

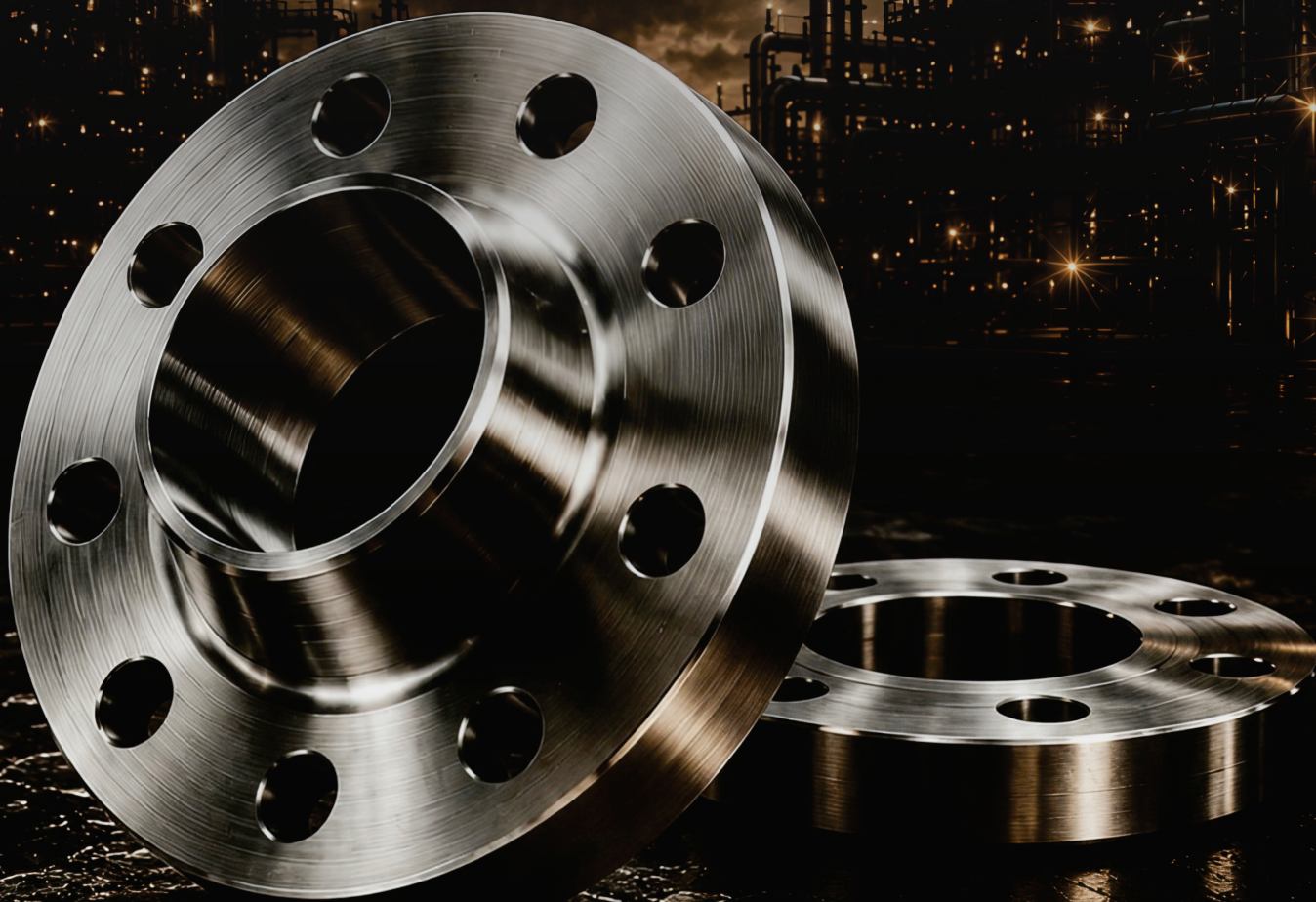


PROTECH VALVE

FITTINGS

Design, Manufacture, Supply & Export of
Mild Steel & Stainless Steel Flanges

ANSI • DIN • BS • JIS • IS STANDARDS



AHMEDABAD | GUJARAT | INDIA



PROTECH VALVE
FITTINGS



CONTENT

01.	OUR STORY.....	03
02.	MISSION / VISION.....	04
03.	TUBE SHEET FLANGE (TS).....	05
04.	THREADED FLANGE (TH).....	06
05.	SOCKET WELD FLANGE (SW).....	07
06.	LAP JOINT FLANGE (LJ).....	08
07.	BLIND FLANGE (BL).....	09
08.	SLIP ON FLANGE (SO).....	10
09.	WELDING NECK FLANGE (WN).....	11
10.	PLATE FLANGE (PL).....	12
11.	RING TYPE JOINT FLANGE (RTJ).....	13
12.	MS FORGED SOCKET WELDED TEE.....	14
13.	SOCKET WELD ELBOW 90°	15
14.	MS TAPERED THREAD COUPLER.....	16
15.	4" MS 90° LR ELBOW.....	17





PROTECH VALVE
— FITTINGS —

OUR STORY



At Protech Valve Fittings, we believe every industrial pipeline deserves strength, precision, and reliability. With a commitment to engineering excellence, we manufacture and supply high-quality pipe fittings, flanges, forged fittings, and industrial piping components that meet international quality standards.

From sourcing premium raw materials to precision machining and rigorous quality inspection, every product is crafted to deliver outstanding performance in demanding industrial environments. Our focus on quality, innovation, and customer satisfaction has helped us become a trusted partner for industries across oil & gas, petrochemical, power generation, water treatment, pharmaceuticals, and infrastructure projects.

Today, Protech Valve Fittings continues to expand its product range and global presence while maintaining the same commitment to excellence that defines our brand.



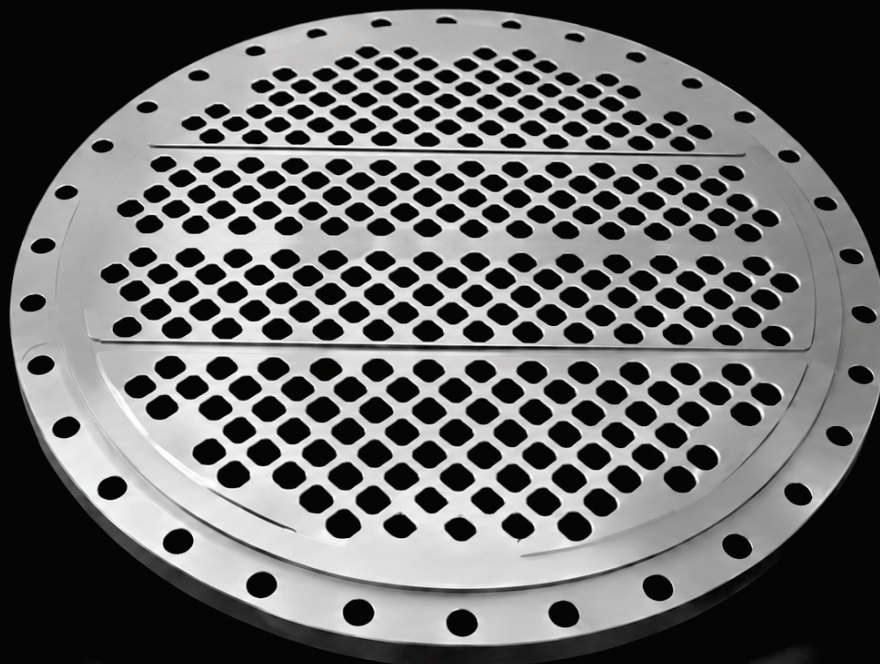
PROTECH VALVE
FITTINGS

MISSION

To deliver high-quality, precision-engineered piping solutions that ensure safety, reliability, and long-term performance while providing exceptional value and service to our customers.

VISION

To be a trusted global leader in industrial piping solutions, recognized for quality, innovation, and customer satisfaction.



TUBE SHEET FLANGE (TS)

**RELIABLE CONNECTION.
STRONG PERFORMANCE.**

Plate Flange (PL) is a common flat-type flange with a simple structure, light weight and low cost, widely used in low-pressure pipeline systems. It is connected to the pipe by welding or bolting, with a flat sealing surface, which is easy to process and install. As a cost-effective flange type, it is widely used in general industrial pipelines and civil pipeline systems and export projects worldwide.

• KEY FEATURES •



ECONOMICAL SOLUTION

Most economical flange type for low-pressure applications



EASY INSTALLATION

Slides over the pipe and is welded from inside & outside for secure connection



VERSATILE USE

Suitable for a wide range of industrial & commercial applications



MULTIPLE STANDARD

Manufactured as per international standards for global compatibility.



PREMIUM MATERIAL

Available in Carbon Steel, Stainless Steel, Alloy Steel & Duplex Steel



SIZE RANGE

1/2" to 48" (DN15 to Dn1200)



PRESSURE RATING

Class 150 to Class 300, PN6 to Pn40



STANDARDS

ANSI/ASME B16.5, EN 1092-1, DIN 2501, JIS B2220



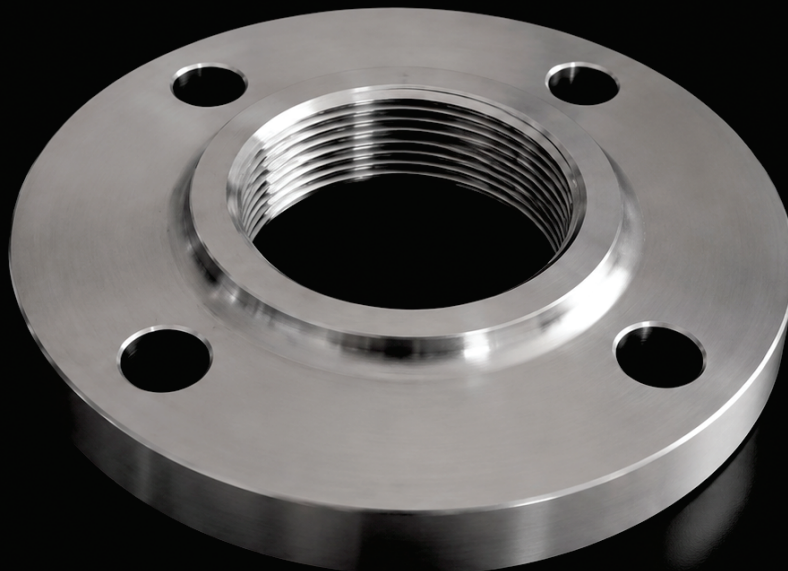
MATERIAL GRADE

Carbon Steel, Stainless Steel (304/304L, 316/316L), Alloy Steel, & Duplex Steel.



APPLICATION

Water treatment plants, low-pressure plumbing irrigation, and HVAC systems



THREADED FLANGE (TH)

**RELIABLE CONNECTION.
STRONG PERFORMANCE.**

Threaded Flange (TH) is a flange connected to the pipe by thread, without welding, which is convenient for disassembly and maintenance. It has the advantages of simple structure, quick installation, no damage to the pipe during installation, and is suitable for low-pressure, small-diameter pipeline systems and scenarios that require frequent disassembly. As a convenient and practical flange type, it is widely used in light industrial and civil pipeline systems and small-scale export projects worldwide.

• KEY FEATURES •



NO WELDING REQUIRED

Threaded connection reduces constructors difficulty and protects the pipe



EASY MAINTENANCE

Easy disassembly and maintenance for inspection and component replacement



SIMPLE & COMPACT STRUCTURE

Quick installation, lightweight design and space-saving structure



MULTIPLE THREAD TYPES

Available in NPT (ANSI) BSP (British) and G (Metric) thread standards.



PREMIUM MATERIAL

Manufactured from high-grade materials with excellent finishing and durability



SIZE RANGE

1/2" to 4"(DN15 to Dn100)



PRESSURE RATING

Class 150 to Class 300 Pn10 to Pn25



STANDARDS

ISO 7005, ASME B16.5, DIN 2501, EN 1092-1, JIS B2220, GBT 9114, HG/T 20592, HG/T 20615



MATERIAL GRADE

Carbon Steel (A105, 20#, Q235B), Stainless Steel (304, 316L), Alloy Steel (16Mn) - customizable per medium and conditions



APPLICATION

Water supply & drainage, HVAC & gas pipeline systems, low-pressure chemical engineering, pharmaceutical & food processing, industrial equipment, frequently disassembled or maintained piping.



SOCKET WELD FLANGE (SW)

**RELIABLE CONNECTION.
STRONG PERFORMANCE.**

Socket Weld Flange (SW) is a flange with a socket structure, which inserts the pipe into the flange socket and fixes it by fillet welding. It has the advantages of compact structure, small volume, reliable sealing and strong pressure resistance, and is suitable for small-diameter, high-pressure pipeline systems. As a high-performance flange type for small-diameter pipelines, it is widely used in high-pressure, high-precision industrial pipeline systems and export projects worldwide

• KEY FEATURES •



COMPACT STRUCTURE

Small volume and light weight for narrow installation spaces.



HIGH PRESSURE RESISTANCE

Reliable sealing and high pressure resistance via socket bore and fillet weld.



SMOOTH FLOW

Smooth internal flow-pipe seated in socket with low-resistance transition.



GLOBAL STANDARD COMPLIANCE

Compliant with ISO, ASME, DIN, EN, JIS & GB manufacturing standards.



PREMIUM MATERIAL

Manufactured from high-grade materials with excellent finishing and durability



SIZE RANGE

1/2" to 4" (DN15 to Dn100)



PRESSURE RATING

Class 300-2500/PN25 Pn100



STANDARDS

ISO 7005, ASME B16.5, DIN 2501, EN 1092-1, JIS B2220, GB/T 9117, HG/T 20592, HG/T 20615



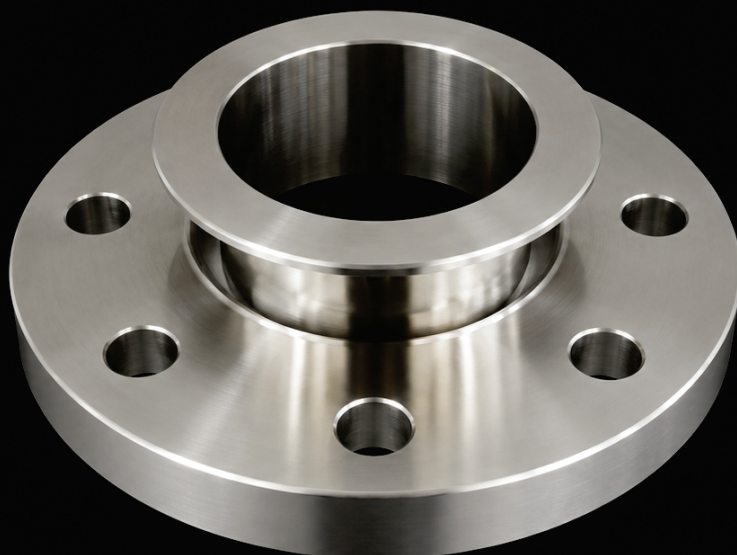
MATERIAL GRADE

Carbon Steel (A105, 20#), Stainless Steel (304, 316L), Alloy Steel (16Mn, 15CrMo, F11) -customizable per medium and conditions



APPLICATION

Petroleum & petrochemical small-bore piping, natural gas and power generation systems, chemical engineering, nuclear energy, high-pressure instrumentation and process lines.



LAP JOINT FLANGE (LJ)

**RELIABLE CONNECTION.
STRONG PERFORMANCE.**

Lap Joint Flange (LJ), also known as Loose Flange, is a flange composed of a flange ring and a Stub End (lap joint short section). The flange ring is loosely sleeved on the Stub End, which is welded to the pipe, and the flange ring is connected by bolting. It has the advantages of convenient disassembly, low cost, and no damage to the pipe during disassembly, and is suitable for large-diameter, low and medium pressure pipeline systems and scenarios that require frequent disassembly. As a flexible flange type, it is widely used in various industrial pipeline systems and large-diameter export projects.

• KEY FEATURES •



CONVENIENT DISASSEMBLY

Easy disassembly without disturbing the pipe or stub end connection



LARGE DIAMETER FRIENDLY

Ideal solution for large diameter piping systems



LAW & MEDIUM PRESSURE

Designed for low and medium pressure applications



COST EFFECTIVE DESIGN

Loose flange design reduces cost and installation time



PREMIUM MATERIAL

Manufactured from high-grade materials with excellent finish and durability



SIZE RANGE

2"to 56"(DN50 to Dn2000)



PRESSURE RATING

Class 150- 600/PN10-PN40



STANDARDS

ISO 7005, ASME B16.5, DIN 2501, EN 1092-1, JIS B2220, GB/T 9117, HG/T 20592, HG/T 20615



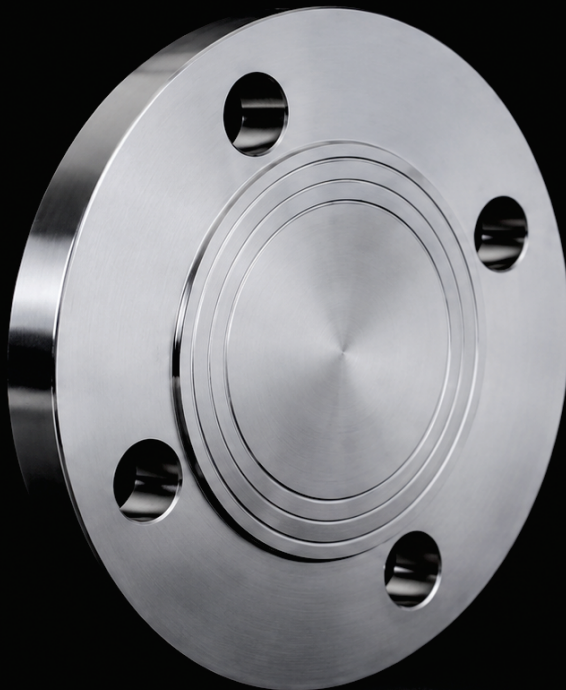
MATERIAL GRADE

Carbon Steel (A105, 20#), Stainless Steel (304, 316L), Alloy Steel (16Mn, 15CrMo, F11)- customizable per medium and conditions



APPLICATION

Petroleum & petrochemical piping systems, water supply & drainage, HVAC systems, natural gas and oil pipelines, fire protection systems, power generation and industrial utilities.



BLIND FLANGE (BL)

**RELIABLE CONNECTION.
STRONG PERFORMANCE.**

Blind Flange (BL) is a flange with a solid disc structure, used to seal the end of the pipeline, prevent the leakage of medium and protect the internal structure of the pipeline. It is connected to the pipeline by bolting, with a simple structure, reliable sealing and strong pressure resistance, and is widely used in all types of pipeline systems that need to be sealed temporarily or permanently. As an essential sealing component in pipeline systems, it meets the needs of export projects and industrial applications worldwide.

• KEY FEATURES •



RELIABLE SEALING

Solid disc with high pressure sealing ensures leak-Droof isolation.



TEMPORARY OR PERMANENT USE

Ideal for temporary maintenance or permanent pipeline termination.



SIMPLE & STRONG STRUCTURE

Solid construction delivers excellent strength and pressure resistance.



COST EFFECTIVE SOLUTION

Cost-effective component for pipeline end isolation.



PREMIUM MATERIAL

Manufactured from high-grade materials with excellent finish and durability



SIZE RANGE

12"to 56"(DN15 to Dn2000)



PRESSURE RATING

Class 150- 2500/PN10- Pn100



STANDARDS

IS07005, ASME B16.5, DIN 2501, EN 1092-1, JIS B2220, GB/T 9117, HG/T 20592, HG/T 20615



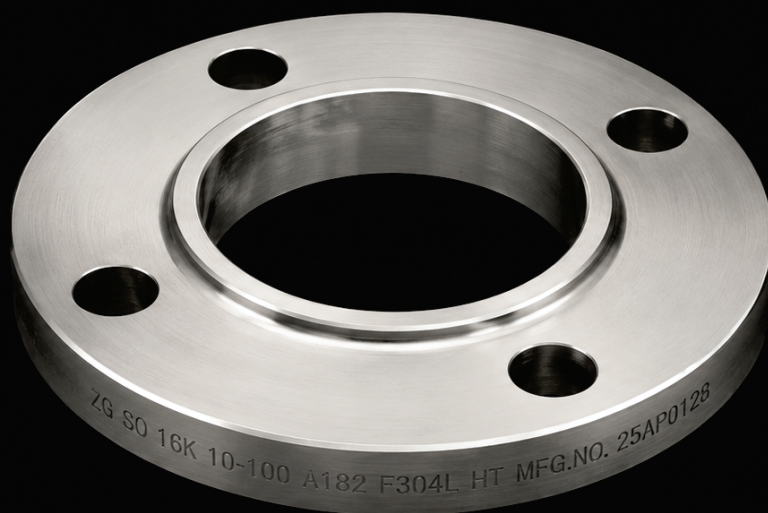
MATERIAL GRADE

Carbon Steel (A105, 20#), Stainless Steel(304, 316L), Alloy Steel (16Mn, 15CrMo, F11)- customizable per medium and conditions



APPLICATION

Carbon Steel (A105, 20#), Stainless Steel (304, 316L), Alloy Steel (16Mn, 15CrMo, F11)- customizable per medium and conditions



SLIP ON FLANGE (SO)

**RELIABLE CONNECTION.
STRONG PERFORMANCE.**

Slip On Flange (SO) is a widely used flange type with a sleeve structure, which is sleeved on the pipe and fixed by fillet welding. It has the advantages of simple structure, easy alignment, low cost and convenient installation, and is suitable for medium and low pressure pipeline systems. As a versatile flange type, it is widely used in various industrial and civil pipeline systems and general export projects worldwide.

• KEY FEATURES •



EASY ALIGNMENT

Sleeve design slips over pipe for easy alignment before fillet welding.



COST EFFECTIVE

Simpler manufacturing than weld neck flanges for medium and low pressure applications.



GOOD SEALING PERFORMANCE

Precision-machined face with gasket ensures reliable sealing under rated pressure



WIDE COMPATIBILITY

Suitable for water, gas, oil and general chemicals at normal to medium temperatures



PREMIUM MATERIAL

Manufactured from high-grade materials with excellent finish and durability



SIZE RANGE

1/2" to 56"(DN15 to DN2000)



PRESSURE RATING

Class 150-600/PN10-PN40



STANDARDS

ISO7005, ASME B16.5, DIN 2501, EN 1092-1
JIS B2220, GB/T 9116, HG/T 20592, HG/T 20615



MATERIAL GRADE

Carbon Steel (A105, 20#), Stainless Steel (304, 316L),
Alloy Steel (16Mn, 15CrMo) - customizable per medium and conditions



APPLICATION

Petroleum & petrochemical (low & medium pressure) natural gas distribution (low pressure), water supply & drainage, HVAC & chemical engineering, food & beverage processing, general industrial and civil pipeline systems.



WELDING NECK FLANGE (SO)

HIGH-PRESSURE FLANGE FOR CRITICAL PIPELINE SYSTEMS

Weld Neck Flange (WN) is a high-pressure flange with a long neck and smooth transition between the flange and the pipe, widely used in high-pressure, high-temperature and high-vibration pipeline systems. It is connected to the pipe by butt welding, which can effectively reduce stress concentration, improve the bearing capacity of the flange, and ensure the tightness and stability of the pipeline connection. As a core flange type in the global industrial field, it perfectly meets the requirements of international trade and high-end project applications.

• KEY FEATURES •



HIGH STRENGTH DESIGN

Long neck and butt weld structure provide superior strength and load-bearing capacity



HIGH PRESSURE CAPABILITY

Suitable for Class 150 to 2500(PN100) pressure ratings in high-



SMOOTH TRANSITION

Smooth neck reduces stress concentration and prevents leakage



PRECISION MACHINED

High flatness and accurate dimensions ensure tightness stability and reliable performance



SUPERIOR SEALING

RF, RTJ, FE, MFM sealing faces ensure zero leakage even under high pressure & vibration



SIZE RANGE

1/2" to 56"(DN15 to DN2000)



PRESSURE RATING

Class 150, 300, 600, 900, 1500, 2500;PN10, PN16, PN25, PN40, PN63, Pn100



STANDARDS

ISO 7005, ASME B16.5, API 605, DIN 2631, EN 1092-1, JIS B2220, GB/T 9115, HG/T 20592, HG/T 20615



MATERIAL GRADE

Carbon Steel, Stainless Steel, Alloy Steel, Duplex Steel, Nickel Alloys (Customizable)



APPLICATION

Petroleum, Petrochemical, Natural Gas, Power Generation, Chemical, Nuclear, Water Treatment, Shipbuilding and more.



PLATE FLANGE (PL)

**SIMPLE STRUCTURE.
MAXIMUM VALUE.**

Plate Flange (PL) is a common flat-type flange with a simple structure, light weight and low cost, widely used in low-pressure pipeline systems. It is connected to the pipe by welding or bolting, with a flat sealing surface, which is easy to process and install. As a cost-effective flange type, it is widely used in general industrial pipelines and civil pipeline systems and export projects worldwide.

• KEY FEATURES •



SIMPLE STRUCTURE

Flat design with light weight and low material cost



EASY INSTALLATION & MAINTENANCE

Flat face aids easy alignment, servicing and maintenance.



WIDE PRESSURE RANGE

Suitable for low-pressure and normal-temperature applications.



RELIABLE SEALING

Flat face ensures reliable sealing with compatible gaskets.



PREMIUM MATERIAL

Manufactured from high-grade materials with excellent finish and durability



SIZE RANGE

1/2"to 56" (DN15 to DN2000)



PRESSURE RATING

Class 150 - 300/PN10-PN25



STANDARDS

ISO 7005, ASME B16.5, DIN 2501, EN 1092-1, JIS B2220, GB/T 9119, HG/T 20592, HG/T 20615



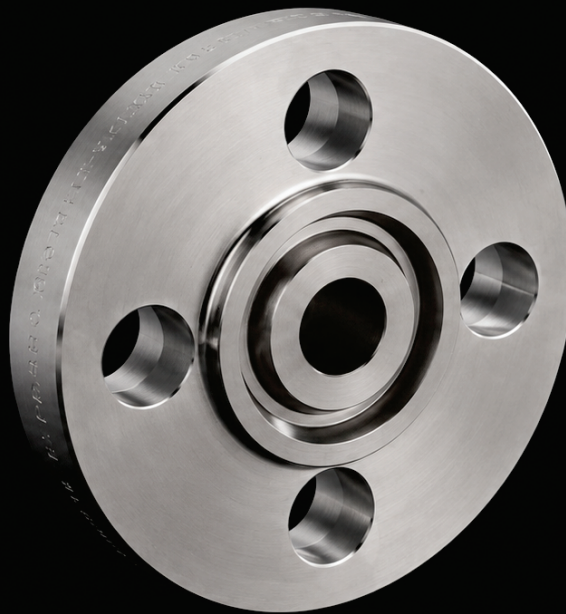
MATERIAL GRADE

Carbon Steel (A105, 20#), Stainless Steel (304, 316L), Alloy Steel (16Mn, 15CrMo) - customizable per medium and conditions



APPLICATION

Carbon Steel (A105, 20#, Q235B), Stainless Steel (304, 316L), Alloy Steel (16Mn) – customizable per medium and conditions



RING TYPE JOINT FLANGE (RTJ)

**SUPERIOR SEALING.
ENGINEERED FOR EXTREME PRESSURE & TEMPERATURE.**

A Ring Type Joint (RTJ) Flange is a heavy-duty, high-performance piping flange specifically engineered for extreme high-pressure and high-temperature (HPHT) service. It is distinguished by its precision-machined annular groove on the sealing face, which holds a solid metal ring gasket to create a superior, leak-proof, pressure-energized metal-to-metal seal. When bolts are tightened, the gasket deforms plastically and flows into the groove to form an impermeable seal that strengthens as internal pressure increases.

• KEY FEATURES •



LEAK-PROOF SEALING

Precision-machined annular groove with solid metal ring gasket for metal-to-metal sealing



ENGINEERED FOR HPHT CONDITIONS

Designed for extreme high pressure and high temperature service



PRESSURE ENERGIZED DESIGN

Gasket deforms under bolt load and process pressure to enhance sealing performance



HIGH DURABILITY & RELIABILITY

Built to resist heat, pressure and severe operating conditions with proven safety.



PREMIUM MATERIAL

Manufactured from high-grade materials with excellent finish and durability



SIZE RANGE

1/2" to 48"



PRESSURE RATING

Class 600-2500 /PN100-PN420



STANDARDS

ASME B16.5, B16.47, API 6A



GASKET STYLES

Style R (Octagonal/Oval), Style RX (pressure-energized), Style BX (Class 2500)



APPLICATION

Oil & gas, petrochemical & refining, power generation, upstream & offshore, heat exchangers, boilers, critical process lines and severe-duty pipeline systems.



MILD STEEL FORGED SOCKET WELDED TEE

PERMANENT BRANCH CONNECTION. BUILT FOR HIGH PRESSURE.

Mild Steel Forged Socket Welded Tee is a carbon steel pipe fitting forged from mild steel billet, with three openings of the same bore for creating a 90° branch from a main pipeline or combining two lines into one. Pipe is inserted into each precision-machined socket and secured with fillet welds, forming a permanent, leak-resistant T-junction. The single-piece forged body delivers the strength and pressure integrity required in oil and gas, petrochemical, power and chemical plant piping where reliable branch connections are needed in compact small-bore systems.

• KEY FEATURES •



EQUAL BORE RUN & BRANCH

Uniform flow distribution on both run and branch.



THREE SOCKET WELD ENDS

Pipe inserted and fillet welded at each opening for a permanent connection.



LEAK-RESISTANT T-JUNCTION

Single-piece forged body ensures strength, integrity and leak resistance at high pressure.



90 BRANCH CONNECTION

Compact T-shaped body for space-efficient branch connections.



FORGED STRENGTH

Mild steel forged construction delivers superior strength and durability.



SIZE RANGE

1/8" - 4" (NPS)



PRESSURE RATING

3000#(Class 3000) and 6000#(Class 6000) ASME B16.11



STANDARDS

ASME B16.11, MSS SP-83, GB/T 14383



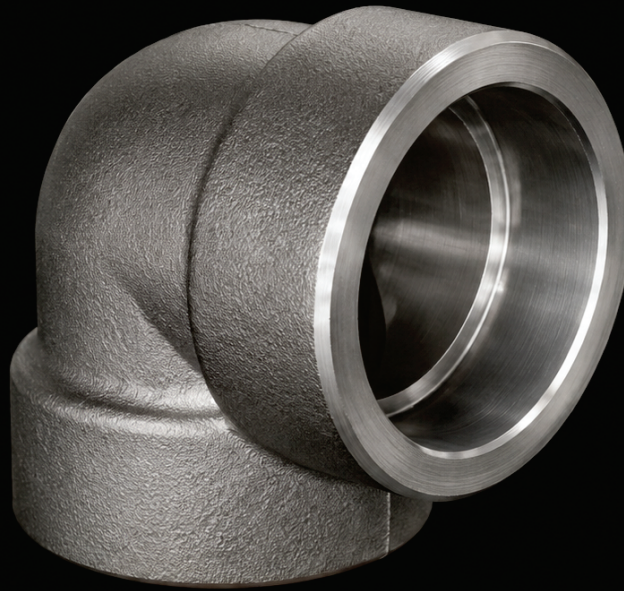
CONNECTION

Socket weld – fillet weld at each of three socket mouths



APPLICATION

Oil & gas processing, petrochemical & refinery branch connections, power plant steam & utility lines, chemical processing, instrument tubing & sample point branches.



SOKET WELD ELBOW 90°

**CHANGES FLOW DIRECTION.
BUILT FOR HIGH PRESSURE.**

Socket Weld Elbow 90° is a forged pipe fitting used to change the direction of flow by 90 degrees in a pipeline. The pipe is inserted into the precision-machined socket at each end and secured with a fillet weld, providing a strong, leak-resistant joint without threading. Its compact forged body and thick wall make it ideal for high-pressure, high-temperature service in oil and gas, chemical, and power plant piping where reliability and smooth internal flow are critical.

• KEY FEATURES •



90 DEGREE CHANGE OF DIRECTION

Changes flow direction by 90 degrees in a compact forged body.



SOCKET WELD CONNECTION

Pipe inserted and fillet welded at each end for a permanent, leak-resistant joint.



THICK-WALL FORGED BODY

Pipe inserted and fillet welded at each end for a permanent, leak-resistant joint.



SMOOTH INTERNAL BORE

Smooth internal bore for low turbulence and reliable flow performance.



FORGED INTEGRITY

Forged integrity ensures strength and durability in critical piping systems



SIZE RANGE

1/8" - 4"(NPS)



PRESSURE RATING

3000#(Class 3000) and 6000# (Class 6000) ASME B16.11



STANDARDS

ASME B16.11, MSS SP-83, GB/T 14383



CONNECTION

Socket weld – fillet weld around pipe OD at socket mouth



APPLICATION

Oil & gas processing and transmission, petrochemical & refinery piping, power plant steam & condensate lines, chemical processing (high-pressure small bore), instrument & utility piping manifolds.



MILD STEEL TAPERED THREAD COUPLER

**CHANGES FLOW DIRECTION.
BUILT FOR HIGH PRESSURE.**

Mild Steel Tapered Thread Coupler is a forged pipe fitting used to connect two lengths of externally threaded pipe in a straight run. Both ends are precision-machined with female tapered threads (NPT or BSPT), allowing the coupler to be screwed onto male pipe threads and tightened to form a pressure-tight metal-to-metal seal. The thick-wall forged mild steel body is suitable for industrial fluid, steam, oil and gas, and utility piping where a compact, removable threaded joint is required without welding.

• KEY FEATURES •



FULL COUPLER

Female tapered threads at both ends for strong pipe connection.



FORGED MILD STEEL BODY

Forged construction ensures strength durability and high-pressure integrity.



NPT & BSPT THREADS

Available in NPT and BSPT thread forms as per specification.



PRECISION MACHINED

Precision-machined threads for reliable metal-to-metal seal.



COMPACT & RELIABLE

Compact design for tight spaces and dependable sealed joints



SIZE RANGE

1/8"– 4"(NPS)



PRESSURE RATING

2000#/3000#/6000# (ASME B16.11)



STANDARDS

ASME B16.11, MSS SP-83, GB/T 14383



CONNECTION

Female tapered pipe threads- NPT (ANSI/ASME B1.20.1) or BSPT (ISO 7-1)



APPLICATION

Oil & gas processing and transmission, petrochemical & refinery branch connections, power plant steam & utility lines, chemical processing, instrument tubing & sample point connections, industrial water, air and hydraulic lines



4" MS 90° LR ELBOW

**SMOOTH FLOW CHANGE.
BUILT FOR INDUSTRIAL PIPING.**

4" MS 90° LR Elbow is a mild steel butt-weld pipe fitting used to change pipeline direction by 90° with a long-radius (1.5D) bend for lower pressure drop and smoother flow than a short-radius elbow. Each end is beveled for butt welding to matching pipe, forming a permanent, high-integrity joint. The black-coated mild steel construction is widely used in oil and gas transmission, water distribution, steam lines, structural piping and general industrial plant work where reliable welded connections and economical carbon steel fittings are required.

• KEY FEATURES •



90 DEGREE CHANGE OF DIRECTION

Enables pipeline turns by 90° with a long radius (1.5D) for smooth flow



LONG RADIUS (1.5D) BEND

Minimizes turbulence pressure drop and erosion for efficient fluid movement.



MILD STEEL CONSTRUCTION

Built from quality mild steel for strength, durability and reliable performance.



BUTT-WELD ENDS

Beveled butt-weld ends for strong, leak-proof connections and stress distribution.



ASME B16.9 COMPLAINT

Manufactured as per ASME B169 standards for dimensional accuracy



SIZE RANGE

1/2" - 48" (NPS) Standard



PRESSURE RATING

Per pipe schedule (Sch 40, Sch 80, XS, XXS)



STANDARDS

ASME B16.9, MSS SP-75, GB/T 12459



CONNECTION

Butt weld — beveled ends per ASME B16.25



FINISH

Black painted / oiled anti-corrosion coating (bare or galvanized on request)



PROTECH VALVE FITTINGS

Design, Manufacture, Supply & Export of
Mild Steel & Stainless Steel Flanges

ANSI · DIN · BS · JIS · IS STANDARDS

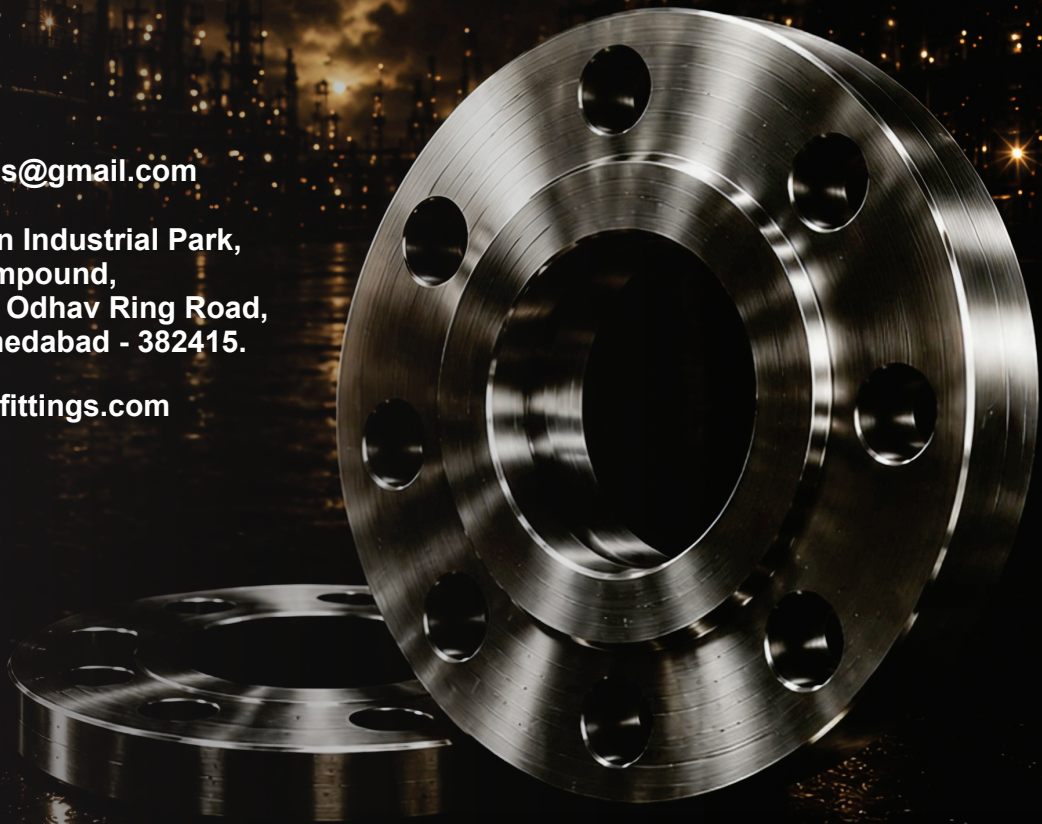
+918780165235

+918511961046

protechvalvefittings@gmail.com

Shed No.87, Golden Industrial Park,
Girnar Scooter Compound,
B/h. Bank Of India, Odhav Ring Road,
Circle, Odhav, Ahmedabad - 382415.

www.protechvalvefittings.com



OIL & GAS



CHEMICAL



POWER



PHARMA



PETROCHEMICAL

Quality with Integrity

Strength for Generations