

# **Complete Piping Solutions**

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





Parker's CPS team is on the jobsite providing the necessary expertise throughout the entire piping project.

# Application-Specific Piping Solutions

Some projects may require significant consultation and design services, while others may only need prefabricated pipe assemblies from a customer supplied print.

Customers have the ability to choose from the breadth of services provided through the Parker CPS Center – whether this is prefabricated piping assemblies delivered to the jobsite, on-site piping fabrication or a more turnkey approach including installation.

## **Complete Piping Solutions (CPS)**

We have combined the innovative Parflange F37 non-welded piping system with a broad array of piping services in Parker's Complete Piping Solutions (CPS). For industries ranging from energy and steel, testing systems and more, Parker CPS tailors piping solutions to maximize our customers' profitability.

#### Moving the technology forward

Parker is the worldwide leader in tube fitting and adapter technology. Numerous connector innovations and advancements are attributed to our engineering and customercentric collaborations. Our Parflange\* F37 system is the proven alternative to time-consuming and costly welding, and we continue to expand this product range to solve new customer challenges.

### **Consultation and Design**

The Parker CPS team of engineers offers expert consultation and design services.



A Parker CPS engineer discusses the framework of the piping project on site.

During *consultation*, the customer's project requirements are reviewed with the CPS engineering team to determine the best-suited services. Technical and commercial requirements are also reviewed. Line sizing, clamping requirements, routing, and environmental and safety concerns are considered during this early stage.

Parker's CPS team provides a tailored proposal to match the customer's technical and commercial requirements whether the project is a line expansion, retrofit of existing piping system or for OEM piping assemblies. This key collaborative planning provides a solid foundation for subsequent



A Parker CPS engineer designs piping assemblies at the CPS center.

design work, as well as for fabrication of piping assemblies.

As the project enters the *design* stage, Parker's engineer-to-engineer collaboration with the customer ensures that all technical requirements are met. Depending on the scope of work, piping assemblies are designed either on the jobsite or at the CPS center. Our piping

designers are experts in on-site measurement/surveying, development or modification of detailed piping drawings, and review of customer technical specifications and standards.

### **Prefabricated Assemblies and Installation**

Parker's CPS team migrates the upfront piping engineering to factory prefabricated pipe assemblies with several installation options.



With state-of-the-art CNC large- and small-capacity bending equipment, as well as all complementary pipe end finishing equipment, the CPS team expertly manufactures *prefabricated piping assemblies*.

By using cold drawn seamless tubes, the non-welded Parflange F37 system is inherently cleaner than welded piping systems, providing the benefit of reduced system flushing time.

#### **Fabrication Capabilities**

1-1/4" (42 mm) to 10" (273 mm) bending at 2D to 3D bend radius

The CPS Center employs Parker filtration and condition monitoring technologies to bring piping cleanliness to documented customer requirements. On-site leak-proof testing services can also be specified.

Parker delivers fabricated pipe assemblies to the worksite. These pipe assemblies will be protected, labeled and ready for installation.

With the largest CNC cold bending capabilities in the industry, Parker's CPS team specializes in the factory fabrication of pre-bent piping assemblies. These assemblies reduce much of the on-site design and fabrication and allow for the most efficient installation on the jobsite. When the project does not allow for



Parker's CPS centers maintain a high-level of seamless tube, flange components, clamps and accessory components for pipe assembly fabrication and to support installation. prefabrication of assemblies, Parker's CPS technicians dispatch these capabilities to the job.

Parker is fully engaged in the on-site *installation* of piping assemblies. A project manager leads the team of trained installers to maximize installation throughput and installation quality. Parker oversees the project from start to finish, and ensures the installed piping system meets all requirements, to instill a high degree of customer confidence.

Our on-site piping installation service also enables quick reaction to unforeseen project obstacles or design changes. Costly project delays and downtime are dramatically minimized.

Parker provides best-in-class non-welded piping systems.
Whether the scope of the project requires the complete redesign of a welded piping system or the fabrication and delivery of a pre-engineered non-welded piping assembly, Parker CPS will engineer a solution to maximize customer value.

### **FLUSHING SERVICES**

As you collaborate with Parker's Complete Piping Solutions (CPS) on your project, you can be sure you have selected the best non-welded piping technology. The inherently clean Parflange® F37 system is free of mill scale and welding-induced contaminants. All assemblies are "pigged" to remove larger particulate contamination imparted in the fabrication process. Simply stated, Parker's Parflange F37 non-welded piping system is installed clean and will remain clean.

Mobile flushing skids can be dispatched to the jobsite with Parker technicians to flush the system to your requirements.



Parker 600 GPM flushing skid

You can be confident that the high-integrity piping system you've chosen will be commissioned to the appropriate hydraulic ISO cleanliness level, up to servo valve cleanliness.



PTS helps customers reduce equipment and machinery downtime by increasing the speed, timing and accuracy of acquiring replacements. Using a Web-based application, PTS generates a unique identification code for each hose assembly that is printed on a durable barcode or RFID label. PTS can eliminate costly hours of equipment downtime, helping customers achieve greater productivity and profitability.

www.parker.com/pts

#### Parflange® F37 Non-Welded Flange System Reduces Total Installed Piping System Cost

Parker's Parflange F37 product range includes certified components capable of providing non-welded piping systems up to 273 mm with wall thicknesses to 25 mm (10" x 1").





Flare Flange



Retaining Ring

- Compliant with SAE/ISO 6162-1/2 and ISO 6164 dimensions and flange patterns
- DNV and ABS type approved system





# Why Non-Welded Piping and Prefabricated Assemblies from Parker:

A comparison of two approaches to a 2"-4" piping system:

#### Welded System

• Welds: 6

• Elbow Fittings: 2

• Welding Fabrication Time: High

System Flushing Time: High

Flow Characteristics: Abrupt

Total Installed Cost: High



# CPS Cold Bent Parflange F37 System

Welds: 0

• Elbow Fittings: 0

Cold bends: 2

Welding Fabrication Time: N/A

• System Flushing Time: Low

Flow Characteristics: Best

Installed Time: Lowest

Total Installed Cost: Lowest



Summary: Parker's Parflange F37
System reduces installed cost by reducing welding and fabrication time. Since no weld contaminants are introduced to the system, flushing time can be dramatically reduced as well. Combining this with Parker CPS Center's cold bending capabilities, additional improvements in installation time and flow characteristics are evident.

# Parker Fluid Connectors Group North American Divisions & Distribution Service Centers

Your complete source for quality tube fittings, hose & hose fittings, brass & composite fittings, quick-disconnect couplings, valves and assembly tools, locally available from a worldwide network of authorized distributors.

#### Fittings:

Available in inch and metric sizes covering SAE, BSP, DIN, GAZ, JIS and ISO thread configurations, manufactured from steel, stainless steel, brass, aluminum, nylon and thermoplastic.

#### Hose, Tubing and Bundles:

Available in a wide variety of sizes and materials including rubber, wire-reinforced, thermoplastic, hybrid and custom compounds.

#### Worldwide Availability:

Parker operates Fluid Connectors manufacturing locations and sales offices throughout North America, South America, Europe and Asia-Pacific.

For information, call toll free...

1-800-C-PARKER (1-800-272-7537)

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