

54 Rahimi St., Nelson Mandela Blvd. TEHRAN, IRAN Zip Code: 1967915137

+98 (021) 91003062

+98 1462

info@fooladtabar.com

https://fooladtabar.com

شرکت صنعت فولاد تبار که در سال 1389 تاسیس شده است، یکی از شرکت های مهندسی و بازرگانی در ایران است. این شرکت در زمینه واردات، تامین کالا و ارائه خدمات فنی مهندسی پروژههای نفت، گاز، پتروشیمی، نیروگاهی و فولادی در کشور ایران و کشور های همسایه فعالیت دارد.

این شرکت در سال های اخیر به جهت گسترش دامنه خدمات خود اقدام به اخذ نمایندگیهای رسمی، توزیع و فروش کالاهای تعدادی از معتبرترین تولید کنندگان و تامین کنندگان امارات، کره جنوبی، هندوستان و کشورهای اروپایی نموده است و از این طریق توانسته است تمامی نیاز کارفرمایان خود را در زمینه اقلام پایپینگ متریال با بهترین کیفیت در کوتاهترین زمان و با نازلترین قیمت به صورت ارزی و ریالی فراهم آورد.

شرکت صنعت فولاد تبار با استقرار سیستمهای مدیریت

کیفیت 9001 ISO، زیست محیطی 14001 ISO، ایمنی و

بهداشت شغلی (45001 ISO)، سیستم مدیریت یکپارچه IMS

و با تفکری استراتژیک به دنبال تامین خواسته های مشتریان،

ایفای وظایف زیست محیطی و اجرای تعهدات ایمنی و بهداشت

شغلی کارکنان و اجرای هرچه بیشتر و بهتر پروژه های صنعتی

بزرگ در داخل و خارج کشور است و اطمینان لازم را نسبت به

کیفیت محصول در مشتریان خود فراهم می سازد.

# هر جا که صنعتی می د رخشــــــد روح <mark>فولاد تبار</mark>را در آنجا حس می کنید



















- Valves
- Pipes
  - Steel Sections
- Inetrumente
- Fittings
- Gaskets
- Industrial Process Equipment
- Stud Bolt
- Fire Fighting Equipment
- Food Industry
- Expansion Joint
- Safety Valve

## **VALVES**



Butt-weld Socket-weld Threaded Flanged Wafer Style Lug Type

#### **VALVES - Butt weld**



Butt-weld valves are the workhorses of high-pressure and high-integrity piping systems in critical industries like power plants, refineries, and chemical plants. These valves are permanently welded directly to the pipe ends, creating a leak-proof, secure connection that can withstand extreme temperatures and pressures.

Unlike flanged or threaded valves, butt-weld valves eliminate potential leak paths and maintain the full strength of the pipe by avoiding holes or reductions in diameter. This makes them ideal for applications demanding the utmost reliability and safety.



#### **VALVES - Socket weld**



Socket weld valves offer a dependable solution for connecting pipes, particularly those with smaller diameters (typically NPS 2 or below). They excel in applications demanding high pressure and leak-proof connections. The valve features a socket-shaped end with a cavity where the pipe's smooth end is inserted. A fillet weld encircles the joint, creating a permanent and robust connection.

This method is favored for its leak resistance, ability to handle high pressures and temperatures, and ease of alignment during welding. However, the welding process requires skilled labor and is less forgiving for errors compared to mechanical connections.



### **VALVES - Threaded**



A threaded valve is a type of valve that uses threads on its ends to screw into pipes or fittings. This creates a tight seal that prevents leaks. Threaded valves are commonly used in plumbing applications, as well as in industrial and hydraulic systems. They are available in a variety of materials, including brass, stainless steel, and PVC, and can be used with a variety of fluids, including water, oil, and gas.





### **VALVES - Flanged**



A flanged valve is a type of valve that utilizes flanges on either end to connect to pipes or other equipment. These flanges are bolted together with a gasket in between, creating a secure and leak-proof seal. Flanged valves are ideal for high-pressure applications because of their strong and reliable connection. They are also easy to install and remove, making them a popular choice for industrial processes, power plants, and water treatment facilities.





### **VALVES - Wafer Style**



A wafer-style valve is a space-saving valve design that sits between two flanges on a piping system. Unlike flanged valves that have their own flanges for bolting on, wafer valves rely on the clamping force of the existing flanges in the pipeline to create a tight seal.

This design makes wafer valves more compact and lighter weight compared to flanged valves. They are ideal for on-off flow control applications where there is easy access to both sides of the valve for installation and maintenance. However, since the valve body itself is not as robust, wafer-style valves typically have pressure limitations and are not suitable for high-pressure applications.





## **PIPES**



Welded Seamless





#### **PIPES - Welded**



Welded pipe is a type of pipe created by forming a flat sheet of metal, typically steel, into a cylindrical shape and welding the seam shut. There are various welding techniques used to manufacture welded pipe, including electric resistance welding (ERW) and submerged arc welding (SAW).

Welded pipe offers several advantages over seamless pipe, a type of pipe formed through extrusion or piercing a solid billet. Welded pipe is generally more cost-effective to produce and can be made in larger diameters than seamless pipe.

Additionally, due to the manufacturing process, welded pipe can often achieve tighter dimensional tolerances than seamless pipe. However, the weld seam itself can be a point of weakness, so welded pipe typically has pressure limitations compared to seamless pipe. Welded pipe is a versatile product used in a wide range of applications including plumbing, construction, oil and gas pipelines, and HVAC systems.





#### **PIPES - Seamless**



Seamless pipe, unlike welded pipe, is formed from a solid cylindrical piece of metal, typically steel. This pipe is shaped by piercing or drawing a starting billet to achieve the final diameter and wall thickness. The seamless manufacturing process creates a pipe with uniform strength throughout its body, resulting in a higher capacity to withstand high pressure. Because of this, seamless pipe is preferred for high-pressure applications such as oil and gas pipelines, boilers, and industrial uses with stricter safety and performance requirements.

While seamless pipe offers significant advantages in terms of strength and safety, it's also more complex and expensive to produce compared to welded pipe. Additionally, the size limitations of the production process typically restrict seamless pipe to smaller diameters than welded pipe.





### **STEEL SECTIONS**



Plate

Angle Bar

U-Channel

Beam

Rod

Profile

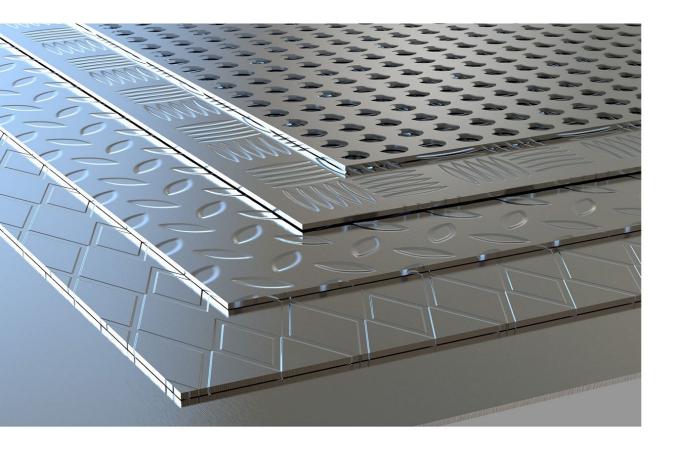
Flat Bar







#### **STEEL SECTIONS - Plates**



Steel plates are flat pieces of steel available in a wide range of thicknesses and sizes. They are a fundamental building block in many construction and industrial applications due to their versatility and strength. Steel plates can be cut, bent, welded, or drilled into various shapes to meet specific project requirements.

The selection of the appropriate steel plate grade depends on several factors, including the strength required, formability (ease of bending or shaping), and corrosion resistance. Steel plates are a cost-effective and reliable material that plays a vital role in modern construction and industry.





### STEEL SECTIONS - Angle bar



An angle bar is a versatile piece of metal shaped like an L with two straight legs at a 90-degree angle. They are commonly made from steel or aluminum and come in various thicknesses and lengths. Steel angle bars are known for their strength and affordability, making them a popular choice for construction projects, braces, and reinforcement. Aluminum angle bars are lightweight and corrosion-resistant, ideal for applications where weight is a concern or where the metal will be exposed to the elements. Angle bars are commonly used in construction projects to reinforce beams, columns, and walls. Their L-shaped form allows them to effectively distribute weight and strengthen corners.



#### STEEL SECTIONS - U-Channel



A U-channel is a long, thin metal strip shaped like the letter "U." It has a flat base (web) with two upright sides (flanges) running parallel to each other. U-channels are typically used for two main purposes:

Edge protection and finishing: U-channels excel at protecting and finishing the edges of panels, sheets, or other materials. They can be found securing glass in windows or furniture, providing a clean border for metal sheets, or even edging countertops.

Lightweight structural support: While not as strong as its cousin the C-channel, U-channels can still offer some level of structural support in non-load-bearing applications. They might be used to create frames or light-duty tracks.





#### **STEEL SECTIONS - Beams**



Beams are a fundamental building component that act as horizontal load carriers. They can be constructed from various materials like wood, steel, or concrete, and come in different shapes like solid rectangular, I-beams (flanged with a wide top and bottom), or box beams (hollow with a rectangular cross-section). In buildings, beams support the weight of floors, ceilings, and roofs, transferring it down to columns and ultimately the foundation. They are essential for creating clear spans within a structure, allowing for open floor plans or large rooms. The size, strength, and material of a beam are determined by the weight it needs to support and the distance it needs to span.





#### **STEEL SECTIONS - Rods**



Steel rods are versatile lengths of steel with a variety of uses. They can be found in different shapes, with the most common being round and threaded rods. Steel rod material can be plain or galvanized for rust resistance. They are available in various lengths and thicknesses, making them suitable for a wide range of projects. From home improvement tasks like hanging shelves to construction applications like reinforcing concrete, steel rods are a strong and dependable choice.





#### **STEEL SECTIONS - Profiles**



Steel profiles are long pieces of steel that have been formed into specific cross-sections. These shapes, like angles, channels, tubes, and beams, run consistent throughout the entire length of the profile. They are typically manufactured through processes like rolling, drawing, or pressing the steel. Steel profiles are known for their strength and are widely used in construction projects to create frames, support structures, and reinforce concrete. They offer advantages over other materials like wood or concrete by being lighter, more durable, and dimensionally consistent.





#### **STEEL SECTIONS - Flat Bars**



Flat bars, also known as flat steel or flat stock, are long, solid bars of metal with a rectangular or square uniform cross-section. They come in various widths, thicknesses, and lengths, often made from steel but also available in aluminum and brass. Due to their flat profile, they are easy to machine, cut, weld, and bend, making them a popular choice for many metalworking projects. Flat bars serve a wide range of functions, from acting as structural supports and braces to being used for trim, gussets, and even mounting plates.





### **INSTRUMENTS**



**Filters** 

Blocks

Valves

Fittings

Manifolds

Connectors

Tube Series

Checking Industrial









### **FITTINGS**



Butt-weld Socket weld Threaded Flanged





#### FITTINGS - Butt-weld



Butt-weld fittings are workhorses in the piping world, used to create permanent, high-pressure connections in pipe systems. They come in various shapes like elbows, tees, reducers, and caps, allowing for changes in direction, branching pipes, size reduction, or equipment attachment. Made from strong materials like steel or stainless steel, they require welding to the pipe ends for a secure, leak-proof joint. The beveled ends of the fittings and pipes create a groove for the weld, maximizing joint strength. Compared to threaded or socket-welded fittings, butt-weld fittings offer a stronger and more permanent solution for high-pressure applications.







#### **FITTINGS- Socket weld**



Socket weld fittings are a popular choice for joining pipes in low-pressure and non-critical applications. Unlike butt-weld fittings that require precise beveling and full circumference welding, socket welds offer a simpler and faster assembly process. These fittings feature a recessed socket at one end, where the pipe is inserted and joined using a fillet weld around the socket perimeter. Commonly made from forged carbon steel or stainless steel, they are suitable for applications like domestic water lines, fire protection systems, and low-pressure industrial piping. While not as strong as butt-weld fittings, their ease of use and good leak integrity make them a cost-effective solution for many plumbing and piping projects.





#### FITTINGS - Threaded



Threaded fittings are the veterans of the pipe connection world, offering a reliable and time-tested method for joining pipes. These fittings, typically made from brass, galvanized steel, or stainless steel, have male and female threads on their ends. The male threads, with a tapered design, screw into the female threads, creating a tight seal. Threaded fittings come in various shapes like elbows, tees, couplings, and bushings, providing flexibility for directional changes, branching lines, connections, and size reduction.

They are ideal for low-pressure applications like water lines, compressed air systems, and some gas lines. While requiring tools like wrenches for tightening, threaded fittings offer a relatively easy assembly process compared to welding techniques. Their affordability and ease of use make them a popular choice for DIY projects and various plumbing and piping applications.





### FITTINGS-Flanged



Flanged fittings are the heavy-hitters in the piping world, designed for high-pressure and high-temperature applications. These robust fittings consist of a body with a raised flange on one or both ends. The flanges have drilled holes for bolts, which clamp the fitting securely between two pipe flanges using gaskets for a leak-proof seal.

Flanged fittings come in a variety of shapes like elbows, tees, reducers, and crosses, allowing for directional changes, branching pipes, size reduction, and equipment connections. Made from sturdy materials like cast iron, forged steel, or stainless steel, they can withstand significant pressure and temperature extremes. While requiring more space and assembly time compared to other fittings, flanged connections offer easy disassembly for maintenance or inspection. Their strength, reliability, and reusability make them the go-to choice for power plants, refineries, and other industrial applications demanding secure and high-performance piping systems.





### **GASKET**



Metallic Semi-Metallic Non-Metallic







#### **GASKET - Metallic**



Metallic gaskets are the tough guys of the gasket world, sealing connections in harsh environments where non-metallic options would fail. Made from robust materials like stainless steel, Inconel, or Monel, they can withstand extreme temperatures, high pressures, and exposure to aggressive chemicals.

Common types include ring joint gaskets, with their oval or octagonal shapes for positive sealing, and spiral wound gaskets, featuring a metal core wrapped in a spiral with a soft filler material for conformability. Metallic gaskets excel in applications like heat exchangers, compressors, pipelines, and valves, ensuring leak-proof connections under demanding conditions. While typically more expensive than some non-metallic options, their exceptional durability and reliability make them a worthwhile investment for critical industrial applications.





#### **GASKET - Semi-Metallic**



Bridging the gap between purely metallic and soft gaskets, semi-metallic gaskets offer a versatile sealing solution for a wide range of applications. They combine the strength and resilience of metal with the conformability of softer materials. Typically, they consist of a metal jacket or core filled with a soft material like flexible graphite or PTFE. This combination allows them to handle high pressures and temperatures while conforming to uneven flange surfaces, preventing leaks. Common types include spiral wound gaskets, with their metallic core and soft filler in a spiral winding, and metal-jacketed gaskets, where a soft core is encased in a metal shell.

Due to their adaptability, semi-metallic gaskets are ideal for applications like flanged connections in refineries, chemical processing plants, and even aerospace, where they can handle demanding environments while offering a reliable seal.





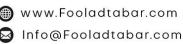
#### **GASKET - Non-Metallic**



Non-metallic gaskets are the workhorses for sealing applications where pressure and temperature are moderate. They offer a cost-effective and versatile solution for various flange connections. Made from a wide range of materials like rubber, cork, fiber, or PTFE (Teflon), they can be chosen based on specific needs. Rubber gaskets excel in flexibility and chemical resistance, while cork offers good thermal insulation. Fiber gaskets, often a combination of materials like aramid fibers and fillers, provide good strength and heat resistance. PTFE gaskets, known for their low friction and chemical inertness, are ideal for applications requiring clean and contamination-free environments.

Non-metallic gaskets are commonly used in plumbing systems, low-pressure vessels, and automotive applications. While not designed for extreme conditions, their affordability, ease of use, and wide range of material options make them a popular choice for many industrial and household sealing needs.







### **INDUSTRIAL PROCESS EQUIPMENT**



Boiler
Compressor
Blower
Pump
Storage Tank
Water Softener
Temperature Sensor





### **INDUSTRIAL PROCESS EQUIPMENT - Boiler**

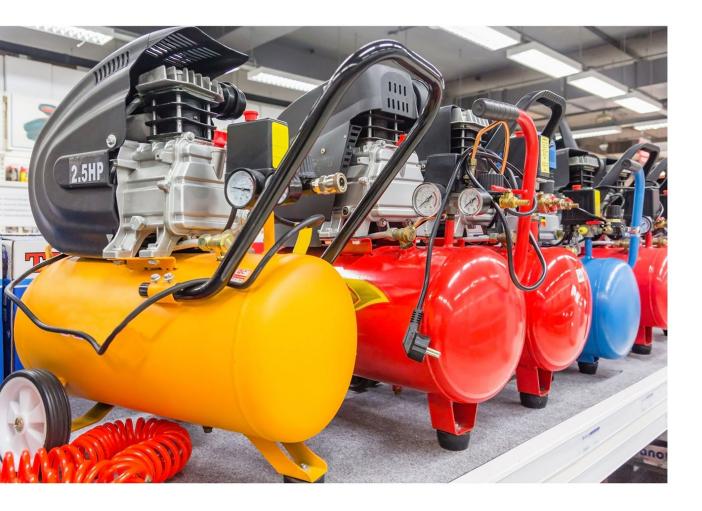


An industrial boiler is essentially a giant industrial kettle used for heating water or other fluids to high temperatures. This hot fluid serves various purposes within a facility, such as generating steam to power turbines for electricity production, supplying heat for large-scale industrial processes (drying products, sterilizing equipment), or providing hot water for building heating systems.





### **INDUSTRIAL PROCESS EQUIPMENT - Compressor**



An industrial compressor acts like a super-powered air pump. It takes in regular air at atmospheric pressure and squeezes it down to a much higher pressure. This compressed air becomes a versatile source of power within the facility, driving various pneumatic tools and machinery. Examples include assembly line equipment (drills, wrenches, impact wrenches), paint equipment, sandblasting equipment, and even actuating systems that open/close valves or operate machinery parts.





### **INDUSTRIAL PROCESS EQUIPMENT - Blower**



Industrial blowers are powerful fans specifically designed for large-scale air movement within industrial settings. Unlike regular fans, they can generate much higher air pressure or flow rates. These blowers find numerous applications, including ventilation and exhaust (removing fumes or dust from factories), drying processes (accelerating evaporation of liquids), material handling (conveying lightweight materials like wood chips or plastic pellets), and even inflating large structures.





### **INDUSTRIAL PROCESS EQUIPMENT - Pump**

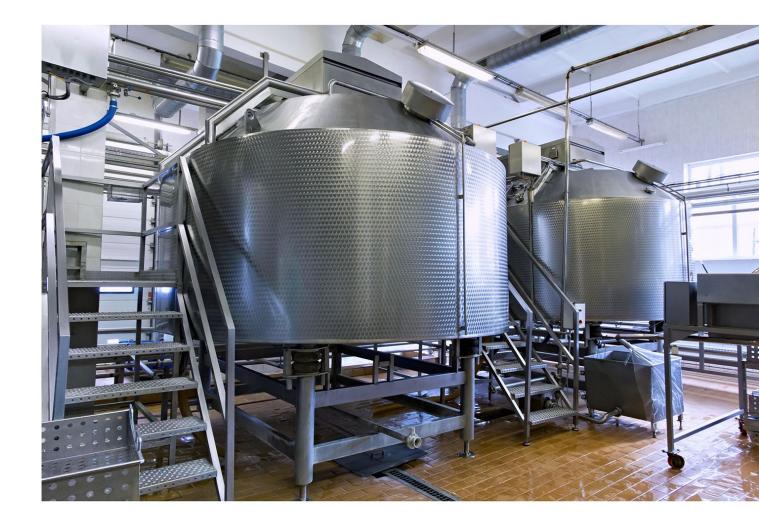


An industrial pump is the workhorse of fluid movement in a facility. Unlike simple hand pumps, they come in various types designed for different fluids and pumping requirements. These pumps move liquids, gasses, or even slurries from one place to another within the vast network of pipes throughout an industrial facility. Examples include water pumps for cooling systems or cleaning, chemical pumps for handling corrosive liquids, fuel pumps for transferring oil or gas, and slurry pumps specifically designed for moving thick mixtures of liquids and solids.





### **INDUSTRIAL PROCESS EQUIPMENT - Storage Tank**



Industrial storage tanks are the workhorses of material storage, acting as giant containers for everything from liquids and gases to fuels and solids like grain. Made from steel or fiberglass depending on the material stored, these tanks come in various sizes and designs.

They can be general purpose tanks for bulk storage, super strong pressure vessels for containing compressed materials, or even buffer tanks to temporarily hold materials at specific points in a production line. In short, they keep essential materials organized, safe, and readily available for industrial processes.





### **INDUSTRIAL PROCESS EQUIPMENT - Water Softener**



Industrial water softeners tackle a common problem – hard water. They act like filters, removing dissolved minerals like calcium and magnesium that cause scaling and contribute to inefficiencies in boilers, cooling towers, and other equipment. This softened water improves overall performance, reduces maintenance needs, and extends the lifespan of equipment in industrial facilities.





### **INDUSTRIAL PROCESS EQUIPMENT - Temprature Sensor**



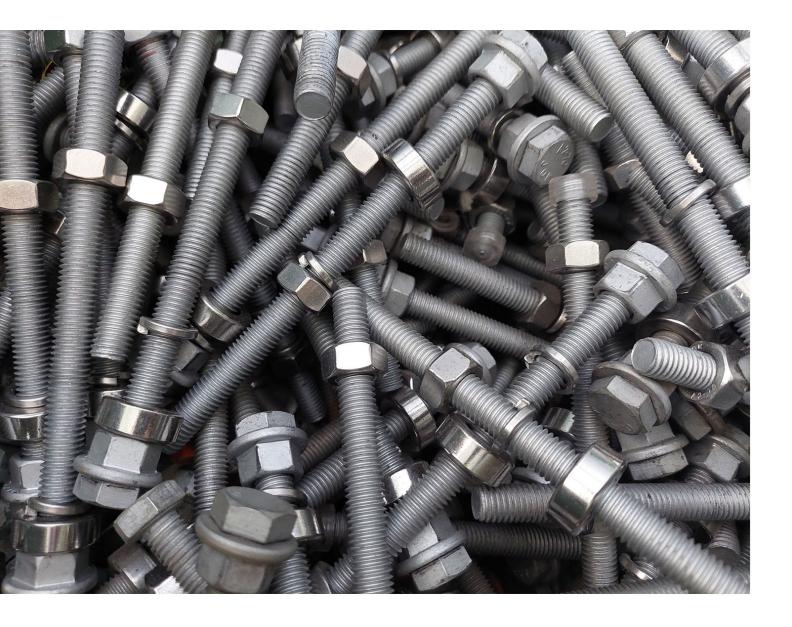
Industrial temperature sensors are the silent guardians of industrial processes. These are devices strategically placed within equipment or tanks to constantly monitor temperature. They come in various forms, like thermocouples or resistance temperature detectors (RTDs). By converting temperature into an electrical signal, they provide crucial real-time data for control systems.

This data allows for precise temperature regulation, ensuring product quality, preventing overheating that could damage equipment, and promoting overall process efficiency and safety in industrial facilities.





#### STUD BOLT



Flange stud bolts are essentially threaded rods that act as high-strength fasteners in industrial piping systems. They screw into one flange and are secured with nuts on the other, creating a tight and secure connection between two pipe flanges. These stud bolts are crucial for withstanding high pressure and preventing leaks within the system, often made from strong materials and following specific standards to ensure reliable performance.





### FIRE FIGHTING EQUIPMENT



Industrial fire fighting equipment goes beyond the standard fire extinguisher. It includes high-powered hoses and pumping systems to deliver massive amounts of water or foam, industrial-sized fire extinguishers for tackling larger blazes involving specific fuel types, and specialized fire trucks with extended reach and high-capacity water tanks. These heavy-duty tools are designed to combat large-scale fires that can erupt in industrial settings.





#### **SAFETY VALVE**



A safety valve is a pressure release mechanism that acts as a fail-safe for pressurized systems like boilers or pipelines. It essentially functions like a pressure relief valve on a pressure cooker. By automatically opening when pressure builds up beyond a safe limit, it safeguards against catastrophic events like explosions or ruptures. Imagine it as a built-in emergency hatch that vents excess pressure to keep the system from bursting.



