

The Tube Fittings Authority:

Performance Plus

Since 1929, Parker Hannifin Corporation has served the marketplace with dependable fluid power technology. Today, Parker offers more than 100,000 quality products for a broad range of industries and applications. No other manufacturer presents a product line as Parker's, nor an expertise as far-reaching in hydraulic and pneumatic systems and components. Much of that expertise originates with Parker's precision-made tube fittings, which were among the first products manufactured by the company. As such, they reflect Parker's ongoing commitment to excellence. With more than seventy years of experience in product design, engineering and manufacturing, the Tube Fittings Division Europe holds a leadership position few other manufacturers can claim. This leadership is further heightened and enhanced by the sharing of technology only possible in Parker's corporate family.



Topflight Experience

Parker has used the background data and knowledge gained from rigorous industrial, mobile, offshore and other applications to create the broadest and best performing line of standard tube fittings in the world.

Why is Parker a topflight manufacturer of fittings?

There are many reasons, but at the heart is the design and manufacturing excellence that goes into every Parker product.

Worldwide standardizing Activities

The Parker Fluid Connectors Group supports the national and international standardizing activities. Experienced engineers from certain countries and Divisions give their input to national committees like SAE, BS, and DIN committees in cooperation with the users of the products. As a result, many ISO FluidConnector standards have been published. These ISO standards are the platform for the international trading, interchangeability and availability that is necessary for all globally operating companies using fluid power technology.

Tube Fittings Division Europe



Worldwide Supplier

The Tube Fittings Division Europe manufactures EO2-Plus (metric bite type with elastomeric seal) EO-Plus Progressive ring (metallically sealed tube fittings) and EO2-FORM (formed tube with soft seal), and O-Lok® fitting (O-ring face seal) form the Dry Technology “family”. EO-Plus fitting (metric bite type), 24° cone weld nipples, Triple-Lok® fitting (37° flare) and Pipe Adapters are the metallically sealed group. In addition, Ferulok fittings (inch tube bite type), Intru-Lok (Brass flareless) and JIS fittings are available via the Tube Fittings Division in the USA.

This variety makes up the broadest line of tube fittings in the industry. Parts are manufactured with ISO 6149, metric, BSPP, BSPT, NPT, UNF, SAE straight threads and flange ports.

There are manufacturing plants in UK, Germany and Poland. Some parts are shipped from the USA or manufactured locally in other places of the world. The fittings are stocked in the Parker Service Centers and are the choice of Original Equipment Manufacturers and Maintenance, Repair and Overhaul customers throughout the world.

Chromium-6 Free

Please find more information about
Cr(VI)-free fittings on

www.chromium6free.com

It's more than just metal

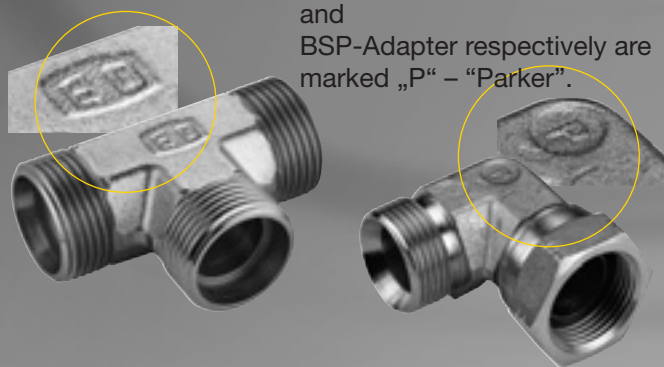
The Parker Plus

How to identify Parker Quality?

Each Parker product is marked with a Parker trademark.

The 24° items standardised in ISO 8434-1 & 4 are branded with "EO" – "Ermeto Original".

Parker Triple-Lok®, O-Lok® and BSP-Adapter respectively are marked „P“ – "Parker".



Stainless Steel items are supplied with "EO-DUR" nuts – sizes bigger than 12S have silver plated threads, smaller nuts are waxed. Furthermore the Stainless Steel products are provided with heat codes to enable Parker to issue certificates.

Innovative Performance
Parker does not keep its best ideas in the lab. The engineering departments from the Tube Fittings Division Europe in Bielefeld, Germany and Annemasse, France take them to the factory floor, integrating state-of-the art technology with innovative, yet practical products that consistently outperform current standards and competitive offerings.

Because of technical evolution new market requirements develop in hydraulic systems. Higher pressure, shorter cycle times and the idea of maintenance-free systems lead to the necessity of absolutely leak-free systems.

The Tube Fittings Division Europe developed the patented Parflange® tube preparation system as an alternative to preparing tube ends by brazing. This enabled the market for O-Lok® ORFS soft sealed fittings to expand strongly in Europe.

Further, the soft sealed solution EO-2 was developed and launched in 1991 to provide the first soft-sealed alternative to the DPR-Progressive Ring and New Generation fitting technology was launched in 2001.



England



Germany



Poland

These facilities are very high volume machining and finishing plants supplying completed parts to the Divisions Service Centers throughout the world. The manufacturing plant in Poland is built to be near the new market of Eastern Europe. Millions of steel, stainless steel and brass fittings are manufactured out of forgings and bar materials per month. They are shipped to Customers around the world.

On the Cutting Edge

Focused Product Unit Custom Products

This business unit, is specialised in offering non-standard fittings according to customer requests. Due to modern CNC-machinery, they are able to produce a huge variety of customised and jump size fittings in different materials such as steel, stainless steel, brass and others. Virtually any straight or shape can be machined with a multitude of fitting systems and thread forms.

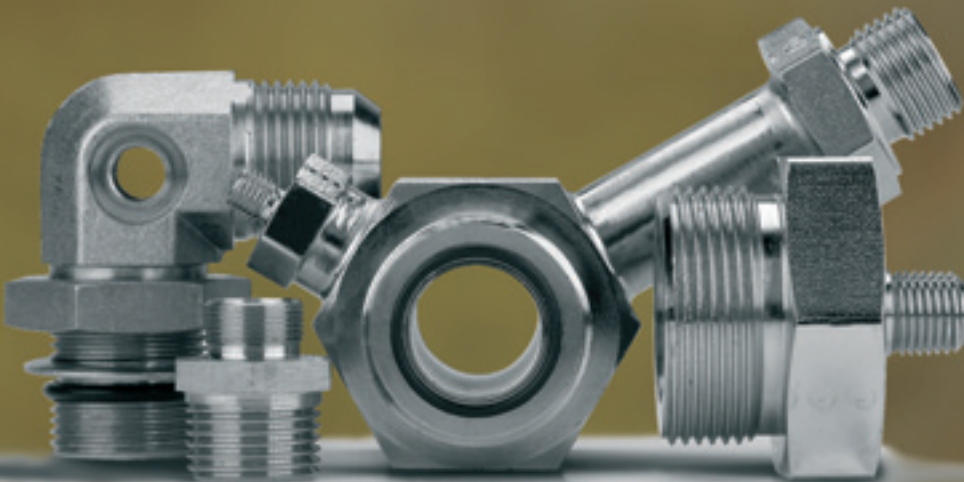


Highest Quality

Both bar stock and forged shapes are machined by state-of-the-art equipment into finished tube fittings that meet or exceed global standards.

All critical production steps are controlled by SPC (Statistic Process Control).

Parker has installed a Quality management system according to ISO 9001 in all locations.



Metal forming plants

These facilities are the metal forming plants supplying raw materials to the manufacturing locations throughout Europe. Thousands of tons of steel, stainless steel and brass are processed each year.

The Tube Fittings Division Europe forges its products from the best materials available to ensure strength and durability. For example, tube nuts are “cold-formed” from quality materials for close grained toughness. The result is a fitting with total reliability – a fitting that can stand up to years of service.



Chromate Protective Coating

Steel EO New Generation fittings are zinc plated and then Cr(VI)-free chromated on a new state-of-the-art plating line providing corrosion protection equal to or exceeding ISO, DIN and SAE standards. The Cr(VI)-free coating meets

already the Directive 2000/53/EC of the European Parliament and of the Council on end-of-life vehicles. This process is more environmentally friendly than other plating methods. The nuts are specially treated for reduced friction.



A Material Difference

High value TFDE fittings components

The manufacture of high quality, high value fittings components starts already with the ordering of tensile-tested raw materials; these have to comply with the Parker material specifications specially determined for the products concerned. All their properties are guaranteed by the process stages triggered both before and after manufacture, in order to meet ever-increasing market requirements.

Development- and manufacturing-related Tests

In order to guarantee high quality in the material employed and in the resulting tube fittings, tests are carried out continually in Tube Fittings Division Europe’s own laboratories and testing area. Forging blanks are subjected to additional magnetic particle crack testing as well as to colour penetration checks, so that cracks and faults can be excluded. Spectrographic analysis shows whether the high requirements for chemical composition have been met. Microscopic investigation and the determination of mechanical properties are a further guarantee of outstanding and consistent quality. The capacity of fittings systems to resist corrosion, and static and dynamic loads, are very thoroughly tested on the Division’s own test stands. The performance of these fittings components is further confirmed independently by tests at testing institutes and research bodies.



Inch and metric Production

All TFDE fittings are produced with external hexagons and body flats in metric sizes according to ISO 8434. This meets the requirements of the European market, where metric tools are used. For customer projects specified the USA, SAE fittings like Triple-Lok® and O-Lok® are also available with imperial flat size for inch-based tooling.

Whatever kind of knowledge and skills are needed – Parker field sales representatives and certified distributors offer a range of training. From Product Training to practical hands-on trainings a lot of variations to improve knowledge and effectiveness.

With a flexible training concept and the use of modern presentation techniques the Tube Fittings Division is able to offer individual customised practical in-house training.

These trainings are completed with an up-to-date handbook, topical literature, wall charts and samples. After the training the customer gets all materials needed for further internal training events.

With up-to-date product knowledge TFDE training team creates the best conditions to establish modern effective processes and selection of Parker TFDE hydraulic fittings.



Training Activities

Benefits for Customers and Parker Certified Distributors:

- **Reduced leakage**
- **Reduce the loss of oil**
- **“Better hydraulic system” as a sales argument for their vehicles**
- **Reduction of cost by using easiest and fastest assembly techniques**
- **Avoidance of maintenance, warranty costs and down time**
- **No scrap/no rework**



Software for 3D-applications

- Fitting types of the Tube Fittings Division Europe now available in more than 100 different versions of 3D format
- Neutral format possible (e. g. Step, IGES)
- Single parts and assembled parts shown
- 3D drawings only available via internet



www.partserver.de



Parker Store, Total Hose and Fittings Service

One of the first self-service shops for hydraulic and pneumatic connectors. This offers:

- More than 3,000 items in stock
- The immediate, on site making of hoses
- "Mr. ParkerStore", the expert, trained and certified by Parker, is always available to help and to offer the best solutions to problems



Hose Doctor Service, Hydraulic Hose Replacement Service

This emergency service is available 24 hours a day and 7 days a week via free phone help line. The Hose Doctor Service van is a truly mobile workshop with a stock of hoses, tube fittings, adaptors, quick couplings and hydraulic lubricant. The technician is therefore able to replace any defective assembly, quickly and on site.

Value Added Services



Technical Services

With this service, Parker offers customers a true partnership:

- Parker engineers study with the manufacturer the best circuit for its equipment
- They work on site, with the customer
- they are present from the conception up to installation and take charge of the training of operators



Kitting - personalised Orders

When a manufacturer regularly needs a group of connectors and accessories, Parker proposes to gather the items under one reference and delivers them as a kit.



Breadman - Parker Logistic Service

This service entails the delivery of products or Parker kits directly to the manufacturer's assembly line, work station or warehouse. This service can be provided by Parker Certified Distributors or by Parker.

Advantages for the customer: stocks are reduced, just-in-time delivery, less handling, no more stock-outs.

