

ENGINEERING YOUR SUCCESS.



Partner with the best – contact Parker Hannifin for all of your cylinder needs. We are always **Engineering Your Success.**

Parker Hannifin is the world's largest manufacturer of Hydraulic, Pneumatic, Electro-Hydraulic and Electric cylinders.

With our global presence in 50 countries, we are perfectly suited to provide superior customer service to any location.

Here is a short list of what you can expect from Parker:

- **Design and Application Experience**
- **Responsiveness**
- **Fast Product Delivery**
- **System Integration Capabilities**
- **Ingenuity and Creativity**
- **Organizational Integrity**
- **Highest Quality**
- **Competitive Pricing**
- **Financial Stability**
- **Worldwide Support**

Markets and Applications

Parker cylinders are utilized worldwide in many markets and applications, including:

- **Oil and Gas**
- **Renewable Energy**
- **Power Generation**
- **Process Valves**
- **Mining**
- **Primary Metals**
- **Metal Fabrication**
- **Marine**
- **Civil Engineering Projects** (including US Corps of Engineers Projects)
- **Military and Commercial Aerospace**
- **Material Handling**
- **Testing and Analysis**
- **Construction**
- **Wood Processing**
- **Waste Processing**
- **Automotive**
- **Tire Press**
- **Machine Tools**
- **Entertainment**

Innovation

Parker continues to innovate new products and technologies to meet the ever-changing demands of the market. Some of these innovations include:

Series XFC – The electromechanical cylinder for hydraulic cylinder replacement or high force electromechanical applications up to 80,000 lbs-force. Drop-in functionality with 100% duty cycles.

Series CHE/CHD – Heavy duty performance from the most compact hydraulic cylinders in the world.

Series RDH – Heavy-duty, industrial-grade repairable welded cylinder that is truly aligned to industrial market demands. We combined robust design, advanced sealing technology and proven exterior toughness into a cost-effective, catalog-standard platform product with short lead times appropriate for industrial customers.

Corrosion Resistant Series – All stainless steel 3000 psi rated hydraulic cylinder from a standard platform with standard deliveries.

Piston Sensing – When you need to sense piston rod position in carbon steel cylinders, we have the most inexpensive solution in the industry: a magnetic piston with sensors that can be positioned anywhere along the stroke. Continuous feedback options are also available.

Rod Coatings

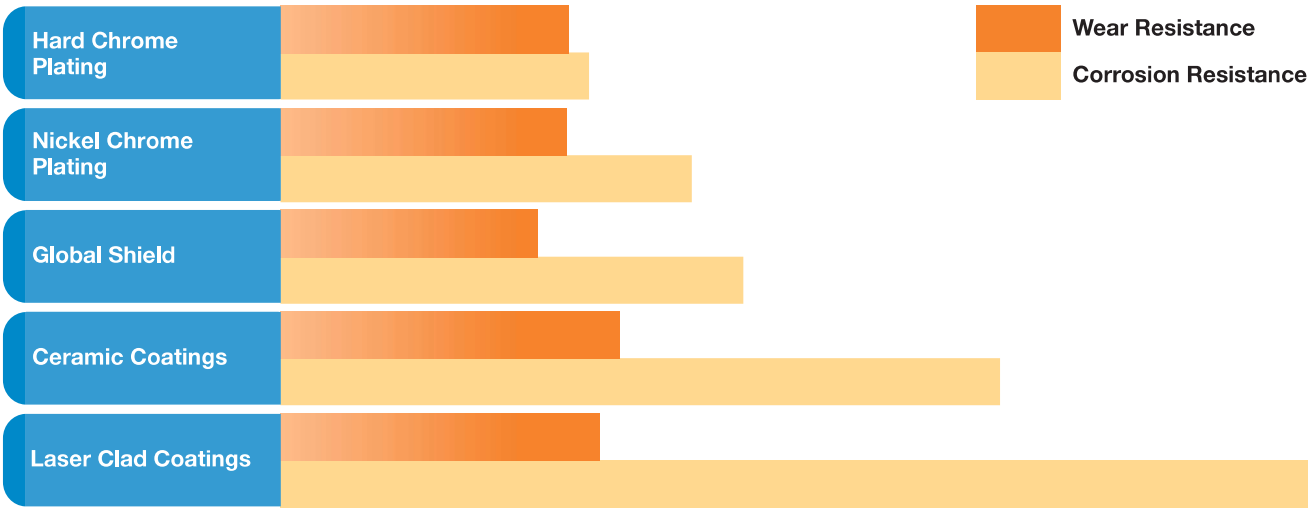
Applications exist where typical rod coatings are inappropriate to meet the expected cylinder service life. Parker offers a myriad of **enhanced rod coatings** which are tailor-made for these situations. We have recorded the relative performance of these coatings via life testing in actual applications and the following standardized tests:

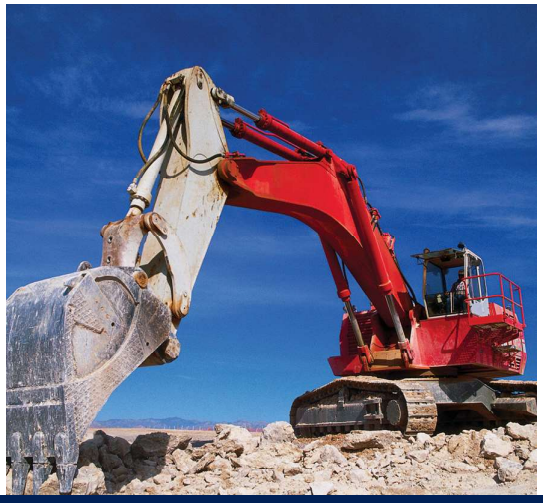
- **Salt Spray (ASTM B117 and ISO 9227)**
- **Copper-Accelerated Acetic Acid Salt Spray (ASTM B368)**
- **Acid Mud Immersion Test**
  Solution contains 13.5% HCL and 1.5% HF acids

To record the relative wear resistance of each coating, all tests were performed on stressed (side-loaded) and unstressed material.

Our typical rod coating options include:

- **Hard Chrome Plating**
- **Nickel Chrome Plating**
- **Global Shield**
- **Nitrotec/Nitride**
- **Ceramic Coatings**
- **Laser Clad Coatings**
  Including Ultimet,® CCW,® Stellite,® Inconel,® stainless steel and other alloys.





Many Abilities, One Company: Parker

In order to focus on customers, Parker is organized into market-based operating groups and business units. The Parker brand permeates throughout the entire company, without the need for ambiguous cylinder subsidiaries or private label sub-brands. We have one name: **Parker**.

We Make Cylinders

Cylinders come in all shapes and sizes. They also range from the very standard to the extremely custom. Parker manufactures all types of cylinders. Please see the table below to review the breadth of our capabilities.

	Construction Type					
Features	**Tie Rod**	**Compact Extruded (Profile)**	**Bolted Mill-Type or Welded**	**Telescopic**	**Intensifier**	**Custom (all styles)**
Hydraulic	✓	✓	✓	✓	✓	✓
Electro-Hydraulic	✓		✓			✓
Pneumatic	✓	✓	✓	✓	✓	✓
Electric	✓	✓				✓
Bore Sizes	3/4" to 30" 25 to 762 mm	20 to 100 mm	1-1/2" to 48" 38 to 1219 mm	1-1/2" to 48" 38 to 1219 mm	1" to 20" 25 to 508 mm	1-1/2" to 48" 38 to 1219 mm
Max. Stroke Length (typical)	300" 7620 mm	100-150 mm	876" 22250 mm	480" 12192 mm	120" 3048 mm	876" 22250 mm
Max. Pressure Rating - Hydraulic	5000 psi 345 Bar	140-207 Bar	5000 psi 345 Bar	3000 psi 207 Bar	60000 psi 4138 Bar	15000 psi 1034 Bar
Max. Pressure Rating - Pneumatic	250 psi 17 Bar	250 psi 17 Bar	250 psi 17 Bar	250 psi 17 Bar	5000 psi 345 Bar	3000 psi 207 Bar
Carbon Steels	✓	✓	✓	✓	✓	✓
Stainless Steels	✓		✓	✓	✓	✓
Exotic Steels	✓		✓	✓	✓	✓
Aluminum	✓	✓				✓
Composite	✓					✓
Standards	NFPA ISO/DIN VDMA, JIS Other Industry Interchange	ISO 16656:2004	NFPA ISO/DIN JOHS Other Industry Interchange	Open Design (any standard)	Open Design (any standard)	Open Design (any standard) May use any construction style

Systems:
We Are The Industrial Convenience Store

When you consider the hydraulic or electronic system for the cylinder, think of us as your one-stop shop. Parker manufactures a full line of seals, filtration, fluid connectors, valves, accumulators, sensors, servomotors, drives and other products that can be **seamlessly integrated to the cylinder, functionally tested and then shipped as an entire assembly from one location**. Other mechanical features, such as external bearings, frames and supports are common requests that can be easily accommodated. With intra-company product development as a key strength, we can provide you with a complete Parker solution. From the basic to the most complex, cylinder assemblies and systems are our specialty.

Testing, Certifications and Specifications

All Parker cylinders are 100% tested to meet or exceed customer expectations. Test Certificates and Certificates of Conformance are available upon customer request.

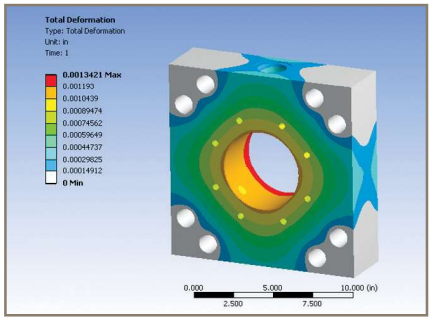
We also have the following Third Party Approvals and Certifications:

- **ABS (American Bureau of Shipping)**
- **DNV (Det Norske Veritas)**
- **BV (Bureau Veritas)**
- **USCG (U.S. Coast Guard)**
- **Lloyd's Register**
- **ASME**
- **ISO 9001-2000**
- **Nuclear (NUPIC-Approved Commercial Grade Supplier)**
- **Government (Military) Specification MIL-I-45208**

Parker is a leader in establishing National Fluid Power Association (NFPA), DIN and ISO standards that are utilized worldwide. The industry follows our lead.

Software

To provide the optimum design for your application, we utilize the best available 3D modeling and functional analysis software. Tailor-made programs and Finite Element Analysis (FEA) verify our design, while customized reporting of your exact cylinder model will support your confidence in our product.



Worldwide Support

Cylinder Manufacturing and Service Locations

I Am Parker

Customers have the highest importance, and Parker is on a continuing journey to a pure customer service culture. Our company-wide goal is exceeding our customers' expectations everyday, in everything we do. **"I Am Parker"** is our way of saying that we are all accountable for customer service. Contact any Parker representative to benefit from the way that we work to **Engineer Your Success**.

Worldwide Support

Parker is an international company with headquarters in the USA, Europe and Asia. Our **cylinder manufacturing and service locations** span the globe while nearly every country has a Parker Sales Office to provide local support for you and your customers.

At Your Fingertips…

Information is readily available!

www.parker.com/cylinder

North and South America

Des Plaines, IL (USA HQ)
Benton, AR, USA
Blaine, MN, USA
Corona, CA, USA
Enfield, CT, USA
Eugene, OR, USA
Goodland, IN, USA
Lithia Springs, GA, USA
Plymouth, MI, USA
St. Marys, OH, USA
Milton, Ontario, Canada
Monterrey, Mexico
Toluca, Mexico
Cachoeirinha, Brazil

Europe

Warwick, UK (Europe HQ)
Arsago, Italy
Cologne, Germany
Stuhr, Germany
Falköping, Sweden

Asia and Australia

Shanghai, China (China HQ and Manufacturing)
Tianjin, China
Osaka, Japan
Nara, Japan
Yamaguchi, Japan
Seoul, South Korea
Navi Mumbai, India
Castle Hill, Australia (Australasia HQ and Manufacturing)

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