Power Plant Solutions
Products, Systems and Support for Utilities, Independent Power Producers and Engineering, Procurement and Construction (EPC) Companies
Look to Parker for New Construction Support in Energy

As the world’s leading original equipment manufacturer of advanced motion and control systems to the energy market, Parker delivers solutions that improve reliability, performance and profitability.

Parker is proven in the power industry like no other supplier.

For 75 years we have created a vast array of trusted, reliable legacy products and systems that speed installation, improve system life, increase safety, eliminate downtime, lower operation and maintenance costs, boost efficiency, and accurately meet standards for emissions compliance.

Parker operates 309 manufacturing locations worldwide. Parker Hannifin Headquarters, Cleveland, Ohio

We are a public company traded on the New York Stock Exchange with annual sales in the billions of dollars.

Parker by the numbers

Founded 1917
139 Divisions
$11+ billion in annual sales
Operations in 50 countries globally
56,000 worldwide employees
AAA credit rating

For more information, click here or visit our Energy Resource Guide at parker.com/energyrgna
A Partnership approach

Whether you’re a utility, independent power producer or involved in Engineering, Procurement or Construction (EPC), involving us early on can frequently speed the process and reduce costs. As a collaborative partner, we work one-on-one with you to create and deliver:

- Custom engineered original equipment solutions utilizing our complete range of proven products
- Technology advances that are smaller, lighter, safer, sustainable, more energy efficient, and highly reliable

Let Parker be your balance of plant (BOP) partner.

No matter where you are located, or how large the project, our 13,000 global distributors provide the products and support you need to keep your power plant running efficiently.

Technologies and System Solutions:

- Electromechanical
- Filtration
- Fluid & Gas Handling
- Hydraulics
- Instrumentation
- Pneumatics
- Process Control
- Sealing & Shielding

Need Support?
Contact us at EPC@PARKER.COM
**Instrumentation & Control**

**Compression Fittings**

**A-LOK® Double Ferrule**

A-LOK® is a two-ferrule compression fitting that is widely used in critical applications. Long-term reliability and performance are ensured through the use of a unique anti-corrosion treatment called Suparcase® on the back ferrule.

**CPI™ Single-Ferrule**

CPI™ delivers a single-ferrule version (Suparcase® treated) of the industry standard two-ferrule fitting, designed to simplify installations and reduce potential leak paths.

**High Pressure / High Temp Fittings**

**MPI® Double Ferrule**

MPI® brings the two-ferrule (Suparcase® treated) compression assembly to higher pressures and temperatures in Ultra super-critical power plant applications. Up to 20,000 PSI (1379 bar) and temperatures exceeding 1100°F / 593°C.

**Pipe Fittings and Port Adapters**

Parker manufactures a wide variety of adapters in steel or brass with thread types including:

- NPT
- NPTF
- BSPT
- BSPP
- Metric
- JIC
- SAE
- Flare

Shaped products are hot forged and straightened manufactured from cold drawn barstock.

Zinc Chromium 6 Free plating is used on all standard products and stainless steel is passivated.

**O-Ring Face Seal Fittings**

**Seal-Lok® Xtreme Stainless Steel 316 / 316L**

Our new Seal-Lok® Xtreme O-ring Face Seal fitting technology provides leak-free connections that optimize fluid conveyance in Natural Gas applications. Patent-pending design incorporates a stainless steel high temperature metal seal ring to withstand temperatures from -325°F (163°C) to +1200°F (649°C) and resistant to vibration-induced loosening. Zero clearance interface enables quick and easy plumbing. Available in sizes from 1/4” and 2”.

**Instrument Grade Tubing**

**Parker Fractional & Metric Seamless Tubing**

Parker offers quality-assured domestic and non-domestic stainless steel seamless tubing characterized by the ovality, concentricity, and hardness limits required for superior performance in hydraulic and instrumentation system applications. Plus Parker tubing offers the high surface smoothness and close dimensional tolerances needed to ensure there are no leakages when connected with couplings or to Parker fittings.

**Tubing Material Grades**

- Stainless Steel 316H (Conforms to B31.1 and B31.3. Material meets ASME SA-479)
- Stainless Steel 316/316L
- Stainless Steel 6Mo
- Alloy 625 & Alloy 825
- Alloy C276
- Alloy 400 (Monel)
- 15Mo3/16Mo3
- 13CrMo44/13CrMo45
- 15Mo3/16Mo3
- 13CrMo44/13CrMo45

**Tube Socket / Butt Weld Fittings**

**Weld-Lok® Stainless Steel**

Weld-Lok® fittings have been designed and tested to meet ANSI B16.11, which covers “forged steel fittings Socket Welded and Threaded”. The fittings are available in a variety of materials, including 316H. Conforms to B31.1 and B31.3. Material meets ASME SA-479.

**For more information, click here or visit our Energy Resource Guide at parker.com/energyrgna**
Tube Fittings for Rigid Tubing & Hydraulic Hose
EO-3® Fitting System
EO-3® Fittings feature a unique “Tapered” threading technology and Indicator ring which provides a visible confirmation of proper assembly eliminating leakage due to under-made connections. New formed tube design eliminates tube “blow-out” failures. No torque spanner required.

Tube Clamping System
Parker Snap-Trap®
The Innovative Clamp is designed to help eliminate corrosion while radically simplifying the installation & maintenance of Instrumentation tubing. Snap-Trap® unique one-piece design allows quick and easy fitting to the cable trays, brackets. The clamp will fit slotted cable trays with various dimensions.

Parker offers two types of coating technology for superior corrosion resistance

Parker ToughShield
Corrosion Plating for Tube Fittings and Adaptors
In neutral salt spray ASTM B117 tests conducted by an outside testing center, Parker steel fittings and adapters plated with ToughShield (TS1000) outlasted the SAE corrosion standard and the competition’s plating. TS1000 offers unmatched corrosion protection at no additional cost, withstanding the harshest operating environments, particularly those that promote the rapid onset of red and white rust. Since corrosion causes both direct and indirect economic losses, protecting fittings and adapters with durable, high-quality plating dramatically reduces replacement cost and downtime. See the results for yourself.

Parker Suparcase™
Surface Treatment for Instrumentation Tube Fittings
The Parker Suparcase™ surface treatment is an unique process that allows stainless steels and other alloys to be hardened without affecting, and even increasing, the corrosion resistance of the given materials. Parker has been using the proprietary Suparcase process to surface harden stainless steel ferrules for approximately 20 years. The process achieves a carbon supersaturated surface layer by altering the oxide passive layer on the surface of the stainless steel, without any detrimental effects.

Improved Hardness
Hardness Test – Suparcased samples are at least 250% harder than their untreated counterparts.

Spec the Best, Spec Parker
Severe Service Root and Blow-Down Valves
U Series 316 Stainless Steel Needle Valves
Our Union Bonnet design with sizes through 1” are pressure-rated at up to 6000 PSIG / 414 bar and temperatures from -65°F to 1200°F (-54°C to +649°C) With Grafoil® packing and our high temperature option. A non-rotating lower stem helps extend packing life. Parker also offers an economical “BD” version.

Ball Valves
B Series Ball Valves
Manual, pneumatic, and electrically actuated Parker B Series Ball Valves are designed to provide positive, leak-tight shut-off and control of fluids. The two-way valves provide quick, 1/4-turn on/off control of media, while the three-way valves may be used as diverting or selecting valves. A broad selection of valve body, seat, and seal material are available. Temperature range from -65°F (-54°C) to +450°F (+232°C).

Three-Piece Swing-Out Ball Valve
SB / SWB8 Series
With a center section that can swing-out to replace seats, seals and the ball without major disruption to the piping system. Our SB and SWB8 ball valves offer PEEK seats and Grafoil® seals for higher temperature and pressure ratings. The ISO-type actuator mounting design offers the option of electric or pneumatic actuation.

Gauge Siphons
Parker PGI PV Series
Providing an easy to install means of protecting valuable gauges and instruments, including a barrier against harmful vapors. A compact and sturdy design reduces vibration and requires less space to mount. Also available with an optional safety excess flow check / snubber which prevents line impulse and pressure spike induced damage.

Blow-Down Valves
PGI PV Series Power Valves
PV Series Blow-down valves feature a patented self-adjusting PTFE Pressure-Core™ stem seal technology to provide virtually leak-free operation and no maintenance backed by a 5 year warranty. The valves also incorporates a carbide ball “roddable” hard seat design for a “bubble-tight” shut-off. Compliance to ANSI 16.34. 100% Hydrostatic Tested.

MPI™ Medium Pressure Valves
MPN Over Critical Valve
The needle and ball isolation valves are designed for multi-turn control of media regulation and shut-off. With a 20,000 PSI upper pressure limit and a 1200°F temperature ceiling, MPI valves are an option for traditional cone and thread style over-critical valves.

Root and Angle Valves
Parker PGI PV Series
Parker’s line of Root valves provide a positive means of isolating down stream instruments. A wide variety of seat and seal materials along with bonnet designs, materials of construction and flow paths to meet any application. We also offer Angle Valves as a simple way to change flow directions.

Multiport and Gauge / Swivel Valves
Parker PGI PV Series
Our Multiport Gauge valves simplify the installation of gauges near the pressure tap. This provides a means of isolating downstream components, as well as direct mounting of gauges, these valves help to eliminate adapters and potential leak paths.

Manifolds
Parker PGI 2,3 & 5-Valve Manifolds
All Parker PGI manifolds feature PTFE Pressure-Core® Stem Seal which creates a “live-loaded” stem seal. Our design incorporates the Low-Torque™ Grafoil® packed stem seal to reduce packing adjustments and associated maintenance costs. Products meet “class A” of ISO 15848 standard for fugitive emissions as well as conform to B31.1, B16.34 and B16.5 codes. 5 year warranty standard.

For more information, click here or visit our Energy Resource Guide at parker.com/energyrgna
Manifolds
Parker PGI 2,3, 5-Valve Coplanar Manifold
Our coplanar manifold mounts directly to a Emerson 3051 Series Coplanar™ transmitter eliminating the need for a coplanar flange. The Global-style manifold affords maximum shut-off, robust stems, pinned bonnets and two mounting holes for connecting to bracket mounts.

Bellows Seal Valve
Parker PGI Series 3/8” Bore
Our Bellows seal valve is designed with a metal bellows between the stem and body as a primary seal. This eliminates two leakage paths, providing a clear advantage over traditional packed seal valves. Zero fugitive emissions is also achieved by this configuration. Standard Grafoil™ back-up packing and backseating valve stem provide additional safety.

Severe Service Manifold Valves
Parker PGI DBB Series Double Block & Bleed Valves
The DBB series is designed for high temperature and severe service applications offering a simplified transition from process piping to instrumentation. This globe-style valve provides maximum shut-off, using a ceramic Ball-tip stem on the process valve and needle tip stem on the bleed valve to reduce leak paths. Offering includes direct mount on 2-1/8” center Weldolets® and flange mounting. Designed to meet ASME B31.1 and B31.3.

Manifolds
Parker PGI 2- Valve Block & Bleed Manifold Valve
For inline instrument mounting, our line of two-valve manifolds provide process isolation, pressure relief, calibration, or sample obtainment ports for robust, simplified installation. The Low-Torque™ Grafoil stem seal and proprietary assembly technique reduces opening and closing forces by 50% when compared against competitors valves.

Manifolds
FEMF Series Double Block & Bleed Monoflange Manifold
The Monoflange manifold range is designed to replace conventional, multiple-valve installations that currently interface with pressure measuring systems. By combining primary and secondary valves into one compact manifold, leak paths are significantly reduced. These products meet “class A” of ISO 15848 standard for fugitive emissions as well as ANSI/ASME B31.1, B16.34 and B16.5 codes.

Seal Pots
Parker MMHMPS Series
Parker seal pot line was designed for instrumentation systems requiring an open seal such as toxic, corrosive or high temperature service. An immiscible seal fluid is used to form a barrier between the manifold and instrument (due to density difference between seal fluid and process media).

Condensate Pots
Parker COND Series
New range of condensate pots from Parker have been designed to trap any foreign material from small bore tubing systems, preventing damage to sensitive instrumentation components. Condensate pots are available in a range of materials and have been designed in accordance with ASME VII Div 1 as well as CE marked to PED 97/23/EC.

Flow Elements – Mass Flow Meter
Veriflo 500/600 Series II Mass Flow Meter
The Series II produces expanded flow ranges (from 0.014 – 0.7 ml/min up to 33 – 1670 l/min) and can be factory configured to include up to eight gas and flow range combinations with max operating pressures up to 6000 PSIG. In addition to standard signals and RS232 connection, DeviceNet, Profinbus-DP and Modbus communication protocols are available. Flow Parameter Adjustment (FPA) feature allows greater user configuration while maintaining high accuracy with more than 180:1 effectiveness range.
Flow Elements – Fuel Flow Meter

Veriflo FM50
Developed to provide measurements for Natural Gas Fuel on individual turbines and engines. The FM50 provides true instantaneous or totalized mass flow calculation which corrects for temperature or pressure fluctuations. Our design incorporates a Venturi insert and uses differential pressure measurement along with a built-in temperature sensor and electronic computer to provide reliable and accurate measurements.

Single & Dual Stage Pressure Regulators

Parker IR4000, IR6000 and 735 Series
Parker Veriflo’s 316 stainless steel pressure regulators meet a wide variety of industrial gas pressure regulations. Metal-to-metal body to diaphragm sealing creates enhanced sealing integrity. We offer a range of flow rates, body construction, porting options and seal materials to customize around project requirements.

Flow Elements – Rotameters

Porter P800 Variable Area Flowmeter
P Series Metal Tube Variable Area Flowmeter is simple yet highly accurate compact flowmeter. The meter comes standard with 316L stainless steel wetted materials. For measuring corrosive and aggressive media, Parker now has a PFA lined offering. The industry standard 250 mm face-to-face dimension on the P800 simplifies piping design. Suitable for liquid, gas or steam measurement.

Temperature Devices – RTD Probes & Assemblies

Parker PGI ThermoSync® ATP Series RTD Probes & ATA Series RTD Assemblies
ThermoSync® RTD probes reduce thermal coupling errors from Thermowells by using a unique two-piece protection tube. ThermoSync® Thermowell RTD assembly in an explosion-proof conduit box offers maximum safety for Hazardous locations in a ready-to-install unit which includes a Thermowell, RTD probe, fitting, close nipple and coupler.

Flow Elements – Vortex Shedding Flow Meter

Vortex Shedding Flow Meter
Ideal solution for measuring flow in low viscosity fluids like water or glycol coolant. 316 stainless steel body construction with measuring rates up to 200 GPM and no moving parts to wear or clog. Design incorporates LED digital display with flow rate transmitter 4-20mA output signal.

Flow Elements – Thermowells

Parker PGI ThermoSync®
Parker’s ThermoSync® Thermowell has a patented finned design that reduces the ambient temperature effects on flow calculations, thus providing greater Natural gas temperature measurement accuracy and minimizing unaccounted errors. Parker Texas Thermowell specializes in design and manufacturer of all thermal types including threaded, flange, socket weld, weld-in and custom designs available for all media and liquid applications. PTC 19.3 TW Wake Frequency testing also available.

For more information, click here or visit our Energy Resource Guide at parker.com/energyrgna
NATURAL GAS MONITORING AND MEASUREMENTS

Gas Chromatograph 4-Valve Manifold
Parker PGI P3GC4S Series Gas Manifold

This four valve manifold is an economical choice for changing carrier gas cylinders for chromatograph without interruption of gas flow. Rated up to 6,000 PSI. Roddable pattern or Blocks and Globe pattern for Purges. Bore sizes: 3/16" (Blocks) and 1/8" for Purges.

Parker PGI Direct-Mount® Systems (DMS)
Flange to Flange continuous connection technology that eliminates NPT connections and leak paths

Why Direct-Mount®?
Pulsation created by compressors, flow control valves, regulators and some piping configurations may create unacceptable levels of Square Root Error (SRE) and/or resulting Gauge Line Error (GLE). Pulsation at the orifice meter is a major source of lost and unaccounted for natural gas, which can create large economic gains or losses for both buyers and sellers along a natural gas pipeline system. Industry studies have proven the existence of flow and/or pulsation-induced GLE in traditional, remotely tubed meter installations. Pulsation and resulting SRE creates a high probability that GLE is present within your measuring systems. These highly accredited studies concluded that transmitters or EFM should be close coupled to the orifice taps with equal length, large bore (0.375 inch I.D. or greater), constant diameter gauge lines to minimize or eliminate GLE.

PGI International’s patented Direct-Mount® Systems (DMS) were developed in response to requests by leading gas transmission companies for a safe, efficient method of close coupling EFM’s and transmitters to orifice fittings and thus eliminating or reducing the effects of Gauge Line Error from accurate measuring systems.

Reduce Installation Costs and Increase Safety
DMS enables a wide range of instruments to be directly mounted to piping systems either horizontally or vertically. DMS reduces installation cost and heat trace requirements as well as the number of connections and potential leakage points.

Pulsation Testing
Detecting Square Root Error and Gauge Line Errors in Natural Gas Measurement

Parker’s SRE-6 and GLE-6 indicators are test devices designed to quantify Square Root and Gauge Line Errors in natural gas orifice flow measurement. They identify inaccuracies caused by compressor induced pulsation and differential pressure discrepancies. All necessary calibration equipment, connections, hardware and fittings are included.

Spec the Best, Spec Parker
INSTRUMENTATION & CONTROL

SOLENOID & PROCESS CONTROL VALVES

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Low Power Solenoid Valves
Directing and Pilot Operated
Valves 0.6 to 2.0 Watts
Parker’s low watt 3 and 4-way Direct acting and Pilot operated solenoid valves are used in power applications for actuation of large control valves consuming as little as 0.6 to 2.0 watts. Available in brass, aluminum and stainless steel construction.

Stainless Steel Solenoid Valves
Skinner and Lucifer
Available in two-way (2/2) and three-way (3/2) stainless steel models, these direct operated valves offer fast-acting actuator control in corrosive and hazardous environments. Pipe-mounted; sizes range from 1/4” to 1”.

3-Way and 4-Way Valve Actuation
Skinner and Lucifer
These 3-Way and 4-Way Pilot Operated valves are used in applications for actuation of single and double acting cylinders and piloting of larger control valves. Pipe and NAMUR mount.

ATEX Coil
Lucifer ATEX “d” Coil
New 316L Stainless Steel, explosion proof, flame proof “d” coil incorporates a modular, lightweight and compact design. The coil is H class and IP66 rated, valid for use in hazardous environments (Zone 1, 21). 8 watt power consumption.

2 & 3-Way On/Off
Solenoid Valves
Skinner 7000 Series and
Gold Ring 23 Series
Our Skinner and Gold Ring brands of 2 and 3-way solenoid valves offer actuation via pilot or remote signal. These high pressure valves provide flow control for a wide variety of liquids and gases.

Anti-Water Hammer
Solenoid Valves
Skinner and Lucifer 2-Way On/Off
Anti-Water Hammer Valves
The Anti-water hammer solenoid valve design permits flow control without the effect of propagating shock waves throughout piping system when the valve closes. Integral speed control provides slow closing actuation.

Process Control Valves
Sinclair Collins K Series
Diaphragm Valves
Nylon-reinforced, molded EPDM rolling-style Diaphragm for uniform thrust. Actuators in sizes 37, 64 and 135 provide for wide range of operating requirements. The rugged design and reliability of the K Series Diaphragm valves makes them ideally suited for control of steam, gas, liquid or chemicals. Bronze or stainless steel construction.

Angle Body Valves
Parker PA Series
Actuated by a pneumatically driven piston, Parker’s Angle Body valves are capable of handling slurry with particles or corrosive solutions at temperatures up to 365°F (180°C) and operating pressures up to 232 PSI (16 bar). Stainless steel actuator housing and high flow rates with CV’s up to 81.7.

For more information, click here or visit our Energy Resource Guide at parker.com/energyrgna
HEAT TRACE LINES

Heat Trace Tube Bundles
Parflex Multitube® Pre-traced, Pre-insulated Tube Bundles
Parker offers a full line of pre-insulated tube bundles designed for impulse, condensate, sample transport and process measurement. Reduce field heat tracing installation costs with our seamless extruded jacket, continuous length, pre-insulated tube bundles. Parflex continuous length tube bundles provide freeze protection, temperature maintenance and meet personnel safety requirements. Self-regulating, constant-wattage, mineral insulated and steam traced bundles, designs for both intermittent and continuous steam blow-down, and elevated process temperatures which require 316H stainless steel are available.

Instrumentation Enclosures
Parflex HES Series Heated Enclosures
HES Heated Enclosure systems are designed using Fiber Reinforced Polyester (FRP) in either split diagonal or panel board styles. IP65 rated with two seal mechanisms; EPDM and tongue & groove. Single, double or triple instrument styles available including Drawing packages and instrument tag numbers.

The manifolds, instruments (sourced or free-issued), fittings and heating systems can be pre-fitted by Parker’s assembly service team and delivered fully pressured tested and certified, so enclosures arrive ready to be installed, saving valuable in field assembly and installation time and cost.

CONTINUOUS EMISSIONS MONITORING (CEMS)

CEMS Umbilicals
Parflex Multitube® CEMS Bundles
To reduce installation time and cost, our custom heated and non-heated CEMS umbilicals consist of two separate sections: custom heated core (sample transport tubes, heating element and temperature sensors) and the non-heated probe support bundle section (tubes for calibration/air purge, electric wires, temperature sensor, wires and thermocouple cables for the sample probe). Each element within the umbilical is helically cabled, allowing for complete heat control throughout its length for precise temperature feedback and accuracy. Multitube® bundles are made to customers design specifications with all components included. Also available for Mercury emissions monitoring.

In-Situ Gas Analyzers
Procal IR and UV CEMS Gas Analyzers
Procal 2000 is an infra-red (IR), duct or stack-mounted analyser designed to provide In-situ analysis of up to six gas-phase emission components. Procal 5000 is an ultra-violet (UV) In-situ analyzer using absorption spectroscopy that analyses lates the gas emission concentrations.

Unlike higher maintenance extractive systems, Procal’s patented, sintered metal technology removes the need for gas filtering or sample conditioning and transport. Auto verification provides both zero and span check. US EPA40 CFR part 60 and 75 compliant.

Heat Trace Tubing
Project Support
Engineering Tools and Support for your next Power Plant Project
Parker Hannifin Corporation, Parflex Division is working with engineering & construction firms within the power sector to develop & design system solutions that optimize their client’s plants, as well as provide continuity and integrity to the system layout and installation process. Using our 100 years of Parker Engineering Expertise, we can help bring your next project together on-time and on-budget, by taking advantage of our:

• Design System Tools
• Budgetary Estimation System
• Material Selection Expertise
• Engineered System Drawing Support
• Installation Layout Prints
• Installation Training Classes

Spec the Best, Spec Parker
On-Site Nitrogen Gas Generators

donnick hunter NITROsource Membrane or PSA

Parker offers both membrane and PSA technology, on-site nitrogen gas generators produce up to 99.6% pure, commercially sterile nitrogen at dewpoints to -58°F (-50°C) from a compressed air supply. The generators are designed to continually process compressed air into nitrogen at safe, regulated pressures without operator attention. 24/7 operation.

Non-Metallic Expansion Joints

Parker RM Dynex® Fabric Expansion Joints

For over 50 years, Parker has been a leader in providing non-metallic expansions to the utility and industrial markets. Parker provides complete in-house design, engineering and manufacturing capabilities to ensure the highest quality fabric expansion joint solutions through a wide variety of materials (EPDM, KFM, CR, VQM and PTFE).

Hydraulic Control Units for Diverter Dampers

ESSD Hydraulic Control Units

Our custom engineered hydraulic drive systems for diverter damper applications can include turn-key solutions with project management, commissioning and on-site service. The control unit design includes an HPU, cylinders, valves, tubing, connectors and hoses, an inclusive control cabinet with PLC control (redundant) and a double security circuit with accumulator station.

Hydraulic Rotary Actuators

HUB Unibody Actuator

This new medium duty hydraulic rotary actuator is designed specifically for valve actuation applications. The hardened alloy steel rack and pinion design is supported by large capacity tapered roller bearings in a ductile iron housing ensures long life as well as allowing the unit to adsorb applied radial and thrust loads. Bolts directly onto the valve. Output torques @ 3,000 psi are up to 600,000 in-lb. (50,000,000 for M series model)

Heat Exchanger Equipment

PWO Brazed Plate Style Water / Oil Cooler

The Parker PWO is a compact and lightweight water / oil cooler with a high cooling capacity. The unique plate style design provides a highly turbulent flow throughout the cooler, which is the key to efficient cooling. System can easily be adapted for special applications including seawater, aggressive oils and high temperatures & high pressures. Cooling capacity up to 500kW with a flow range of 1600 l/min.

Heat Exchanger Equipment

6-Way Transfer Valve

Parker Hydraulic Fuel Filter has developed a new high flow 6-way shoe valve technology allowing for uninterrupted flow during change-over (no external gearbox / motor) for heat exchanger isolation applications. Locked neutral position and open flow area for low pressure drop.
Air Dryers
donnick hunter Pneudri Heatless
and Heat Dessicant Dryers

The Pneudri range of regenerative
desiccant dryers remove water vapor
from the compressed air supply to
create clean, oil-free, dry compressed
air in compliance with ISO 8573-1
standards. Our lightweight, modular
design eliminates the need for complex
valving and interconnect piping which
is used in conventional twin tower
designs. Flow rates up to 1381 cfm.
Custom skid packages available per
customer requirements.

Condensate Drains
Hyperdrain Zero Air Loss
Electronic (HDE-X) and Zero Air
Loss Mechanical (HDF) Drains

HDE-X series are the
most advanced
“intelligent” drains
automatically and
continuously alter
the drainage pattern
according to the
conditions. An alarm
warns against any
malfunction.

HDF Series drains are
compact and highly
reliable float controlled
condensate drains. Manual drain
valve and operational check fitted as
standard. Zero power consumption as
no power supply is required.

Three Screw Pumps
Parker SWAT and SWATB16 Series
Three Screw Pumps

Parker’s three-screw
pumps are positive
displacement axial
flow pumps
designed to
manage low to high
viscosity fluids up
to 100 bar in Power
Plant applications including oil
circulation, cooling and filtration.
Can be used on a wide variety of fluids
such as mineral oil, synthetic fluids,
lubrication oils and fuel oils.
• Compact pump with only three
rotating parts and one shaft seal
• Extremely low noise and
pulsation design
• High flow capabilities up to
1,320 GPM
• Manufactured according to API 676

Fluid Transfer Pumps
Positive Displacement Lobe Pump

Parker has
developed an
new 3" positive
displacement
lobe with
centrifugal boost.
Design includes a high
performance direct AC induction
motor without a need for a gearbox.
Compatible with fluids such as liquid
fuels, hydraulic and lube oils, water and
coolant. Flow rates up to 380 GPM @
80 psi.

Key Features:
• Continuously Dry Runnable and
Self-priming
• Reversible Flow Direction
• Cavitation Resistant

Turbine Oil Coalescing System
Parker Velcon TOC Series

The TOC
series
units
combine
Parker’s
latest
coalescing
filtration
technology and microglass filter media
to restore oil to an ISO cleanliness of
14/11 or better while continuously
removing free and emulsified water
down to 150 ppm or less. Our system
design removes water and dirt from the
turbine lubrication oil in three stages.
Particulate solid contaminants are
removed in the pre-filter stage, free
and emulsified water is removed in
the second filter/separator stage, and
then the final polishing stage using
synthetic media elements to remove
fine particles.
NON-WELDED PIPING SYSTEMS
ASME B31.1 and B31.3 Compliance

Non-Welded Compressed Air Piping
TransAir™ Advanced Air Piping – ISO8573 Certified
TransAir is a quick connection aluminum piping solution for compressed air, vacuum and inert gases. Transair is manufactured in Aluminum 6063 T5 (ASTM B241) and powder coated on the outside of the pipe to enhance mechanical, physical and chemical properties. Instant connections eliminate the need to thread or weld pipe. The lightweight aluminum pipe is easy to handle and safe to work with on elevated platforms. Available in 1” to 8” sizes, the Transair™ piping solutions offers significant savings on installation, maintenance and operating costs over the life of the product versus traditional galvanized steel, stainless steel and cooper piping.

Our fitting technology is made of nonflammable fiber-glass reinforced polyamide (Nylon) with UV resistant and compatible with most compressor fluids. The larger fittings are Aluminum and 304 stainless steel.

TransAir™ Benefits
- Removable & Reusable
- No Corrosion
- Energy Efficient
- Full-bore Design
- Optimum Flow Rate
- Leak-Free Guarantee
- 10 Year Warranty

SCOUT™ Compressed Air Wireless Remote Sensors
Monitors:
- Pressure
- Temperature
- Humidity
- Flow
- Power

Non-Welded Pipe Connection System
ParFlange™ F37
F37 system is a high and low pressure metallic non-welded piping and tube system with sizes up to 10” (263 mm) O.D. and wall thickness of 0.35” (9 mm). The innovative system is comprised of seamless cold drawn tube and pipe, a board range of interconnect components, valves and clamps and is fully support by Parker’s Complete Piping solutions services team.

The excellent sealing characteristics and high mechanical stability of the F37 technology is achieved through continuous orbital pipe reshaping. Placed in the flared pipe end, an insert offers a soft seal for the connection and pipe sides, providing faster, leak-free connections.

F37 Non-Welded Pipe Connection system is well suited for hydraulic oil, water, water/glycol, lubrication and other media. SAE and ISO hydraulic service break termination flanges as standard.

F37 vs. Welding
- Shorter installation and prefabrication
- No X-ray needed
- No “hot works” permit
- Reduced flushing time/costs with clean DOM tubes
- No post-weld pickling, passivation or acid cleaning

For more information, click here or visit our Energy Resource Guide at parker.com/energyrgna
INDUSTRIAL WATER FILTRATION SYSTEMS

Seawater Reverse Osmosis (SWRO) Desalination Systems
Parker Water Purification SR Series
Parker Water Purification engineers seawater reverse osmosis (SWRO) desalination systems utilizing the latest technology for low pressure operation. System is designed for high salt rejection with energy recovery integrated into each system. On-skid booster pump, 500 gallon CIP and permeate flush system are standard. This single pass SWRO system is capable of a nominal capacity of 350-400 M3D.

Brackish Water Reverse Osmosis (BWRO) Desalination Systems
Parker Water Purification BW Series
Parker Water Purification Brackish Water Reverse Osmosis (BWRO) systems incorporate the latest RO technology to purify water and remove salts and other impurities from brackish water. Standard packaged units have a capacity range from 20 to 250 GPM (3-60 m3h). Our design can treat brackish water up to 3,000 mS/cm conductivity (EC) and a maximum of 10,000 EC. The BW series RO desalination systems are pre-engineered, pre-assembled and ISO factory tested in the USA to minimize installation and start-up time. Custom engineered solutions are also available for higher TDS source waters or for larger flow capacities.
WATER & WASTEWATER MEMBRANE TREATMENT

Mobile Water Treatment Containers
Parker Water Purification Containerized
Membrane Water Treatments Solutions

Parker Water Purification specializes in manufacturing a variety of reliable ISO containerized systems for almost any mobile water treatment application. They are pre-tested and ready to deploy for purchase or lease.

Seawater or brackish water RO equipment is provided in combination with all needed building blocks to make a complete water treatment package including; pre-filtration, chemical feed tanks, booster pumps, automated backwashing and distribution pumps.

RO permeate can be further polished with EDI to provide Ultrapure water.

Standard Features
• Air conditioning designed for outdoor use, NEMA rated
• ISO Container certified for worldwide shipment
• Insulated walls with water resistant internal sheathing
• Lighting and receptacles
• Corrosion resistant flooring system
• External ports for simple water connections and primary power
• Full end cargo door and side entry man-door

System Design
• Electrodeionization (EDI) unit for ultra low silica & conductivity
• Automated system operation using PLC logic
• Clean in Place (CIP) system for membrane cleaning
• Safety devices for RO system protection
• Hoses for feed, permeate and drain connections

RENTAL PROGRAMS AVAILABLE

For more information, click here or visit our Energy Resource Guide at parker.com/energyrgna
Ultrafiltration Systems (UF)
Parker Water Purification
UHF Series
Parker Water Purification is specialized in providing ultrafiltration (UF) pretreatment systems using a variety of natural source waters and industrial wastewaters. UF hollow fiber membranes are provided in two configurations, outside-in (O/I) PVDF or inside-out (I/O) multi-bore MPES. Both types of UF membranes are proven durable with high membrane integrity and low fouling. System flow rates up to 220 GPM capacity.

RO-EDI Ultrapure Demineralized Water (UPW)
Parker Water Purification
DM Series
Parker DM Series Reverse Osmosis Electrodeionization system provide ultrapure demineralized water from brackish water sources. Combining the latest technologies of RO with EDI polishing the system can produce up to (18) megohm of ultrapure water.

Standard packaged units offer a capacity range from 25-140 GPM (6-32 m³/hr) utilizing 1 to 6 membranes. The ideal solution to replace high-maintenance DI beds or trailers.

Pretreatment Filtration Systems
Parker Twin Filter
IMF Media Filtration
Parker Twin Filter Media Filtration systems offer multi-media performance and are specifically engineered with media layers that are optimized to remove particulate matter from the feed stream ahead of the cartridge filtration system.

A proprietary mix and measure of media targets particulate matter such as turbidity and suspended solids that otherwise overload the micron filtration array of an RO system. In addition, the advanced media design reduces iron, manganese and organics in the feed stream.

Electrodeionization (EDI) Treatment
Parker Water Purification
EDI Series
Parker Water Purification EDI systems remove trace ionic salts and silica from the reverse osmosis (RO) permeate resulting in ultrapure water up to 18 megohm resistivity with a high rejection of soluble ionic load up to 98%. Our continuous and chemical-free design provides an economical treatment solution that can eliminate the expensive and hazardous chemicals used in traditional ion exchange resin regeneration. Flow rates up to 140 GPM (32 m³/hr) for packaged systems and 1,000 GPM (225 m³/hr) for custom engineered solutions Water recovery up to 99%.

Degasification System
Water Purification
Membrane Contactors
Parker Water Purification Membrane Contactors (MC) or Gas Transfer membranes incorporate innovative degassing technology to remove dissolved gases such as CO₂ for ultrapure water. Our design utilizes micro porous hydrophobic polypropylene membranes, providing a reliable and simple solution while eliminating the need for caustic chemical injection systems.

Condensate Pre-Filtration
Parker dominic hunter
ParMax™ Large Diameter Vessels and Cartridges
The best of large diameter and pleated technologies are combined in Parker’s ParMax™ Large Diameter Filter Vessels are designed to ASME code in stainless steel or carbon steel construction. Designed to work with ParMax™ filter cartridges that handle flows up to 500 GPM (1,892 LPM), these 60” length high-flow capacity vessels offer significant size and capital cost reduction compared with vessels containing conventional size filter cartridges. ParMax™ holds up to 19 cartridges with flow rates up to 9,500 GPM.

Spec the Best, Spec Parker
BATTERY ENERGY STORAGE

Utility-Scale Central Inverters
Parker EGT 890GT-B
The Parker 890GT-B Series is available in ratings up to 2.2MVA and are designed for direct outdoor installation. No air conditioner is required, as the power semiconductors, inductor and internal ambient air are cooled by Parker’s two-phase advanced cooling system. The cooling system is self-contained and requires no chilled water or external air intake.

Inside the PCS, phase modules plug into a rack system to form a complete inverter stack. Modules are accessible and can be changed in the field with minimal equipment. Our small footprint design and integrated transformer connection result in a space saving installation.

Climate-Controlled Battery Storage Container and Integration
Parker EGT 20 & 40ft ISO or Custom Solutions
For any level of Battery integration support you may need, Parker EGT will be able to assist you. Parker has extensive experience and knowledge integrating many battery technologies (Lithium Ion, Flow and Lead Acid) and battery structures into either ISO or custom designed building solutions. Parker can also provide the climate control, DC Combiner boxes, fire-suppression and control systems.

To manage Energy Storage Systems and optimize power regulation, Parker EGT can provide customers with a software solution to meet application specific requirements, including Site Dispatch Control, Plant Master Controller and Utility SCADA interfaces.

BIOGAS CONDITIONING

Automatic Siloxane Removal Systems (SRS)
Parker PpTek BioGas AK (BGAK)
Parker PpTek is the world leader in regenerative siloxane removal technology using Hydrophobic media technology. The BioGas AK is ATEX approved Siloxane Removal System (SRS) installed in the biogas supply line of a gas to energy installation, decontaminating landfill and sewage gas of siloxanes and other VOC’s.

The skid-mounted, ECU controlled unit uses one of two parallel housings to clean the gas, capturing the contaminants in the media. As the on-line housing becomes saturated, the gas flow is automatically redirected to the other housing. The first is then regenerated automatically while the flow of gas continues uninterrupted to the engine. 5 year media guarantee (1,820 regenerations).

Biogas Dehumidification Skid Mounted Packages
Parker Hiross BioEnergy Dehumidification system
Compact, robust and easy to handle, the Parker skid solution is a plug & play biogas dehumidification package specifically designed for outdoor installations and reliable performance in harsh operating environments typically found at Landfill biogas and Anaerobic digester sites.

The dehumidification skid has energy efficiency at the forefront of its design. The in-built flexibility to use a wide range of cooler / chiller combinations ensures the closest match to customer requirements thus delivering constant dewpoint performance and significantly reduce the water vapor content in the biogas and partially or completely remove some of the other impurities.

Available in a range of sizes from 29 – 1059 scfm (50 to 1800 Nm3/h) For applications where the system is located downstream of the blower a specially designed gas-to-gas heat exchange can be supplied.

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CUSTOM ON-SITE WORK CONTAINERS

20 ft & 40 ft Custom Mobile Containers
ParkerStore™ On-site Mobile Work Container
The Parker On-site Container solution will significantly reduce the time it takes to obtain critical spares or fabricate hose assemblies. The highly efficient and mobile container-based worksites provide all the technology, equipment and inventory needed for remote fabrication of hose and tube assemblies as well fitting inventory. Each unit can be customized with a variety of options to best suit your specific project or jobsite.

RENTALS AVAILABLE

PHASTITE™ FOR PIPE

Non-Welded Pipe Connection Systems
Phastite™ for Pipe and Phastool™ System
Simple assembly process that achieves permanent “non-welded”, leak-free connections quickly and easily reducing labor costs. Phastite™ for Pipe also reduces overall post-welding inspection time and cost. The system is well suited for hydraulic oil, water, water-glycol and other media for working pressures up to 10,000 PSI.

PHASTITE™ FOR TUBE

Non-Welded Tubing Connection System
Phastite™ for Tube
Revolutionary Phastite™ tube connections provide an integrated alternative to weld connections and traditional high pressure fittings. Simply insert your cleaned and prepped tubing, then compress the integral collars to their stops. It’s that simple. Assembly time required for heavy wall tubing is reduced, while costly welding and inspection are eliminated.

ParkerStore™ Hose Doctor
Custom On-site Hose Assemblies
Hose repair has never been so easy with the ParkerStore™ Hose Doctor mobile hose repair solution. Parker will have trained professionals come to your site with a fully stocked truck to identify, diagnose and replace hose assemblies on hydraulic and pneumatic systems. Backed by our global network of over 1,000 vehicles were available anytime, day or night for your service and repair needs.

Spec the Best, Spec Parker