



FAQ

Isotubi-USA is the exclusive Isotubi distributor of high-quality stainless steel press fittings and valves in North America. The products are manufactured in our ISO 9001 certified manufacturing facility in Barcelona, Spain.

How does a press fitting seal?

A special tool physically “presses” the fitting onto the tube creating a mechanically sound joint. Hydraulic tightness is insured by an o-ring seal.

How does a press fitting compare to other joining methods?

Simply put, press fit technology allows tubes to be joined mechanically without threading or soldering. This means no solvents, thread sealants or open flames are required. Pressing is a comparably fast joining method requiring less technical skill to install than other means. Press installations typically costs 30% - 50% less than those made with other joining methods due to labor and auxiliary material savings.



STAINLESS STEEL **PRESS - FAQ**



Where can Isotubi-USA stainless steel fittings and valves be used?

Anywhere traditional fittings and valves are used – plumbing and heating, commercial, and industrial applications where gas, steam, liquids or vacuums are conveyed.

What type of fittings and valves does Isotubi-USA offer?

Isotubi-USA provides a complete line of stainless steel press fittings including elbows, straight and slip couplings, end caps, tees (equal and reducing), reducers, flanges and weld adapters, transition nipples and full port press valves in sizes ½” – 2”.

What type piping can Isotubi-USA fittings and valves be used with?

Isotubi-USA fittings are designed to be used with Schedule 5 or 10 Type 304, 304L, 316 or 316L stainless steel pipe conforming to ASTM A-312.

What are Isotubi-USA fittings and valves made of?

Our fittings (with the exception of flange adapters) are constructed of ASTM AISI 316L stainless steel. Valves and flanges are made of CF8M stainless steel, the 316 cast equivalent. These materials exhibit an exceptionally high corrosion resistance.

Why is stainless steel a better choice than PEX (cross-linked polyethylene), PVC or CPVC?

Plastic piping and fittings can burn and distort during a fire event, and in many cases will give off toxic smoke. Stainless steel is not flammable. Stainless steel is also more dimensionally stable than plastics when exposed to thermal fluctuations.

How can I be assured a joint has been pressed in an installation?

Isotubi-USA fittings are designed to leak before press, so any unpressed joint can be quickly identified.

Some other manufactures use 304 stainless steel. Why do you use 316 and 316L?

Both 316 and 316L stainless steels exhibit better corrosion resistance and are stronger at elevated temperatures than 304. This is primarily due to the addition of molybdenum which is not contained in 304 stainless steel. Our 316 and 316L stainless steel is hygienic, exceptionally durable and corrosion resistant, not affected by UV radiation, resistant to erosion corrosion and is visually attractive. Our 316 and 316L material costs more than 304, but we believe it is worth it as it results in a superior product.

Why should I use press products instead of those joined by traditional methods (soldering, brazing, welding, threading, etc.)?

Press connections can be made in the fraction of the time required by other joining methods, and no open flame or flame permit is required. Faster installations translate into significant labor savings. Connections made by pressing are sound, simple, and clean and provide an economical alternative to other means of joining tube.

Are press connections secure?

Absolutely. Press connections made per Isotubi-USA's recommended practice are as secure as any other joining method. Isotubi has a three decade plus record of successful and trouble-free use in Europe, and now this technology is being made available in the USA.

How long does it take to make a press connection?

A press connection can be made in seconds – literally the time it takes to insert the tube and cycle the tool, and unlike other methods full structural integrity and sealing capability is realized immediately.

Can Isotubi-USA stainless steel fittings be used in combination with copper plumbing systems?

Yes. Both copper and stainless steel have similar corrosion potentials in potable water.

Can a joint be adjusted after pressing? What press tools should I use?

Slight torsional adjustments (generally 5 degrees or less) can be made after pressing. More significant rotations require that the joint to be repressed.

Press tools:

- Milwaukee's M18 Force Logic Long Throw Press Tool
- Novopress ACO203 Press Tool
- Associated jaws and rings for SS type M applications for each

Can Isotubi-USA stainless steel fittings be used with deionized water?

Yes. Our fittings have a long track record of use in many types of conditioned waters including softened and deionized.

What applications are Isotubi-USA fittings and valves suited for?

The o-ring selected determines suitability for a given service, but Isotubi-USA fittings and valves can be used anywhere other traditionally joined stainless steel products are specified – including but not limited to water, gases, air (wet or dry), hydraulic fluids, lubricants, oil vapors, acids, alkalies, vegetable and mineral oils, hydrocarbons, and automotive fluids. Additionally the hygienic characteristics of our fittings and valves make them a good choice for use in the food, beverage, and pharmaceutical industries.



What are the pressure and temperature ranges of Isotubi-USA products?

Isotubi-USA fittings have a working pressure range from a full vacuum (internal absolute pressure of 0 psi) to 300 psi on Schedule 5 and 10 stainless steel pipe. Valves have a maximum working pressure of 300 psi and can be used in vacuum service down to an internal absolute pressure of 7.3 psi.

Temperature ranges are o-ring dependent:

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| EPDM O-Ring (Black) | -4°F to 230°F |
| HNBR O-Ring (Yellow) | -31°F to 248°F (-13°F to 248°F for valves) |
| FKM O-Ring (Green) | -4°F to 356°F |

Which o-ring should I select?

Isotubi-USA's three o-ring options cover a wide variety of applications, but it is important to specify the correct one for a given service.

The black EPDM o-ring has excellent oxidation resistance and is recommended for use with potable water, dilute acids, alkalis, oil free air and many chemical services. **DO NOT USE WITH HYDROCARBONS.**

The yellow HNBR o-ring exhibits excellent resilience and is recommended for use with petroleum-based products, propane, vegetable oils, lubricants, salt solutions, ethylene glycol and gases. **DO NOT USE WITH ETHERS OR HALOGENATED SOLVENTS.**

The green FKM o-ring retains its mechanical properties at elevated temperatures and is recommended for use with oxidizing acids, oils, hydraulic fluids, chlorinated hydrocarbons and process water. **DO NOT USE WITH AMMONIA.**

What pipe hanger and support requirements should my installation follow?

Support hanger spacing should correspond to the ASME B31.1 Power Piping Code, ASME B31.3 Process Piping Code, or ASME B31.9 Building Services Piping Code as appropriate. Consult the local authority having jurisdiction for possible additional requirements. Proper bearing and spacing of supports is necessary to prevent excessive bending or sagging. The weight of the conveyed material should also be considered.

Can Isotubi-USA stainless steel fittings be used in compressed air applications?

Yes. Since most compressed air systems contain finely distributed lubricants, the gray nitrile o-ring should be specified for this service.

Can Isotubi-USA stainless steel fittings be insulated?

Yes. Insulating material with a maximum level of soluble chloride ions of 0.05% should be specified. Avoid use of insulating materials that may collect and hold moisture such as felt. Closed cell foam insulation is preferred. Protecting the fittings and valves from chemical attack should be considered when installations are made in particularly harsh environments (i.e. paint shops, open tank chemical processing, etc.).