



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



Hydraulic Global Overview

Products and Systems for Mobile, Industrial and Truck



ENGINEERING YOUR SUCCESS.

Parker's Global Markets



Parker Hydraulics has a leadership position in major mobile, industrial and truck markets throughout the world. Based on a partnering philosophy, Parker provides not only leading edge motion and control technology, but is deeply committed to improving productivity and throughput while reducing energy and fuel consumption.

Mobile

Parker continues to dominate the mobile market with innovative products, sub-assemblies and systems. Parker's knowledgeable motion and control experts help vehicle design teams develop and refine functional subsystems or complete-vehicle motion control systems. These solutions include implement control, cooling, steering, braking, suspension, drive and propel and intelligent, computer-based mobile systems. Many Parker components are ISO certified and all are manufactured to the highest standards.

Industrial

Parker's industrial hydraulics capabilities cover a wide range of applications from machine tool, rubber and plastics and in-plant automotive to the ever changing and demanding medical and energy markets. Parker's industrial engineering and manufacturing expertise is what sets it apart from others. Parker continues to look for ways to increase customer's profitability by providing components and systems that are smaller, lighter, and last longer. Additionally, Parker is dedicated to improving the work environment with products that are quieter, run longer and produce less heat while reducing overall machine energy costs.

Truck

Today's global truck market is as tough as ever. Increased pressures from regulators to improve fuel efficiency and reduce emissions has necessitated that manufactures look for design and manufacturing partners who have the engineering expertise and breath of products to meet the challenges head-on. Parker works with both OEMs and trailer and body builders to see that not only are regulations met, but that trucks stay on the road and continue to be productive and profitable. One of the best commitments to the truck market is Parker's fan drive system that is quieter, much more efficient and greatly improves fuel economy.





Support and Service

When it comes to hydraulics, Parker's worldwide network of field-sales engineers walk the walk and talk the talk. The best trained in the business, our field-sales engineers can be your single point of contact for any hydraulic requirement, including rapid problem solving. All are degreed engineers who are dedicated to long-term relationships. And whether they are crawling inside your machine during business hours, or working weekends, Parker engineers are there when you need them!

Hydraulic Distribution and Channel Partners



Parker's ultimate competitive advantage in serving customers has been built with a global network of 12,000 distributors that can provide Parker products and services nearly anywhere, anytime. Many Parker distributors offer a one-stop shop for a wide range of products, engineering services, computer-aided design, fabrication, and assembly. Parker distributors can assist with equipment design, prototyping, and the integration of electronic or pneumatic components with hydraulic systems.

Parker's distributors are chosen because of their commitment to providing exceptional customer service and complete hydraulic systems solutions and carry local inventory of Parker products, ensuring customers fast delivery and reduced downtime.

Locate your nearest Parker distributor by visiting our web site at www.parker.com/distloc

Training Excellence

Parker's technical training for hydraulic, pneumatic, and electromechanical technology is the best in the world. We offer complete and comprehensive texts, web-based training, and hands-on classes for employees, distributors, and customers. Classes are held at your facilities or at Parker.

Hundreds of colleges and universities use Parker textbooks in motion and control courses. In addition to texts, Parker provides these institutions instructor guides, computer-based training discs, digital overheads on CD, final exams, drafting and simulation software, lab manuals, and trainer stands.

Find out more about Parker training by visiting: www.parker.com/training

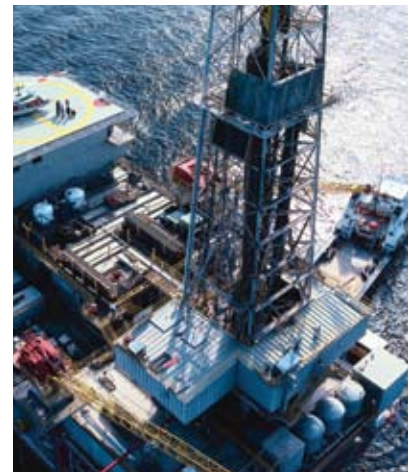
Parker is your global hydraulics partner when it comes to increased productivity and profitability. No matter what your needs, Parker is your single source provider of all your hydraulics motion and control solutions.

Parker - Engineering your Success.





Technology/ Customer Solutions



Wind Power Systems

Parker hydraulics play a critical role in the operation of wind turbines, as they harvest kinetic energy. We supply the hydraulic power necessary to operate pitch, yaw and braking systems while supplying back-up in case of a power failure, to provide a safe stop.

Customer-Driven Solutions

Parker Hydraulics is in the “solutions business”, offering our customers the widest array of solutions and services available. Customers can be assured that no one knows hydraulics like Parker’s staff of highly qualified application and design engineers, innovation teams, and our systems-solutions specialists. Our customers can reduce their number of vendors without compromising product integrity. And buying from a single source saves both time and money while allowing easier ordering and faster deliveries.

Hydraulic Products for Every Application

At the heart of every mobile, industrial and truck hydraulics solution is Parker’s 75-year reputation for innovation and quality manufacturing. No one is better positioned to meet your needs. Parker maintains more than 200,000 hydraulic model numbers in its inventory, so whether you are designing new applications or retrofitting older ones, we can meet any hydraulic component requirement.





photo by: Atlas Copco



Solar Power Generation

A precise, powerful, simple and low maintenance hydraulic motion system is key to efficient energy generation at solar thermal power plants. A single hydraulic actuator rotates each parabolic mirror concentrator in 0.1 degree increments to precisely track the sun.

At Parker, value is not a commodity. Instead, it is the result of personal interaction and resources. Our value-added services include:

- Machine Analysis and Troubleshooting
- Design-Engineering Support
- System Design
- Components Selection
- New Product Development
- Custom-Component Manufacturing
- Assemblies and Kits
- Sub-Systems
- Global Support and Service
- Training

Application Expertise

Parker believes that it takes more than our great products, competitive prices, and on-time delivery to satisfy customer demands. It takes a commitment to provide exceptional value.

For today's customer, an outstanding total experience is the benchmark by which many suppliers are evaluated. Parker delivers tangible and measurable benefits that are designed to reduce your total cost while increasing performance and productivity, eliminating your frustrations, and improving your profitability.



Energy Recovery

Parker's hybrid hydraulic drive systems are designed to recover and store brake energy for later use to generate power. Field test results of our refuse truck systems have yielded improvement in miles per gallon ranging from 45 to 60%.



Extensive Product Offering



When it comes to hydraulic products, Parker is the most recognized name in the business. With over 75 years of experience, Parker currently inventories more than 200,000 hydraulic part numbers, allowing for unlimited solution possibilities. Customers can reduce their number of vendors without compromising quality. And buying from a single source saves time and money, allowing for easier ordering and faster shipping.

Accumulators

www.parker.com/hyd/accumulators



Accumulators maximize the energy efficiency of hydraulic systems by increasing productivity, reducing maintenance and lowering overall operating cost. These systems last longer and provide better performance than comparable systems without accumulators.

- **Piston, bladder and diaphragm designs**
- **Shock suppressors**
- **Reservoir isolators**
- **Gas bottles**
- **Charging kits and accessories**

Compact Hydraulics

www.parker.com/hyd/oildyne



Compact, powerful and efficient performance are delivered from Oildyne products. Robust, simple designs provide power density, easy installation and flexibility for use across a wide variety of applications.

- **Electro-hydraulic actuators**
- **Miniature power units**
- **Fluid power systems**
- **Gear motors**
- **Piston pumps**
- **Cartridge piston pumps**
- **Hand pumps**

Cylinders

www.parker.com/hyd/indcylinders
www.parker.com/hyd/mobcylinders



From off-the-shelf mobile or quick-delivery tie rod to highly engineered cylinders for your specific applications, the wide array of hydraulic cylinders from Parker reduce your cost by providing the optimum hydraulic actuator solution.

- **Industrial Tie Rod**
- **Mobile**
- **Mill Type**
- **Electrohydraulic**
- **Telescopic**
- **Custom**



Extensive Product Offering

www.parker.com/iqan
www.vansco.ca
www.parker.com/hyd/sensors

Mobile Electronics



Electronic systems improve diagnostics, ease of operation and functionality. User programmable, Windows®-based software reduces programming costs and development time. Several products support multiple languages and custom overlays. Parker systems experts can assist in all phases of implementation.

- System solutions comprising control modules, displays and electromechanical
- Sensors for speed and direction, rotary positioning, proximity, tip, tilt and linear positioning
- CAN bus (proprietary, J1939, generic) interface
- ISO, EN, IEC, EP, SAE certifications and verification testing

Filtration

www.parker.com/hyd/filter



Parker's hydraulic filters deliver positive protection against contamination, providing reliability for your hydraulic systems and components. On-line particle analysis, off-line bottle sampling and water contamination analysis are perfect complements to high performance.

- Pressure & return filters
- Off-line & purification systems
- Reservoir accessories
- Fluid condition monitoring
- Fluid analysis
- Competitive interchanges

Fluid Connectors

www.parker.com/fcg/fluidconnector



The leaders in "dry technology" for the fluid power industry, Parker's Fluid Connectors Group is your single source for Parker's high-quality tube fittings, hose and hose fittings, thermoplastic tubing, brass fittings and valves, quick-disconnect couplings and assembly tools.

- Brass products
- Quick couplings
- Rubber hose products
- Thermoplastic products
- Tube fittings

Motors

www.parker.com/hyd/pistonvanemotors
www.parker.com/hyd/lshmtmotors
www.parker.com/hyd/gearmotors



Parker's complete line of long life hydraulic motors provides solutions to almost any rotary power application. Piston units deliver unmatched performance and efficiency. Gear and gerotor motors are a lower cost answer for many applications. Pressures to 420 bar (6000 PSI). Horsepower from 5 to over 600.

- Low speed high torque motors
 - Gerotor
 - Radial piston
- High speed motors
 - Piston - fixed & variable displacement
 - Vane
 - Gear



Extensive Product Offering

Power Take Offs

www.parker.com/hyd/chelsea



Performance and reliability you can count on every day with industry leading engineering and innovation. Parker offers value-added and premier customer service to the auxiliary power market.

- 6, 8 and 10 Bolt series
- Designs for both manual and automatic transmissions
- Broadest range of power shift PTO's in the market
- System solutions for continuous power applications

Power Units

www.parker.com/hyd/powerunits



Self contained pre-plumbed hydraulic power units for industrial applications. Units can be configured with coolers, heaters, filtration and various valving options. Designed to provide low maintenance/reduced downtime performance for your system.

- 5 to 40 gallon
- 0.5 to 20 hp
- 3000 PSI
- Gear, vane or piston operated
- 0-16 GPM
- Very quick lead-times

Pumps

www.parker.com/hyd/pistonvanepumps
www.parker.com/hyd/pistonpumpshydrotrans
www.parker.com/hyd/gearpumps



Designed to handle a wide range of applications, Parker pumps are available with a full complement of computer and electronic controls. Manufactured with the finest materials under the strictest control, these pumps deliver high efficiency and low maintenance under the toughest operating conditions.

- Gear pumps
- Piston and Vane pumps
- Fixed and variable displacement pumps
- Gold Cup hydrostatic transmission pumps
- Flow dividers/intensifiers

Rotary Actuators

www.parker.com/hyd/rotaryactuators



Hydraulic and pneumatic rotary actuators featuring long-life, durability and high efficiency for low cost operation. Offering a full range of torque options and pressure ratings matched to the application for an optimum solution.

- Rack and pinion
- Non-tie rod rack & pinion
- Single and double vane
- Custom engineered housings and shafts
- Materials: titanium, monel, stainless, bronze
- Special environments and applications

Extensive Product Offering

Threaded Cartridge Valves & Integrated Hydraulic Circuits

www.parker.com/hyd/hcs



Parker has one of the broadest lines of cartridge valves and manifold systems in the industry. With expert applications engineering assistance, we can develop and design virtually any solution to meet your needs. From simple cartridge valve applications to complex integrated manifold systems, we can handle it all.

- Solenoid valves
- Pressure controls
- Flow controls
- Check and Shuttle valves
- Logic elements
- Load and motor controls
- Proportional control valves
- Integrated manifold solutions

Valves and Controls

www.parker.com/hyd/valves



Parker provides the largest selection of Mobile and Industrial valve products ranging from simple in-line valves to high performance sectional and manifold mounted directional and proportional valves.

- In-line products including flow and pressure controls, checks, ball and shear seal valves
- Manifold mounted pressure, directional, proportional control and servovalves
- Mobile open-center and pressure-compensated load-sense valves (pre & post comp)
- In-line accessories and hydraulic remote controllers



WARNING - USER RESPONSIBILITY

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Parker Hannifin Corporation

ENGINEERING YOUR SUCCESS.

A global Fortune 300 company with customers in 48 countries, Parker Hannifin is the world's leading supplier of hydraulic, pneumatic, and electromechanical systems and components. Customers rely on Parker for engineering excellence, world-class manufacturing and outstanding customer service to provide comprehensive application solutions that are second to none.

- More than \$12.1 billion in sales
- 298 plants worldwide
- 12,000+ distributors
- 449,000 customers
- Serving 1,200 distinct markets
- Listed as PH on New York Stock Exchange



Let Parker become part of your design team. Whether you need to develop new products, redesign existing applications, or design completely new systems, Parker offers unparalleled engineering expertise.

The Parker Brand

Parker Hannifin is your trusted single source partner for all your motion and control solutions.

Action Directory

When it comes to hydraulic components and solutions, no company offers more than Parker. Get a jump on your next solution by contacting Parker today.

Sales

Call 800-CPARKER (800-272-7537)

Distributor Locator

Call 800-CPARKER

Online: www.parker.com/distloc

Literature

Call 800-CPARKER

e-mail: c-parker@parker.com

Online

www.parker.com/hydraulics

Training

Software and training programs

Call 216-896-2495

Online: www.parker.com/training



Mobile Bulletin
HY19-1012/US



Industrial Bulletin
HY01-1001/US



Truck Bulletin
HY19-TD01/US

Parker has available a set of Hydraulic Product Catalogs for industrial, mobile and truck markets, each paired with an interactive CD. Call 800-CParker to order any or all of these comprehensive guides.



Parker's Motion & Control Technologies

At Parker, we're guided by a relentless drive to help our customers become more productive and achieve higher levels of profitability by engineering the best systems for their requirements. It means looking at customer applications from many angles to find new ways to create value. Whatever the motion and control technology need, Parker has the experience, breadth of product and global reach to consistently deliver. No company knows more about motion and control technology than Parker. For further info call 1 800 C-Parker (1 800 272 7537).



AEROSPACE

Key Markets

- Aircraft engines
- Business & general aviation
- Commercial transports
- Land-based weapons systems
- Military aircraft
- Missiles & launch vehicles
- Regional transports
- Unmanned aerial vehicles

Key Products

- Flight control systems & components
- Fluid conveyance systems
- Fluid metering delivery & atomization devices
- Fuel systems & components
- Hydraulic systems & components
- Inert nitrogen generating systems
- Pneumatic systems & components
- Wheels & brakes



CLIMATE CONTROL

Key Markets

- Agriculture
- Air conditioning
- Food, beverage & dairy
- Life sciences & medical
- Precision cooling
- Processing
- Transportation

Key Products

- CO² controls
- Electronic controllers
- Filter driers
- Hand shut-off valves
- Hose & fittings
- Pressure regulating valves
- Refrigerant distributors
- Safety relief valves
- Solenoid valves
- Thermostatic expansion valves



ELECTROMECHANICAL

Key Markets

- Aerospace
- Factory automation
- Food & beverage
- Life science & medical
- Machine tools
- Packaging machinery
- Paper machinery
- Plastics machinery & converting
- Primary metals
- Semiconductor & electronics
- Textile
- Wire & cable

Key Products

- AC/DC drives & systems
- Electric actuators
- Controllers
- Gantry robots
- Gearheads
- Human machine interfaces
- Industrial PCs
- Inverters
- Linear motors, slides and stages
- Precision stages
- Stepper motors
- Servo motors, drives & controls
- Structural extrusions



FILTRATION

Key Markets

- Food & beverage
- Industrial machinery
- Life sciences
- Marine
- Mobile equipment
- Oil & gas
- Power generation
- Process
- Transportation

Key Products

- Analytical gas generators
- Compressed air & gas filters
- Condition monitoring
- Engine air, fuel & oil filtration & systems
- Hydraulic, lubrication & coolant filters
- Process, chemical, water & microfiltration filters
- Nitrogen, hydrogen & zero air generators



FLUID & GAS HANDLING

Key Markets

- Aerospace
- Agriculture
- Bulk chemical handling
- Construction machinery
- Food & beverage
- Fuel & gas delivery
- Industrial machinery
- Mobile
- Oil & gas
- Transportation
- Welding

Key Products

- Brass fittings & valves
- Diagnostic equipment
- Fluid conveyance systems
- Industrial hose
- PTFE & PFA hose, tubing & plastic fittings
- Rubber & thermoplastic hose & couplings
- Tube fittings & adapters
- Quick disconnects



HYDRAULICS

Key Markets

- Aerospace
- Aerial lift
- Agriculture
- Construction machinery
- Forestry
- Industrial machinery
- Mining
- Oil & gas
- Power generation & energy
- Truck hydraulics

Key Products

- Diagnostic equipment
- Hydraulic cylinders & accumulators
- Hydraulic motors & pumps
- Hydraulic systems
- Hydraulic valves & controls
- Power take-offs
- Rubber & thermoplastic hose & couplings
- Tube fittings & adapters
- Quick disconnects



PNEUMATICS

Key Markets

- Aerospace
- Conveyor & material handling
- Factory automation
- Food & beverage
- Life science & medical
- Machine tools
- Packaging machinery
- Transportation & automotive

Key Products

- Air preparation
- Compact cylinders
- Field bus valve systems
- Grippers
- Guided cylinders
- Manifolds
- Miniature fluidics
- Pneumatic accessories
- Pneumatic actuators & grippers
- Pneumatic valves and controls
- Rodless cylinders
- Rotary actuators
- Tie rod cylinders
- Vacuum generators, cups & sensors



PROCESS CONTROL

Key Markets

- Chemical & refining
- Food, beverage & dairy
- Medical & dental
- Microelectronics
- Oil & gas
- Power generation

Key Products

- Analytical sample conditioning products & systems
- Fluoropolymer chemical delivery fittings, valves & pumps
- High purity gas delivery fittings, valves & regulators
- Instrumentation fittings, valves & regulators
- Medium pressure fittings & valves
- Process control manifolds



SEALING & SHIELDING

Key Markets

- Aerospace
- Chemical processing
- Consumer
- Energy, oil & gas
- Fluid power
- General industrial
- Information technology
- Life sciences
- Military
- Semiconductor
- Telecommunications
- Transportation

Key Products

- Dynamic seals
- Elastomeric o-rings
- EMI shielding
- Extruded & precision-cut, fabricated elastomeric seals
- Homogeneous & inserted elastomeric shapes
- High temperature metal seals
- Metal & plastic retained composite seals
- Thermal management



ENGINEERING YOUR SUCCESS.

North America

Industrial

USA

Chicago Region

Naperville, IL
Tel: (630) 964 0796

Eastern Region

Pine Brook, NJ
Tel: (973) 227 2565

Great Lakes Region

Fairlawn, OH
Tel: (330) 670 2680

Gulf Coast Region

Spring, TX
Tel: (832) 717 3094

Pacific Region

Buena Park, CA
Tel: (714) 228 2510

Southern Region

Alpharetta, GA
Tel: (770) 619 9767

Canada

Milton, Ontario
Tel: (905) 693 3000

México

Toluca, Edo. De México
Tel: (52) 72 2275 4200

Mobile & Truck

USA

USA Global Mobile & Truck

Lincolnshire, IL
Tel: (847) 821 1500

Canada

Milton, Ontario
Tel: (905) 693 3000

México

Apodaca, N.L.
Tel: (52) 81 8156 6000

Europe

Austria

Wiener Neustadt
Tel: (43) 2622 235 010

Azerbaijan

Baku
Tel: (994) 50 2233 458

Belarus

Minsk
Tel: (375) 17 209 9399

Belgium/Luxemburg

Nivelles
Tel: (32) 67 280 900

Czech Republic & Slovakia

Klecany
Tel: (420) 284 083 111

Denmark

Ballerup
Tel: (45) 43 56 04 00

Finland

Vantaa
Tel: (358) 20 753 2500

France

Contamine-sur-Arve
Tel: (33) 450 25 80 25

Germany

Kaarst
Tel: (49) 2131 4016 0

Greece

Athens
Tel: (30) 210 933 6450

Hungary

Budapest
Tel: (36) 1 220 4155

Ireland

County Dublin, Baldonnell
Tel: (353) 1 466 6370

Italy

Corsico, Milano
Tel: (39) 02 45 19 21

Kazakhstan

Almaty
Tel: (7) 7272 505 800

Latvia

Riga
Tel: (371) 6 745 2601

The Netherlands

Oldenzaal
Tel: (31) 541 585 000

Norway

Ski
Tel: (47) 64 91 10 00

Poland

Warsaw
Tel: (48) 22 573 24 00

Portugal

Leca da Palmeira
Tel: (351) 22 999 7360

Romania

Bucharest
Tel: (40) 21 252 1382

Russia

Moscow
Tel: (7) 495 645 2156

Slovenia

Novo Mesto
Tel: (386) 7 337 6650

Spain

Madrid
Tel: (34) 902 33 00 01

Sweden

Spanga
Tel: (46) 8 59 79 50 00

Switzerland

Etoy
Tel: (41) 21 821 02 30

Turkey

Istanbul
Tel: (90) 216 4997081

Ukraine

Kiev
Tel: (380) 44 494 2731

United Kingdom

Warwick,
Tel: (44) 1926 317 878

Asia Pacific

Australia

Castle Hill
Tel: (61) 2 9634 7777

China

Beijing
Tel: (86) 10 6561 0520 5

Shanghai
Tel: (86) 21 5031 2526

Hong Kong

Cheung Sha Wan
Tel: (852) 2428 8008

India

Mahape, Navi Mumbai
Tel: (91) 22 6513 708185

Japan

Fujisawa Kanagawa
Tel: (81) 4 6635 3050

Korea (South)

Seoul
Tel: (82) 2 559 0400

Malaysia

Shah Alam
Tel: (60) 3 7849 0800

New Zealand

Mt. Wellington, Auckland
Tel: (64) 9 574 1744

Singapore

Jurong Town
Tel: (65) 6887 6300

Taiwan

Taipei
Tel: (886) 2 2298 8987

Thailand

Bangkok
Tel: (662) 717 8140

Latin America

Argentina

Buenos Aires
Tel: (54) 3327 44 4129

Brazil

Cachoeirinha RS
Tel: (55) 51 3470 9144

Chile

Santiago
Tel: (56) 2 623 1216

Pan American Division

Miami, FL
Tel: (305) 470 8800

Venezuela

Caracas
Tel: (58) 212 238 5422

Africa

South Africa

Kempton Park
Tel: (27) 11 961 0700

Middle East

United Arab Emirates

Dhabi
Tel: (971) 4 8127100

