

# VALVES - INDUSTRIES - APPLICATIONS

## VALVES

Ball Valve

Butterfly Valve

Check Valve

Gate Valve

Globe Valve



Ball Valve



Gate Valve



Check Valve



Butterfly Valve



Globe Valve

## INDUSTRIES

Chemical

Fertilizer

Power

Oil & Gas

Petrochemicals

Water Treatment

Pharma

Paper & Pulp

Steel

Cement

Municipal Corporations



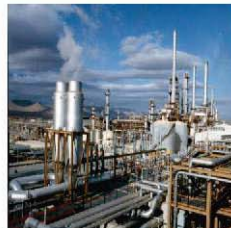
Chemical



Fertilizer



Power



Oil & Gas



Water Treatment



Pharma



Paper & Pulp



Steel



Cement

## APPLICATIONS

- Water & Environment
- Irrigation
- Water Transportation
- Water Treatment Plant

- Drinking Water Supply Schemes
- Hydro Projects
- Industrial Water
- Sewage Systems

- Ash Handling Plant
- Coal Handling Plant
- Steel Melting Shop

## Wafer Soft Seal Butterfly Valve

Wafer Soft Seal Butterfly Valve uses the flexibility of rubber seat, could easily achieve zero leakage, therefore is a widely applied valve in oilfield, agriculture, water & waste water and mining industries. Due to its rubber lined body materials, it is usually used in low pressure lines.

Wafer type is the common style of butterfly valve and is less expensive than the lug type. The wafer butterfly valve is installed between two flanges. The valve is kept in place by using bolts or studs and nuts from flange to flange. This type of installation, of course, makes it impossible to disconnect just one side of the piping system from the valve.

### Features

- Center Lined, Resilient Seat
- Bi-Directional Sealing
- Shutoff and Throttling Operation
- Wafer Body Type, Lug Type or Flanged Type
- Applicable Standards
- End Connection: ASME B16.5, EN 1092
- Sizes: 2" - 24" or DN50 - DN 600
- Pressure Rating: Class150 or PN10 - Pn16
- Materials of Valve Body: GG25, A126 B, GGG40, A536,WCB, LCB, CF8, CF3, CF8M, CF3M, etc.
- Operated by: Lever, Gear, Pneumatic, hydraulic and Electric actuator



## Floating Ball Valve

The series FFB Tow-Piece, floating ball valve 1/2"-6" ANSI Class 150-600, 1/2"-2" ANSI Class 900-1500, 1/2"-1" ANSI Class 1500 in full and reduce port

### Features

Spraytech standard floating ball valves are manufactured in tow pieces bolted body, ball valves could be supplied full or reduced bore, designed for maximum rigidity against pipeline thrust, made from forged components or bar stock.

Bolted body constructions allow easy service and maintenance operation on site, Pressure rating is from class ANSI 150 up to ANSI 1500 Lbs.

Valves are usually supplied with lever operator, with gear box or bare stem on customer request. All standard floating ball valves have below features:

- Lock device: Valve is equipped with an integral locking device to secure line flow.
- Blow-out proof stem: The stem is made separately from the ball with integral T-type round shoulder, which ensures total safety and integrity.
- Anti-Static Design: Grounding device are supplied form positive anti-static between ball / stem and body.
- ISO 5211 mount plate: Simplifies the installation of actuators with standard connections
- Emission-free gasket: The primary gasket is emission free graphite to eliminate leakage.

### Standards

- Design & Manufacturing Standard: ASME B16.34, BS 5351
- Face to face: ASME B16.10, DIN 3202, BSEN 558
- Flange Connection Size: ASME B16.5, BSEN 1092

## Cast Steel Gate Valve

Gate valve that opens by lifting a round or rectangular gate/wedge out of the path of the fluid. The distinct feature of a gate valve is the sealing surfaces between the gate and seats are planar. The gate faces can form a wedge shape or they can be parallel. Typical gate valves should never be used for regulating flow, unless they are specifically designed for that purpose. On opening the gate valve, the flow path is enlarged in a highly nonlinear manner with respect to percent of opening. Cast Steel Wedge Gate Valve Specifications



## Features

- API 600: Bolted Bonnet Steel Gate Valve for Petroleum and Natural Gas Industries
- BS 1414: Specification for Steel Wedge Gate Valves (Flanged and Butt-welding Ends) for the Petroleum, Petrochemical and Allied Industries
- DIN3352: Bolted Bonnet Steel Gate Valve for Petroleum and Natural Gas Industries
- Connection: ASME B16.34 Valves Flanged, Threaded and Welding Ends
- Flange: ASME B16.5 Pipe Flanges and Flanged Fittings: NPS 1/2 through 24
- ASME B16.47 Series A Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard
- Butt Weld: ASME B16.25 Butt welding Ends
- Face to face: ASME B16.10 Face to Face and End to End Dimensions of Valves
- MSS SP-25 Standard Marking System for Valves, Fittings, Flanges and Unions
- BB, OS&Y: Bolt Bonnet, Outside screw and Yoke
- Size Range: 2" - 24"
- Pressure rating: ANSI Class150LB- 1500LB

### Materials:

- Carbon Steel: ASTM A105, ASTM A216 WCB, ASTM A217 WC6, ASTM A217 WC9, ASTM A217 C5, ASTM A217 C12, ASTM A217 C12A
- Stainless Steel: ASTM A351 CF8, ASTM A351 CF8M, ASTM A351 CF3, ASTM A351 CF3M.
- Operation: Handwheel, Gearbox, Electric actuator, Pneumatic actuator, hydraulic actuator

Spraytech cast steel gate valves are designed and manufactured to provide maximum service life and dependability. All gate valves are full ported and meet the design requirements of API-600 and ANSI B 16.34. Valves are available in a complete range of body/bonnet materials and trims.

## Forged Steel Gate Valve

### Features

- API 602: Steel wedge gate valve for Sizes 2" and Smaller for the Petroleum and Natural Gas Industries.
- BS 5352: Specification for Steel Wedge Gate Valves 50 mm and Smaller for the Petroleum, Petrochemical and Allied Industries.
- Connection: ASME B16.34 Valves Flanged, Threaded and Welding Ends
- Flange: ASME B16.5 Pipe Flanges and Flanged Fittings: NPS 1/2 through 24
- ASME B16.47 Series A Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch Standard
- Butt Weld: ASME B16.25 Butt welding Ends
- Face to face: ASME B16.10 Face to Face and End to End Dimensions of Valves
- MSS SP-25 Standard Marking System for Valves, Fittings, Flanges and Union
- BB, OS&Y: Bolt Bonnet, Outside screw and Yoke

### Materials:

- Size Range: 1/2" - 2" / DN15—DN50
- Pressure rating: ANSI Class150LB- 1500LB / PN16- Pn100
- Forged Steel: ASTM A105, ASTM A350 LF1, ASTM A350 LF2, etc.
- Stainless Steel: ASTM A182 304, ASTM A182 304L, ASTM A182 316, ASTM A182 316L, ASTM A350 F11, ASTM A350 F22, ASTM A350 F51, ASTM F347, etc.
- Operation: Handwheel, Gearbox
- Report: CHEMICAL ANALYSIS OF MATERIAL CERTIFICATE EN 10204 3.1B



## Cast Steel Globe Valve

### Features

- Meet design ANSI B16.5, B16.34, B16.10, B16.25 (for NPS ≤ 24), MSS SP-44 (for NPS > 24).
- Straight and Y pattern body design
- OS & Y, outside screw and yoke
- BB, Bolted bonnet
- Yoke integral with bonnet
- Rising stem and handwheel
- Loose disc, choice of plug or ball
- Renewable seat ring or Body seat ring
- Impact handwheel for 10" & above
- Horizontal service
- Flanged or butt welding ends
- Normal Size: 2"~20"



- Pressure: 150LB~1500LB
- Connection: Flanges, RTJ Flange, Butt Weld, Groove
- Material: Carbon Steel, Forged Steel
- Carbon Steel: ASTM A105, ASTM A216 WCB, ASTM A217 WC6, ASTM A217 WC9, ASTM A217 C5, ASTM A217 C12, ASTM A217 C12A
- Stainless Steel: ASTM A351 CF8, ASTM A351 CF8M, ASTM A351 CF3, ASTM A351 CF3M.
- Operate: Handwheel, Wormer, Gearbox, Pneumatic Actuator, Electric Actuator, Hydraulic Actuator.

**Standards**

- Steel Valves: ASME B16.34
- Flanges Ends according to: ASME B16.5
- Face to Face according to: ASME B16.10
- Butt Welding Ends according to: ASME B16.25

## Forged Steel Check Valve

Spraytech compact design, high pressure, Forged Steel Check Valves are designed and manufactured according to BS 5352 to meet requirements of small Pipelines up to 50NB. They are available either with Threaded or Socket Weld ends. Hard Faced Trim material ensures perfect Sealing and long life. Properly guided Lift type Disc which acts on its own according to flow direction. These Valves are generally suitable for horizontal installation.

Spraytech Check Valves are available in varied materials like Forged Carbon Steel conforming to A105; Forged Alloy Steel like LF2, F11, F22, and Forged Stainless Steel like F304, F304L, F316 and F316L. Size range commences from 10NB through 50NB and pressure rating up to ANSI 800#.

Bonney Forge valves are available in two bonnet designs. The first design is the Bolted Bonnet, with male-female joint, spiral wound gasket, made in F316L/graphite. Ring joint gasket are also available on request. The second design is the welded bonnet, with a threaded and seal welded joint. On request a full penetration strength welded joint is available.

The check valves are also available in three different design configurations. These are piston check, ball check, or swing check designs.

### Features

- Forged steel check valves conform to ASME B16. 34
- Each tested according to API 589, and marking is per MSS SP-25
- Three bonnet designs A) Bolted B) Welded C) Pressure seal
- Three different design configurations A) Piston check B) Ball check C) Swing check
- Investment casting
- Temperature range: -20 - 232°C
- Working pressure: 200 PSI WOG
- Materials: WCB, SS 316 and SS 304

**Standards**

- Normal Size: 1/2" ~2"
- Design Features: Piston or Swing type, BB, WB, PSB.
- Materials: A105, LF2, F11, F22, F5, F304, F316.
- Pressure rating: 150 LB~1500 LB



## Swing Type Check Valve

The valve is opened or closed by the valve disc to rotate around the spindle outside the valve seat; and it is an automatic valve when it is automatically opened or closed by the force generated by the medium flowing within the pipeline. Its major function is to prevent the back flow of the medium in the pipeline, reverse rotation of the pump and its driving motor, and discharge of the medium in the container. are also available in three different design configurations. These are piston check, ball check, or swing check designs.

### Features

- Compact and reasonable product structure, reliable tightness and good performance;
- Smooth fluid passageway and small fluid resistance;
- Swing type disc.
- Can be designed with a Damping Cylinder.
- Rapid closing and flexible actions of the valve disc .
- Small closing impact, water hammer is not liable to be generated.
- Smooth fluid passage way and small fluid resistance.

**Product Range**

- Body material: carbon steel, stainless steel, alloy steel
- Nominal diameter: 1/2" ~24"
- End connection: RF, RTJ, BW
- Pressure range: Class150~1500
- Working temperature: -196°C~+560°C

**Standards**

- Pressure temperature rating: ASME B16.34
- BW end dimension: ASME B16.25
- End flange dimension: ASME B16.5, ASME B16.47



# Spraytech Products at Glance

## Flow Line Products

- Spray Nozzles
- Spray Systems
- Flow Control Elements
- Flow Measuring Elements
- Control Valves
- Strainers & Filters
- Planetary Mixers, Agitator

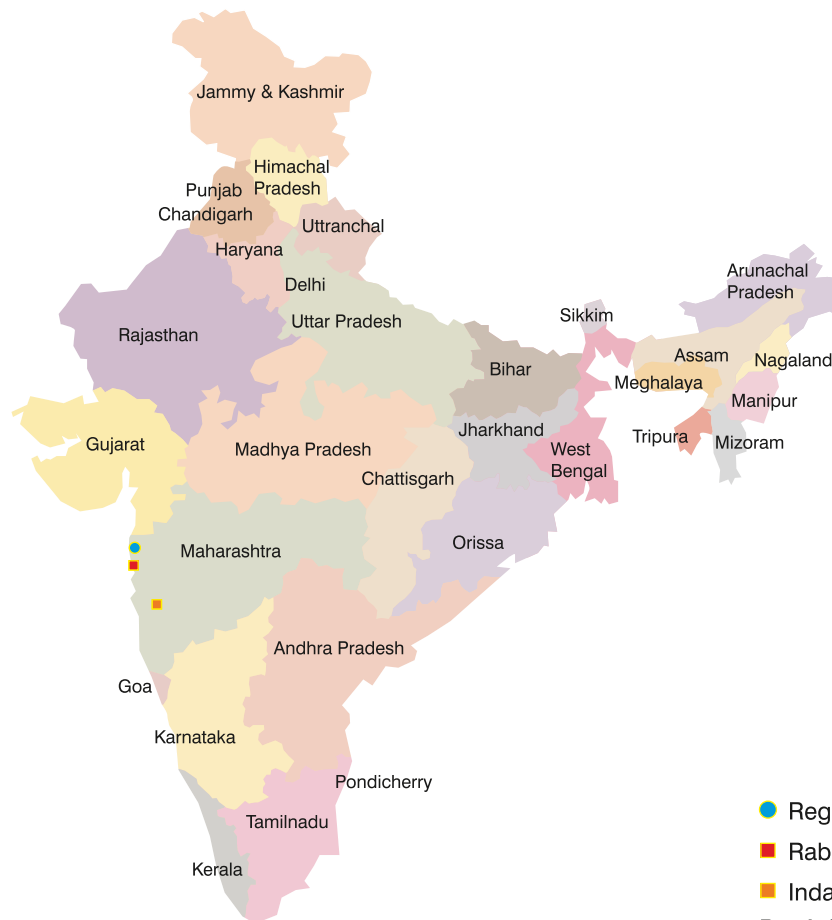
## Pharma Products

- FBP, FBE, FBC, Spray Nozzles & Lances
- Wurster Coating Lance / Nozzles
- Top Spray Lance / Nozzles
- RMG / HSG Spray Lance / Nozzles
- Tablet Coating Spray Nozzles ( Guns )
- CIP Spray Nozzles

## Forged Products

- Forged Fittings
- Flanges
- Valve Manifolds
- Check Valves
- Plugs & Bushings
- Hydraulic Fittings
- Compression Tube Fittings

## Spraytech Location Map



- Regd. Office (Thane)
- Rabale Plant (Navi Mumbai)
- Indapur Plant (Pune)

**Regd. Office :**  
20 KMS from Mumbai International Airport



*The Flow Technologists*

### Regd. Office :

Spraytech House, Plot A-132, Road No. 23,  
Spraytech Circle, Wagle Indl. Estate,  
Thane (W) - 400 604.

Mumbai - Maharashtra, (India)  
Tel. : 91-022-2582 8929 / 2735 / 2736  
Fax : 91-022-2581 2861

E-mail :- sales@spraytechindia.com  
sales1@spraytechindia.com  
flowtechnology1@spraytechindia.com

### Rabale Plant (Navi Mumbai) :

Spraytech Systems (I) Pvt. Ltd.,  
Plot No.: R-513, MIDC, TTC Industrial Area,  
Rabale, Navi Mumbai - 400 701.

### Indapur Plant (Pune) :

Spraytech Systems (I) Pvt. Ltd.,  
Plot No.: A-5,  
Indapur Five Star Industrial Area,  
Village - Loni Devkar Balpudi,  
Tal. - Indapur,  
Dist. - Pune. - 413 103