

# PRODUCT LIST

<u>FLANGES</u>	<u>FORGED FITTINGS</u>	<u>PIPE FITTINGS</u>
<p><b>Types of Flanges: -</b></p> <p><b>Threaded Flanges:</b> - Also known as the Screwed Flanges, the Threaded Flange has a thread inside its bore. The thread fits in line with another male thread on the pipe. Though it is a fast process of connection, it is not suggested for high pressure or high temperature applications.</p> <p><b>Slip-on Flanges:</b> - Slip-on Flanges are made with holes that match the outer diameter of a pipe. The pipe is passed through the hole and fillet welded from both sides. Low pressure and low temperature applications are suitable for this kind of flange joint. Slip-on flanges are generally forged and come with a hub. Large sizes are used to connect big bore pipes with storage tanks.</p> <p><b>Socket-Weld Flanges:</b> -Usually used only for Low pressure and temperature applications, Socket-Weld Flanges have female socket. A pipe is fitted through the female socket in the Flange.</p> <p><b>Lap-Joint Flanges:</b> -Lap-joint flanges are made in two components, which includes a stub-end and a loose backing flange. Lap-joint Flange is used for applications that require frequent dismantling.</p> <p><b>Blind-Flanges:</b> - These Flanges are used as a termination point to a piping system. Blind-Flanges have a blank surface with bolt point to fit a pipe.</p>	<p><b>Types of Socket-Weld Fittings: -</b></p> <p><b>Full Coupling:</b> - A full coupling is used to join a pipe to another pipe or a pipe to a nipple and so on.</p> <p><b>Half Coupling:</b> - Directly welding a half coupling to a run pipe helps in creating a branch system.</p> <p><b>Reducing Coupling:</b> - A reducing coupling has two separate outside diameters to fit pipes with different diameters.</p> <p><b>Union:</b> - A union is a screwed joint consisting of three pieces that are interconnected. Two internally threaded pieces connected through a centre piece.</p> <p><b>Elbows:</b> - Elbows are made in 90 and 45 degree angles to change the direction of a pipe.</p> <p><b>Cross:</b> - The 90degree cross sections of a cross create a branch system.</p> <p><b>End caps:</b> - End caps are used to complete a pipe and terminate the open ends of the pipe.</p> <p><b>Types of Threaded Fittings: -</b></p> <p><b>Full Coupling:</b> - A full coupling is used to connect pipes to pipes and pipes to nipples and more.</p> <p><b>Half-Coupling:</b> - A run pipe and a half-coupling can be welded to form a branch connection.</p> <p><b>Elbows:</b> - Elbows are common in both. These fittings come in 90 and 45 degree angled connections to make changes in the direction of a pipe.</p> <p><b>Square Head plug:</b> - The fitting helps in sealing the threaded ends of a fitting.</p>	<p><b>Types of Pipe fittings: -</b></p> <p>• <b>Pipe Elbow:</b> - Elbows are the most common type of pipe fittings used. Pipe elbows give the flexibility to change a pipe's direction. 90 and 45 degree elbows are commonly used. However, angles can be adjusted as per requirement.</p> <p>• <b>Reducing Elbow:</b> - The reducing pipe helps in changing direction, as well as reducing the size of a pipe within a system. Also, the gradual reduction in diameter of this kind of elbows helps in preventing stream turbulence and internal corrosion.</p> <p>• <b>Pipe Reducer:</b> - Pipe reducers help in reducing the diameter of a pipe. Two types of pipe reducers include Concentric and eccentric pipe reducers.</p> <p>• <b>Stub-ends:</b> - Stub-ends are generally used with lap-joint flanges. The stub is butt welded to the pipe and the flange is left free to move over the stub end.</p> <p>• <b>Pipe Nipple:</b> - Pipe nipple is threaded at both or at least one end. Nipples are applied on low-pressure piping and used for connecting pipes, as well as valves.</p>

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<u>BARS</u>	<u>FASTENERS</u>	<u>OTHER PRODUCTS</u>
<p><b>Types of Bars: -</b></p> <p><b>Round Bars</b> : - Round Bars are commonly used for applications such as shafts, Axels, dowels, Bolts and gears.</p> <p><b>Square Bars</b> : - Square Bars are generally used for structural applications, manufacturing and repairs. Other industries like agricultural implementation, fencing, and transportation also involve square bar usage.</p> <p><b>Hex Bars</b> : - Hex or Hexagonal bars are with six sides. These generally are cold drawn and can be altered as per application requirements.</p>	<p><b>Types of Fasteners: -</b></p> <p>Some of the most commonly used Fastener types are listed below with their purposes: -</p> <p><b>Bolts</b> : -Bolts are a type of threaded fasteners consisting of an external male thread. Bolts are commonly misinterpreted with screws. Both have different structures and purposes all together. Bolts are often used in making bolted-joints, for the assembly of two unthreaded components. Types of Bolts include Anchor Bolts, Arbor Bolts, Elevator Bolts, Hex Bolts, Carriage Bolts, Lag Bolt, J-Bolt, U-Bolt, Hanger Bolt, and so on.</p> <p><b>Screws</b> : - A screw is somewhat similar to a Bolt and is characterizes by a typical helical ridge, also known as the male thread. A screw usually has a head with a special cut that allows it to be tightened into a softer base using a tool.</p> <p><b>Nuts</b> : - Nuts are normally used along with a fastening bolt to fasten multiple parts together. Hexagonal nuts are popular as they provide easy access for a tool and requires only one sixth of rotation to reach the next side and obtain optimal grip.</p> <p><b>Washers</b> : - A washer is a thin plate of metal that is basically used to distribute the weight of any threaded fastener. Washers usually have an outer diameter twice the inner diameter.</p>	<p>SHEETS</p> <p>PLATES</p> <p>PIPES</p> <p>TUBES</p> <p>VALVES</p>

<u>Alloy steel</u> <u>Carbon steel</u>	<u>Low</u> <u>Temperature</u> <u>Carbon Steel</u>	<u>STAINLESS STEEL</u>	<u>SUPER NICKEL ALLOYS</u>
<p>F1 F11 F12 F2 F22 F5 F9 F9 1 F911 F92</p> <p>A105 A36 F42 F46 F48 F52</p> <p>F56 F56 F60 F65 F70 F80</p>	<p>LF1 LF2 LF3 LF5 LF6 LF7 LF9</p>	<p>202, 303, 304, 304H, 304L, 304LN, 304N, 309H, 310, 310MoLN,310H,310S, 316, 316H, 316L, 316LN, 316N, 316Ti ,317, 317L, 321, 321H, 347, 347H, 348, 348H, 904L.</p> <p>Duplex Steel 2205 S31803 S32205</p> <p>Super Duplex Steel 2507 Ferralium 255 S32750 S32760 Zeron 100</p>	<p>Copper Nickel :70/30 90/10</p> <p>Hastelloy : B2 B3 C22 C276</p> <p>Incoloy : 800 825</p> <p>Inconel :600 601 617 625 690 718</p> <p>Monel 400</p> <p>Nickel Alloy : 200 201 Alloy 20</p> <p>Titanium :Gr 1 Gr 2 Gr 3 Gr 4 Gr 5</p>