



VIRGO ENGINEERING SOLUTION

www.virgoengineering.com

Supplier of Industrial Manual & Actuated Valves, Instrumentation Valves and Fittings.

Our Products Range:

- Gate, Globe & Check Valves
- Forged Steel Gate, Globe & Check Valves
- Ball Valves, Butterfly Valves & Plug Valves
- Dual Plate Check Valve, Wafer Check Valves
- Knife Edge Gate Valve, Diaphragm Valve
- Control Valve, Safety Relief Valve, Pressure Reducing Valve
- Strainers, Steam Traps, Flush Bottom Valve, Bronze Valves
- Flanges (All Types), Metallic Gaskets, Thermoplastic Valves
- Instrumentation Valves, Tube/Pipe Fittings and accessories
- Pneumatic/Electric Actuator operated Valves, Solenoid Valves



Application Industries:

Oil & Gas / Chemicals / Petrochemicals / Fertilizers / Power Plants / Water Plants/ Pharmaceuticals / Sugar & Distillations / Pulp & Paper / Metal & Mining / Navy & Shipping / Sewage & Effluent Treatment Plants / Paint & many more.

Gate Valve

(Bolted Bonnet, OS & Y Type)

Design & Mfg. STD : API 600/API 603/API 6D
Pressure Class : 150#, 300#, 600#, 900#, 1500#, 2500#
Size : 25 mm to 600 mm
End Connection : Flanged to ASME B 16.5, Butt Weld - ASME B16.25
Face to Face STD : ASME B 16.10
Testing STD : API 598, BS EN 12266-1
Operator : Hand Wheel/Gear or Pneumatic/Electric Actuator
Material : WCB, CF8, CF8M, CF3, CF3M and Alloy Steel
Special : Pressure Seal Bonnet/Bellows seal Gate Valve



Globe Valve

(Bolted Bonnet, OS & Y Type)

Design & Mfg. STD : BS 1873
Pressure Class : 150#, 300#, 600#, 900#, 1500#, 2500#
Size : 25 mm to 600 mm
End Connection : Flanged to ASME B 16.5, Butt Weld - ASME B16.25
Face to Face STD : ASME B 16.10, BS 2080
Testing STD : API 598, BS EN 12266-1
Operator : Hand Wheel/Gear or Pneumatic/Electric Actuator
Material : WCB, CF8, CF8M, CF3, CF3M and Alloy Steel
Special : Pressure Seal Bonnet & Bellows seal Globe Valve



Check Valve

(Bolted Cover, Swing Type)

Design & Mfg. STD : BS 1868/API 6D
Pressure Class : 150#, 300#, 600#, 900#, 1500#, 2500#
Size : 25 mm to 600 mm
End Connection : Flanged to ASME B 16.5, Butt Weld - ASME B16.25
Face to Face : ASME B 16.10, BS 2080
Testing STD : API 598, BS EN 12266-1
Operation : Auto
Material : WCB, CF8, CF8M, CF3, CF3M and Alloy Steel
Special : Dash pot/By pass arrangement/ Tilting Disc Design



Forged Steel Gate/Globe/Lift Check Valve

(Bolted Bonnet/Welded Bonnet)

Design & Mfg. STD : API 602/ISO 15761
Pressure Class : 800#, 1500#, 2500#
Size : 15 mm to 50 mm
End Connection : ASME B 16.11 (Socket Weld)
ASME B 16.25 (Butt Weld)
ASME B 1.20.1 (Screwed)
Face to Face STD : Manufacturers Standard
Testing STD : API 598, BS EN 12266-1
Operator : Hand Wheel for Gate & Globe Valve,
Auto for Check Valve
Material : A 105, F304, F304L, F316, F316L, F11, F22



Note: Valves in other material (Hastelloy/Alloy-20/Duplex SS/Monel/Inconel/with NACE MR 0175 etc.), design, higher size/class are available on request.

Ball Valve

(1/2/3 Piece, Full/Reduced Bore, 2/3 Way)

Design & Mfg. STD	: BS 5351, ISO 17292, API 6D, ISI Marked
Pressure Class	: 150#, 300#, 600#, 900#
Size	: 15 mm to 400 mm
End Connection	: Flanged to ASME B 16.5, Butt Weld - ASME B16.25 : Socket Weld- B 16.11, : Screwed to NPT/BSP- ASME B1.20.1
Face to Face STD	: ASME B 16.10, BS 2080
Testing STD	: API 598, BS EN 12266-1
Operator	: Lever/Gear or Pneumatic/Electric Actuator
Material	: WCB, CF8, CF8M, CF3, CF3M, Forged/Alloy Steel
Special Design	: Trunnion mounted /Steam Jacketed /Fire safe design



Butterfly Valve

(Double Flanged/Lugged/Wafer Type)

Design & Mfg. STD	: API 609, BS 5155, ISI Marked
Pressure Class	: 150#, 300#, PN 10, PN 16
Size	: 40 mm to 1000 mm
End Connection	: Flanged/Lugged- ASME B 16.5 Wafer- Suitable to mount between ASME B 16.5
Face to Face STD	: ASME 16.10
Testing STD	: API 598, BS EN 12266-1
Operator	: Lever/Gear or Pneumatic/Electric Actuator
Material	: C.I, S.G Iron, WCB, CF8, CF8M and Alloy Steels
Lining	: Nitrile, EPDM, Silicon, Viton
Special Design	: Triple Offset / Metal seated, Kitz Make



Plug Valve

(PTFE Sleeved/Jacketed/Lubricated/ Self Lubricated)

Design & Mfg. STD	: API 599, API 6D, BS 5353
Pressure Class	: 125#, 150#, 300#, 600#, PN 10, PN 16
Size	: 25 mm to 450 mm
End Connection	: Flanged to ASME B 16.5/Butt Weld/Screwed/SW
Face to Face STD	: ASME B 16.10, API 6D, BS EN 558-1 & 2
Testing STD	: API 598, API 6 D, BS EN 12266-1
Operator	: Lever/Wrench, Pneumatic/Electric Actuator
Material	: C.I, WCB, CF8, CF8M, CF3, CF3M & Alloy Steels



Safety Relief Valves

(Spring Loaded, Full Lift, Angle Pattern)

Design & Mfg. STD	: API 520, API 526, ASME Sec-VIII Div- 1
Pressure Class	: 150#, 300#, 600#, PN 40
Size	: 25 x 50 mm to 250 x 350 mm
End Connection	: Flanged/Screwed /SW Ends
Set Pressure	: Up to 110 Kg/ cm ²
Testing STD	: API 527, ASME PTC 25.3
Application	: Steam, Gas Air, Water, Oil etc.
Material	: WCB, CF8, CF8M, CF3, CF3M and Alloy Steels
Optional	: Open/Closed Bonnet, Soft seated, Packed Lever
Special	: Pilot Operated / Bellows Seal design



Note: Valves in other material (Hastelloy/Alloy-20/Duplex SS/ Monel/Inconel/with NACE MR 0175 etc.), design and higher size/class are available on request.

Check Valves

(Dual Plate /Disc / Wafer Type)

Design & Mfg. STD : API 6D, EN 558-1, API 594
Pressure Class : 125#, 150#, 300#, 600#, 900#
Size : 15 mm to 900 mm
End Connection : Flanged to ASME B 16.5/Wafer Type/Lugged
Face to Face STD : ASME B 16.10, API 6D
Testing STD : API 598, DIN 3230
Material : C.I, WCB, CF8, CF8M, CF3, CF3M and Alloy Steel
Special Design : Nozzle Slam, Soft Seated, Fire Safe Check Valves



Knife Edge Gate Valve

(Uni-Directional/ Bi-Directional)

Design & Mfg. STD : MSS SP-81
Pressure Class : 150#, 300#
Size : 50 mm to 1000 mm
End Connection : Flanged/Two Lugs/ Full Lugs/Wafer Type
Testing STD : MSS SP 81
Operator : Manual/Gear or Pneumatic/Electric Actuator
Material : C.I, WCB, CF8, CF8M, CF3, CF3M and Alloy Steel
Special : Extended Stem, Closed Bonnet, Soft Seated



Diaphragm Valve

(Weir ' A' Pattern, Lined/Unlined Body)

Design & Mfg. STD : MSS SP- 88, BS 5156
Pressure Class : 125#, 150#, PN 10, PN 16
Size : 25 mm to 450 mm
End Connection : Flanged to ASME B 16.5, Butt Weld/Screwed
Face to Face STD : BS 2080, DIN 3202
Testing STD : API 598, BS 6755 Part-1
Operator : Manual/Gear or Pneumatic/Electric Actuator
Diaphragm : Natural Rubber, Neoprene, Hypalon, Buna-N, Butyl, Viton, EPDM, PTFE with Neoprene etc.
Material : C.I, WCB, CF8, CF8M, CF3, CF3M and Alloy Steels



Lined Valves

(PTFE/PFA/ FEP/PVDF/EPDM/Nitrile/Silicon/Viton/Rubber Lined)

Design & Mfg. STD : BS 5351/BS 5156, API 609/API 6D/API 600
Pressure Class : 125#, 150#, PN 10, PN 16
Size : 15 mm to 200 mm
End Connection : Flanged, Wafer, Lugged (Butterfly Valve)
Testing STD : API 598/API 6D
Operator : Lever/Gear or Pneumatic/Electric Actuator
Material : C.I, SG Iron, WCB, CF8, CF8M, CF3M & Alloy Steels
Type of Valves : Ball /Ball Check /Butterfly /Plug /Gate /Globe / Diaphragm Valves and Sight Glass



Note: Valves in other material (Hastelloy/Alloy-20/Duplex SS/ Monel/Inconel/with NACE MR 0175 etc.), design and higher size/class are available on request.

Sight Glass

(Full View/Double Window/Chuck Nut/LN Key Type)

Pressure Rating	: Maximum 25kg/cm ²
Temp. Rating	: Maximum 200°C
Size	: 15 mm to 300 mm
End Connection	: Flanged/Screwed/TC /ANSI 16.5, ASA 150#, BS 10
Face to Face	: Standard length 192 mm
Application	: To check the inline flow, Colour & clarity of fluids
Material	: MS, SS 304/SS 316, PP & HDPE
Glass	: Toughened Borosilicate
Gasket	: PTFE / CAF
Special	: Double Window with jacket/Tank Mounted : Flapper type for gas applications



Pressure Reducing Valves

(Self, Spring Return, Diaphragm, Pilot Operated Type)

Design & Mfg. STD	: API/BS/DIN
Pressure Class	: BS 10 Table H, 150#, 300#, 600#
Size	: 15 mm to 350 mm
End Connection	: Flanged/Screwed /SW Ends
Max. Inlet Pressure	: 3500 PSI
Max. Operating T	: 350 deg C
Pressure Reduction	: 85%
Testing STD	: BS 5755, As per Customer Requirement
Material	: A 105, WCB, CF8, CF8M, CF3, CF3M & Alloy Steel



Strainers

(Y Type / T Type / Basket Type)

Design & Mfg. STD	: Manufacturing Standard
Pressure Class	: 125#, 150#, 300#, 600#, PN 10, PN16, ND 40, PN 64
Size	: 15 mm to 800 mm (Up to 50 mm- Screwed/SW)
End Connection	: Flanged/Butt Weld/Screwed/Socket Weld Ends
Testing STD	: Manufacturing Standard
Material	: C.I, WCB, CF8, CF8M, CF3, CF3M and Alloy Steels
Special Design	: Duplex Basket Strainer/ Automatic Strainer



Steam Traps

(TD-3/Float / Bucket Type)

Design & Mfg. STD	: IS 12268 / TD-3
Pressure Class	: 800#, 1500#, 2500#
Max. Inlet Pressure	: 10 Kg/cm ² , 30Kg/cm ² , 248 Kg/cm ² at 204 Deg C
Size	: 15 mm to 50 mm (Float/Bucket Type) : 15 mm to 25 mm (TD-3)
End Connection	: Flanged / Screwed/Socket Weld to ANSI B 16.11
Testing STD	: As per requirement
Material	: C.I, CA 15, CF8, CF8M , A 105, F11, F 22



Note: Valves in other material (Hastelloy/Alloy-20/Duplex SS/Monel/Inconel/with NACE MR 0175 etc.), design and higher size/class are available on request.

Instrumentation Valves

Maximum working Pressure: 10000 PSI

Ends : NPT/BSPP/BSPT, SW, BW

Size : Up to 2"

: Up to ½" (Manifold/Mono flange)

Material : CS, SS, Alloy steel, Brass, Monel, Inconel, Hastelloy, Duplex Steel. MOC in accordance with NACE MR 0175 is available on request.

Tube fittings

Maximum working Pressure: 6000 PSI

Ends : NPT/BSPP/BSPT

Size : 1/16" to 1"

Pipe Fittings

Maximum working Pressure: 6000 PSI

Ends : NPT/BSPP/BSPT

Size : 1/16" to 2"



Ball Valve (Low/High Pressure)



Male Connector

Female Connector



Hex Nipple

Hex Long Nipple



Needle Valves



Bulk Head Male / Female Connector



Coupling

Reducing Coupling



Manifold Valve (2 Way /3 Way)



Male Elbow

Female Elbow



Adaptor

Reducing Adaptor



Monoflange Valve

Block & Bleed Valve



Union Tee

Union Cross



Pipe Plug

Pipe Cap



Gauge Valve

Bleed (Vent) Valve



Union

Reducer Union



Pipe Cross

Female Tee



Check Valve

Plug Valve



Male Adaptor

Female Adaptor



Male Elbow

Female Elbow

Instrumentation Accessories

Ends : NPT/BSPP/BSPT
Size : ¼" to ½" (Gauge Accessories)
: Up to 1" & above (Others)
: 40 to 150 mm (Gauges)
Material : CS, SS, Any special material

Flanges and Fittings

Class : 150# to 2500#
Size : 1/2" to 24" (Flanges/ BW fittings)
: 1/8" to 4" (Forged fittings)
: Up to 1" (Hydraulic Fittings)
Material : CS, SS, Forged Steel, Alloy Steel

Flanged Pipe Fittings

Mfg. STD. : D.I as per IS 9523; C.I as per IS 1538
Size : 80 mm to 1200 mm
Pr. Rating : PN 10 / PN 16
Paint : Zinc coating + Black bitumen paint
Material : Cast Iron, Ductile Iron



Gauge Cock



Gauge Snubber



Weld neck Flange



Slip on Flange



Flanged Tee



Gauge Saver



Quick Release Coupling



Lap Joint Flange



Socket Weld Flange



Flanged Bend (45 degree / 90 degree)



Air Header



Condensate Pot



Threaded Flange



Blind Flange



Double Flanged Taper (Concentric/Eccentric)



Gauge Siphon (Q Type/ U Type)



Forged Fittings



Flanged Spigot



Thermowell (Flanged/ Screwed)



Butt weld Fittings



Flanged Socket



Pressure Gauge



Temperature Gauge



Hydraulic Fittings



Dismantling Joint

Other Products

Air Release/Air Vacuum Valve



Type : Single/Double Orifice or Kinetic
Class : 150#, PN 1.0, PN 1.6
Ends : Screwed/Flanged
Size : 25 mm to 250 mm
Material : CI, D.I, CS, SS
Special : Temper Proof Design of Air Vent

Pinch Valve (Seat less & Glandless)



Type : Open/Closed Body
Class : Up to 25 Bar
Ends : Flanged to ASME/BS/DIN/IS Std.
Size : 15 - 400 mm
Material : Body- C.I, CS, SS, AI
Sleeve : Rubber, EPDM, Viton, Nitrile, Butyl

Solenoid Valves (2/3/4/5 Port)

Normally Closed/Open or Universal Operations



Type : Direct Acting / Pilot Operated
Pressure : Up to 10 Kg /cm²
Ends/Size : Screwed/ Up to 1"
Voltage : All Standard Voltage Available.
Media : Air, Water, Steam, Oil & Gas
Material : Aluminum Die Cast, Brass, SS

Sluice Valve



Design : IS 14846/BS 5163
Type : Rising/Non Rising Spindle
Class : PN 1.0/PN 1.6
Ends : Flanged
Size : 50 mm to 600 mm
Material : CI, D.I, CS, SS (Spindle)

Pulp Valve



Type : OS & Y Type, Rising Spindle
Class : 150#
Ends : Wafer
Size : 40 mm to 400 mm
Material : Body- CI, CS, SS
Plate : CS, SS 202/304/316

Thermoplastic Valves



Type : Ball/Foot/NRV/Diaphragm Valve
Class : Up to 25 Bar
Ends : Flanged / Screwed
Size : 15 - 300 mm
Material : PP/ISO PP/PVDF/HDPE/UPVC/CPVC
Operator : Manual/ Actuator operated

Piston Valve



Design : ASME 16.34/ IBR/ Non IBR
Type : Seat less & Glandless
Class : 150#, 300#, PN 40, 800# (Forged)
Ends : Flanged/Butt weld/Screwed/SW
Size : 15 mm to 200 mm
Material : CI, CS (Forged & Cast), SS

Flush Bottom Valve (Y-Type)



Design : Opening in the Tank/Valve
Type : Y Type /Ball Type
Class : 150#, 300#
Ends : Flanged
Size : 15 mm to 200 mm
Material : CI, CS, SS, Alloy Steel, PTFE lined

Brass/Bronze/Gun Metal Valves



Design : IS 778 Class-1 & 2/ Mfg. Standard
Type : Gate/Glove/NRV/Ball/Foot/SRV
Class : Up to 25 Bar
Ends : Flanged/Screwed
Size : 15 - 300 mm
Material : Brass, Bronze, Gun Metal

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