

AN ISO 9001:2008 CERTIFIED COMPANY

Quality that inspire
Customer Satisfaction



www.mcneilinstruments.com



Company Profile

Mcneil Instruments Inc. was found by a group of experienced specialists having 37 years of expertise in product development, designing, production, management and quality controls. As professional and specialist we are engaged in manufacturing and exporting of Valve Fitting, Needle Valve, Ball Valve, Gate Valve, Globe Valve, Block Valve, Bleed Valve, Check Valve. as per standard specification or as per client drawing,.

We have made our presence felt worldwide having operating network across the Globe. We has been serving the many industry in **Piping, Petroleum & Refinery, Oil & Gas, Oilfield, Chemical, Power Plant**

Cement Pharmaceuticals, Turbines, Shipbuilding, Navals, Aerospace for Current, New and Upcoming Projects in domestic and global market. Our highly knowledgeable and experienced technical & sales team works together to make sure you get the right product, the first time, every time and fast as per requirements

Please give us opportunities to serve you best with excellent quality of material by sending your all valuable enquiries. We shall appreciated your quick response to establish and mutually beneficial business Relationship with your esteemed organization.

Quality Policy

A system comprises the way of Quality Control to be followed during each process of Instrumentations Fitting, Manifold Valves, Condensate POT, Air Header, Pipe Clamps, Syphon, Copper Tube Coil, QRC, Snubber, Pipe Fittings so that an audit mechanism is introduced during manufacturing itself to produce a product meeting the requirements of desired codes & specifications. **Each of our products are 100% Factory tested.**





Needle & Ball Valves

Mcneil Instruments Inc. make Needle valves come in bar stock as well as in forged construction in various sizes, sealing styles, end connections and stem types. Main feature of Needle valves is that its stems are interchangeable with any of its valves of the similar configurations thus resulting in low cost and less inventory. We offer a range of needle valve that are fabricated from qualitative raw material and are as per the International standards.

Needle Valve

10,000 PSI Needle Valves with screwed bonnet, integral seat and threaded pipe ends as per ANSI B 1.20.1. Applications are for throttling and straight shut-off.

Technical Specification (Needle Valve)

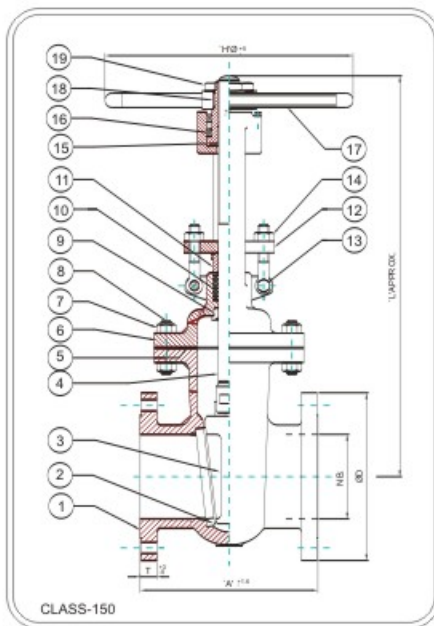
Max Working Pressure	10,000 PSI (689 BAR) @25°C (77°F)
Testing Pressure	Hydrostatic Body — 15,000 PSI (1034 BAR), Hydrostatic Seat — 10,000 PSI (689 BAR) Pneumatic Seat — 569 PSI (39 BAR)
Service Medium	Liquid Gas or Vapor
Type of valves	Needle Valve - Straight Type, Angle Type (90° & 45°)
Gland Seal	PTFE(Standard) : For temperature range -73°C (-99.4°F) to 210°C (410°F) Graphoil : For temperature range 180°C (356°F) to 540°C (1004°F)
Material	Carbon steel, SS 304, SS 316, SS 304L, SS 316 L, Monel 400 NACE MR-01-75 & NACE MR-01-03 (For Sour gas service) can also be provided Material certificate according to EN 10204/3.1 b
Finish	Carbon steel — zinc plated & dichromated, SS Natural
Mounting Arrangement	Needle Valves — Panel Mounting
Design Standard	ANSI B 16.34

Technical Specification (Ball Valve)

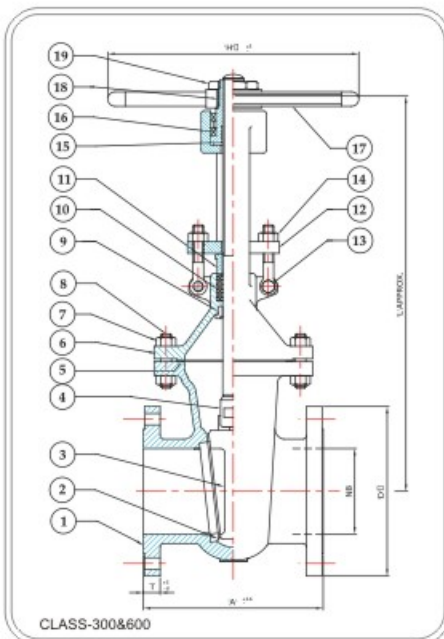
Size Range	15NB – 600NB,	Operation	Manual, Gear Operated, Electro Pneumatic, Electric Actuated
Range	½" to 12"	Wedge / Disc	Mounted
Pressure Rating	ANSI - 150#, 300#, 400#, 600#, 900#	Seat	PTFE/ Carbon or Glass Filled Teflon/ Graphite
Standard	Generally conforming to BS 5351 and tested in accordance to ASME B16.34	Ball	Floating, Full/Reduced Bore
End Connections	Screwed Ends to BSP / BSPT/ NPT (F) Socket Weld Ends to ANSI B 16.11 Inspection	Material	SS 316/ SS 316 L/SS 304/ Cast Iron / Cast Steel / Forged Steel / PTFE
Body Type	3 pcs/ 2 pcs/ 1 pcs, Flanged body	Quality	Highest standard in Visual, Materials, Dimensional Accuracy, Operation, Leak-tightness
Design	Fire Safe Design, Jacketed Design, Teflon Lined, Multiport Design, P.T.F.E. (PFA/FEP)Lined,	Testing	Each valve is 100% tested to ensure leak-tightness at Shell, Seat and Gland
		Application Industries	Hydraulic oil, Water, Steam, Gas, Chemicals, Petrochemical, Power, Energy, Thermal



Gate Valve (Cast Iron)



SR. NO	PART NAME	QTY	MATERIAL
1	BODY	1	ASTM A 216 Gr. WCB
2	SEAT RING	2	CARBON STEEL WITH 13% Cr. S.S. FACING
3	WEDGE	1	ASTM A 216 Gr. WCB WITH 13% Cr. S.S. FACING
4	SPINDLE	1	S.S. AISI 410
5	GASKET	1	COMPRESSED ASBESTOS FIBRE SS. 304 SPIRAL WOUND WITH CAF
6	BONNET	1	ASTM A 216 Gr. WCB
7	BONNET STUD NUT	AS REQD.	ASTM A 194 Gr. 2H
8	BONNET STUD	AS REQD.	ASTM A.193 Gr. B7
9	BONNET BUSH	1	S.S.AISI 410
10	GLAND PACKING	7	METALIC WIRE REINFORCED GRAPHOIL ASBESTOS/GRAPHIL
11	GLAND	1	S.S AISI 410
12	GLAND FLANGE	1	CARBON STEEL
13	CROSS BOLT & NUT	2	CARBON STEEL
14	EYE BOLT 7 NUT	2	CARBON STEEL
15	YOKE SLEEVE	1	G. IRON
16	YOKE BUSH	1	CARBON STEEL
17	HANDWHEEL	1	CAST IRON/CAST STEEL
18	KEY	1	CARBON STEEL
19	HANDWHEEL NUT	1	CARBON STEEL



Class	TEST PRESSURE		
	Hydrostatic		Air
	Body	Seat & Back Seat	Seat
150	30 kg/cm ²	22 kg/cm ²	6kg/cm ²
300	76kg/cm ²	55kg/cm ²	6kg/cm ²
600	150kg/cm	110kg/cm ²	6kg/cm ²

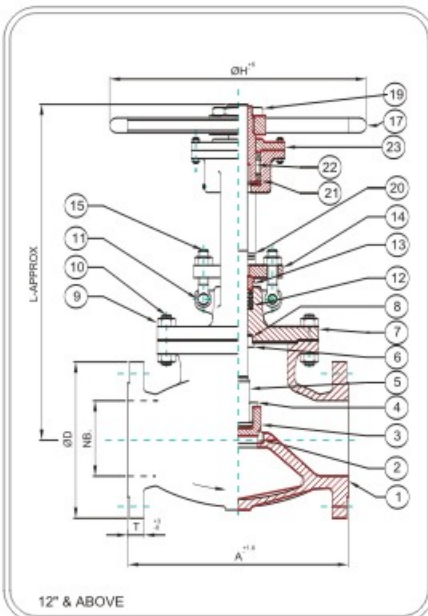
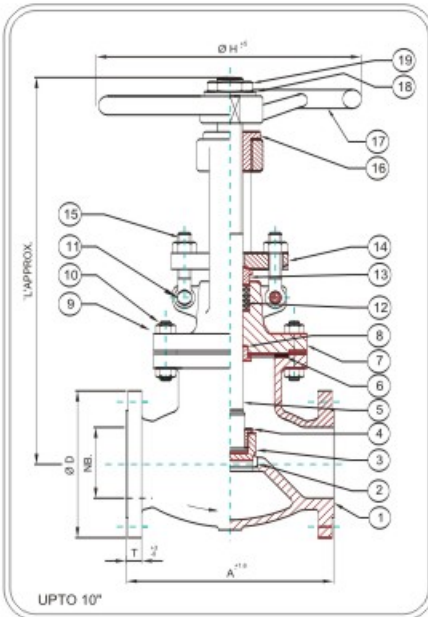
DESIGN FEATURES :

- Manufacturing Standards -BS : 1414/API-600/API-6D/ANSI B 16.34
- Face To Face As Per ANSI B 16.10
- Ends Flanged & Drilled As Per Ansib 16.5 R.F.
- Tested As Per Bs : 5146/API 598
- Available In Class 900, 1500
- Available With Actuator Operator
- Available With Extension Stem





Globe Valve (Cast Iron)



SR. NO	PART NAME	QTY	MATERIAL
1	BODY	1	ASTM A 216 Gr. WCB
2	SEAT RING	2	CARBON STEEL WITH 13% Cr. S.S. FACING
3	DISC	1	CARBON STEEL WITH 13% Cr. S.S. FACING
4	SPINDLE NUT	1	S.S. AISI 410
5	SPINDLE	1	S.S. AISI 410
6	GASKET	1	COMP. ASBESTOS FIBRE/SS 304 SPIRAL
7	BONNET	1	WOUND WITH CAF ASTM A 216 GR. WCB
8	BONNET BUSH		S.S. AISI 410
9	BONNET STUD NUT	AS REQD.	ASTM A 194 Gr. 2H
10	BONNET STUD	AS REQD.	ASTM A 193 Gr. B7.
11	CROSS BOLT & NUT	2	CARBON STEEL
12	GLAND PACKING	7	METALLIC WIRE REINFORCED GRAPHITE DASBESTOS/GRAPHOIL
13	GLAND	1	S.S. AISI 410
14	GLAND FLANGE	1	CARBON STEEL
15	EYE BOLT & NUT	2	CARBON STEEL
16	YOKE SLEEVE	1	S. G. IRON
17	HANDWHEEL	1	CAST IRON / CAST STEEL
18	WASHER	1	CARBON STEEL
19	HANDWHEEL NUT	1	CARBON STEEL
20	GUIDE PLATE	1	CARBON STEEL
21	BEARING	1	COMMERCIAL
22	YOKE SLEEVE	1	CARBON STEEL
23	COVER	1	CARBON STEEL
24	COVER BOLT & NUT	6	ASTM B728
25	KEY	1	CARBON STEEL

Class	TEST PRESSURE		
	Hydrostatic		Air
	Body	Seat & Back Seat	Seat
150	30 kg/cm ²	22 kg/cm ²	6kg/cm ²
300	76kg/cm ²	55kg/cm ²	6kg/cm ²
600	150kg/cm	110kg/cm ²	6kg/cm ²

DESIGN FEATURES :

- Manufacturing Standard - BS : 1873/ANSI B16.34
- Face To Face As Per ANSI B 16.10
- Ends Flanged & Drilled AS PER ANS B 16.5 R.F.
- Testing As Per BS : 5146
- Available In Class 900, 1500
- Available With Actuator Operator
- Available With Extension Stem



Block & Bleed Valve

Mcneil Instruments Inc. make Bleed valves that are designed for use on products such as multi-valve manifolds, or gauge/root valves. Functionally, the valve vents line pressure either to atmosphere or to containment when used with optional barbed vent tube. Bleed valves are used whenever an instrument is removed from a system or to assist in the calibration of control devices.

Bleed Valves are also called Double Block & Bleed valve generally, as this valve is made up by two ball valve and one needle valve or two ball valve and a globe valve.

Double Block and Bleed valves have evolved to replace and add the process of bolting together individual valves to make the valves in one body. it saved a lot of space and material, it is the development tendency of the valve in the future. These new assembly of the double block & bleed valve provides great savings in weight, space and installation times especially in cage isolation. Double Block and Bleed valves have evolved to replace the process of bolting together individual valves to provide dual isolation. This new assembly provides great savings in weight, space and installation times especially in instrument & can be seen in the reduction of leak paths to atmosphere

SINGLE BLOCK & BLEED VALVES

One Piece Ultra Slim line Forged Body combines a compact design with strength and reduced potential leak paths compared to conventional designs. Flanged Connections available on inlet or inlet and outlet in a choice of sizes and ratings to suit each particular application. Gauge Adaptors allow flexible positioning of gauges and instruments with a choice of designs available.

Technical Specification

Size Range	: 15mm to 600mm
Pressure Rating	: ANSI - 150#, 300#, 400#, 600#, 900#, 1500#, 2500#
Standard	: Designed and manufactured to conform API/BS/DIN STANDARD
End Connections	: Flanged connections to ANSI B 16.5
Type	: NYLON SEAT PACKING BLOCK VALVES BALL TYPE, BLEED VALVE NEEDLE TYPE, WITH BOLTED BONNET DESIGN
Max Temperature	: -52 degree C to +250 degree C depend on different material.
Operation	: Pneumatically controlled, electrically controlled - Smooth, Easy, Low-Torque, Long life
Quality	: Highest standard in Visual, Materials, Dimensional Accuracy, Operation, Leak-tightness
Testing:	: Each valve is 100% tested to ensure leak-tightness at Shell, Seat and Gland.
Application Industries :	Petrochemical, Power, Energy, Thermal, Refineries, Fertilizers, Chemical, Pharmaceutical



Check Valve

Mcneil Instruments Inc. check valves are heavy duty, bolted cover, renewable seat ring, and body mounted disc swing type. Valves are straight through flow which works automatically. They are opened by the force of velocity pressure and closed by the force of gravity and back pressure. The valves are single direction flow and restrains flow in opposite direction. Distortion, wear and noisy operation of the valve can be avoided by selecting the size of the valve on the basis of flow conditions. Swing Check valves are best suited for moderate velocity operations. Swing check valves are normally designed for horizontal installations. It can be installed in vertical direction with flow in upward under the disc. There is no tendency for seat to gall because the disc meets flat surface without rubbing upon contact.

The most advanced design features provides the ultimate in dependable, economic flow control. They are available in wide range of sizes and weights. Flow directions are marked as cast on the body for ease of installation.

Swing Check valves are adequate for all service media. Valves can also be supplied with counter weights and dash pot arrangement depending upon the condition and request.

STANDARDS

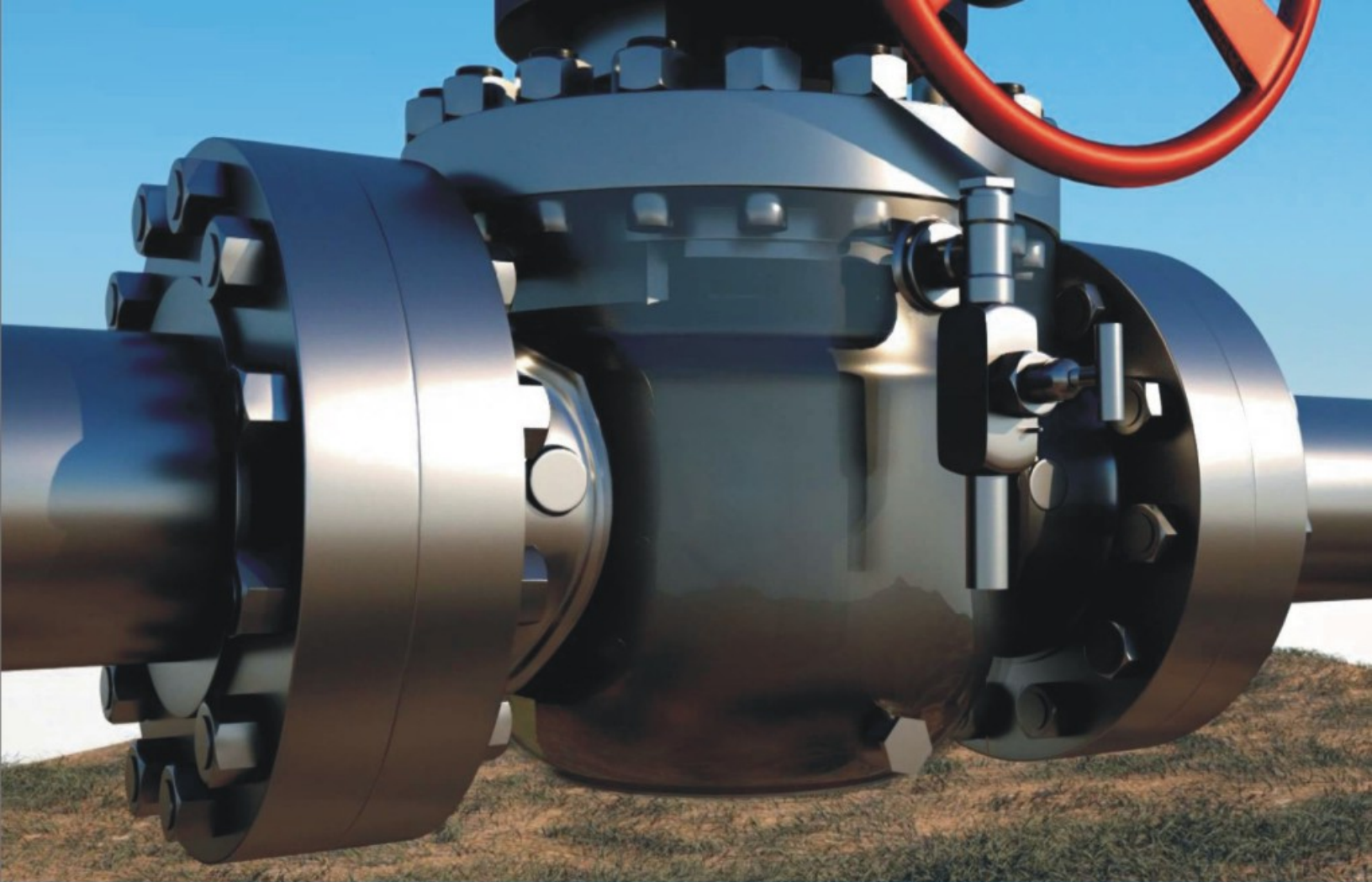
Design Standard	BS 1868
Testing Standard	BS EN 12266 – 1
Face To Face	ASME B 16.10
End Connection	Flanged End - ASME B 16.5 Butt Weld End – ASME B 16.25
Pressure – Temperature Chart	ASME B 16.34

MATERIAL

Structure	End Connection	Flanged End, Raised Face, Butt Weld End, RTJ, ETC
Material	Shell	WCB, WC1, WC6, WC9, LCB, LCC, LC3, C5, C12, CF8, CF8M, Cf3, CF3M, CF8C, CN7M, CD4MCu, Hastelloy, Inconel, Duplex Stainless Steel
	Trim	13% Cr Steel, 304 , 304L, 316, 316L, 321, 347, F51, Monel

Product Range For Cast And Forged Swing Check Valves

Valve Type	: SWING CHECK, SWING CHECK - PRESSURE SEAL
Class Rating	: 150#, 300#, 600#, 800#, 900#, 1500#
Size Range	: (2" TO 36"), (½" To 2") , (½" To 20"),
Shell Material As Per Specification :	ASTM A216 Gr. WCB/ ASTM A217 Gr. Wc1/ ASTM A217 Gr. Wc6/ ASTM A217 Gr. Wc9 /ASTM A217 Gr. C5/ ASTM A217 Gr. C12/ ASTM A351 Gr. F8/ ASTM A351 Gr. F3/ ASTM A351 Gr. F8M/ ASTM A351 Gr. CF3M/ ASTM A351 Gr. CN7M /ASTM A351 Gr. CF8C/ ASTM A351 Gr. CD4Mcu/ ASTM A351 Gr. CK3MCuN/ ASTM A352 Gr. LCA/ ASTM A352 Gr. LCB/ ASTM A352 Gr. LCC/ ASTM A494 Gr. CW6MC/ ASTM A494 Gr. CW2M/ ASTM A494 Gr. CW2M/ ASTM A494 Gr. Cy40/ ASTM A494 Gr. CU5MCuC/ ASTM A995 Gr. 1A /ASTM A995 Gr. 4A/ ASTM A995 Gr. 5A /ASTM A995 Gr. 6A/ NACE malt. Grade to NACE MR0175/NACE MR .



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