



## Forged Stainless Steel DBB Ball Valve With Customized Design BV-DBB-02F

### Our Product Introduction

#### Basic Information

- Place of Origin: CHINA
- Brand Name: DEYE
- Certification: ISO9001:2015 PED
- Model Number: DY-V-14
- Minimum Order Quantity: 10PCS
- Price: USD2-USD20000 each
- Packaging Details: carton box+ ply wooden cases or carton+ Pallets
- Delivery Time: 20 days for usual order, 7 days for stocked items
- Payment Terms: T/T, L/C, D/P
- Supply Ability: 1000pcs one month



#### Product Specification

- Highlight: Stainless Steel dbb ball valve,  
Forged dbb ball valve,  
Forged double block and bleed ball valve

## Product Description

**Ball valve** features a spherical disc to open and close the flow of the fluid. They are the industry standard for pipeline shut-off applications, as their design guarantees very tight and leak-free sealing even after years of operation. The two key types of ball valves are the floating and the trunnion designs (side or top entry). The body can be cast or forged and monolithic or split (in 2 or 3 pieces). The API 6D and ASME B16.34 are key specifications.

### Product Information / Product Description / Basis Information / Specification

API VALVE Standard	API6D Gate valve, Plug valve and Ball valve API600 Bolted Bonnet Steel Gate Valves for Petroleum and Natural Gas Industries API602 Forged Steel valves API603 Stainless steel valve API609 Butterfly valve API594 Wafer, Lug check valve BS1868 check valve BS1873/ BS 5352 cast and forged Globe valve
Valve Types	Butterfly Valves, Ball valves, gate valves, check valves, globe valves, Plug valves, strainers
	Ball valve with floating ball and trunnion mounted ball, Body with 1pc. 2pcs. 3pcs Split type
Size	1/2"-48 DN15-DN1200"
End Connection	Flange Ends, RF, FF, RTJ, LM, BW ends, threaded ends NPT, BSPT, BSPP, Socket Welded Ends
Pressure Range	CL150LBS, 300LBS, 600LBS, 800LBS 900LBS, 1500LBS, 2500LBS PN6 PN10 PN16 PN25 PN40. PN64 PN110, PN160, PN250, PN420
Surface	Acid pickling, Polished, Galvanized, Painting, epoxy Power Coated

### Material List Grade

Ball Valves supplying scope					
Standard	ANSI B16.34 / API600 / API6D/ DIN EN				
Constructi on	Side Entry type, 2-pc, 3-pc body, Top Entry Type 1 pc Body				
Ball Type	Floating Ball from size 1/2"-12", Trunnion Mounted Ball from 2"-48"				
Connectio n	Flanges RF, RTJ, Threaded Ends NPT BSPT, Socket Ends, Butt Welded Ends				
Pressure	150LBS-1500LBS, 1000WOG, 2000WOG, 3000WOG				
Acuators	Manual with lever/ Gear box; Motor elec. Actuator, pneumatic actuator				
Materials of parts as per different Application					
No	Part Name	Carbon Steel	Stainless Steel	Duplex SS	Carbon S teel
1	Body	A216- WCB	A351- CF8M	4A/5A	A352- LCB
2	Bonnet	A216- WCB	A351- CF8M	4A/5A	A352- LCB
3	Ball	A105+ENP//A182- F304	A182- F316	SAF2205/2507	A182- F304
4	Stem	A276- 304	A276- 316	SAF2205/2507	A276- 304
5	Seat	A105+ENP	A182- F316	SAF2205/2507	A350-LF2+ENP
6	Seat Insert	Glass Filled PTFE			
7	Seat Spring	A313- 304	Inconel X- 750	Inconel X- 750	A313- 304
8	Seat O- Ring	NPR	Viton	PTFE	Viton
9	Stem O- Ring	NBR 2)	Viton 2)	PTFE	Viton 2)
10	Bonnet Gasket	Graphite+304	Graphite+316	PTFE+2205	Graphite+304
11	Bonnet O- Ring	NBR	Viton	PTFE	Viton
12	Antistatic Spring	A313- 304	A313- 316	SAF2205/2507	A313- 304
13	Lower Cover	A216- WCB	A182- F316	SAF2205/2507	A182- F304
14	Bonnet Stud	A193- B7	A193- B8	A193- B8	A320- L7
15	Bonnet Stud Nut	A194- 2H	A194- 8	A194- 8	A194- 4
16	Trunnion	A276- 304	A276- 316	A276- 316	A276- 304
17	Trunnion Bearing	304+PTFE	316+PTFE	316+PTFE	304+PTFE
18	Gland Flange	A216- WCB	A351- CF8M	A351- CF8M	A352- LCB
19	Gland Bolt	A193- B7	A193- B8	A193- B8	A193- B7
20	Stop Plate		Carbon Steel+Zn	Carbon Steel+Zn	Carbon Steel
21	Handle	Carbon Steel			

High Temperature Material CF8, 304, 304H CF8M, 316, 316H CK-20, 310, 310H WC4, WC5, F2, WC6, F11C1.2, F12C1.2, WC9, F22C1.3, C5, F5, WC4, WC5, F2, WC6, F11C1.2, F12C1.2, WC9, F22C1.3, C5, F5

Low Temperature Material A352 LCB, LCC, LC1 LC2, LC3, LC4, CF8M, CF8, CF3M  
Alloy Material: Bronze, IN Conoy, DUPLEX SS, Alloy 20, Hastelloy C 276, Hastelloy B

### Technical Pressure Test

Shell Test	1.5xworking pressure				
Seal Test	1.1x Working Pressure				
air test for seal	0.6Mpa by air				
Valve Size		Minimum Test Duration (Seconds)			
DN	NPS	Shell , タ	Backseat (for Valves with Backseat Featu_re)	Closure Check Valves (API 594)	Closure Other Valves
≤50	≤ 2"	15	15	60	15
65 to 150	2 1/2" to 6"	60	60	60	60
200 to 300	8"-12"	120	60	120	120
≥350	≥14"	300	60	120	120
a The test duration is the period of inspection aft the valve is fully prepared and is unde full pressure.					

Maximum allowable Leakage Rates for Closure Test							
Valve Size		All Resilient Seated Valves	Metal Seated Valves Except Check		Metal Seated Check Valves		
DN (mm)	NPS		Liquid Test (drops/ minute)	Gas. Test (bubbles/ minute)	Liquid Test (cc/min)	Gas Test (m3/h)	Gas Test (ft3/h)
≤50	≤2	0	0	0	6	0.08	3
65	2 1/2	0	5	10	7.5	0.11	3.75
80	3	0	6	12	9	0.13	4.5
100	4	0	8	16	12	0.17	6
125	5	0	10	20	15	0.21	7.5
150	6	0	12	24	18	0.25	9
200	8	0	16	32	24	0.34	12
250	10	0	20	40	30	0.42	15
300	12	0	24	48	36	0.5	18
350	14	0	28	56	42	0.59	21
400	16	0	32	64	48	0.67	24
450	18	0	36	72	54	0.76	27
500	20	0	40	80	60	0.84	30
600	24	0	48	96	72	1.01	36
650	26	0	52	104	78	1.09	39
700	28	0	56	112	84	1.18	42
750	30	0	60	120	90	1.26	45
800	32	0	64	128	96	1.34	48
900	36	0	72	144	108	1.51	54
1000	40	0	80	160	120	1.68	60
1050	42	0	84	168	126	1.76	63
1200	48	0	96	192	144	2.02	72
a For the liquid test, 1 ml is considered equivalent to 16 drops. b There shall be no leakage for the minimum specified test duration . For liquid test, 0 drops means no visible leakage per minimum specified test duration. For gas test, 0 bubbles means less than 1 bubble per minimum specified test duration.							

### Ball Valves catalogue pages/Dimension List

**锻钢球阀**  
Forged steel ball valves

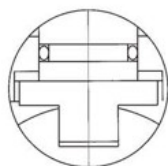
**采用以下结构Construction is as follows**

全径或缩径;  
Full port or conventional port;  
90度定位和带锁结构;  
90° locating and lock structure;  
特殊形式的“Y”头手柄;  
Special Y type handle;  
防火和防静电设计;  
Fire proof and anti static;  
符合ISO5211的上法兰;  
Mounted flange as per ISO 5211;  
防吹出阀杆;  
Blow out proof stem;  
阀杆中部双重密封结构;  
Double sealing for the stem;  
螺栓、螺纹垫片密封阀盖;  
Screwed ends (NPT) to ANSI/ASME B1.20.1.  
承插端符合: ASME B16.11  
Socket weld ends to ASME B16.11  
螺纹连接端 ( NPT ) 符合 ANSI/ASME B1.20.1。  
Screwed ends (NPT) to ANSI/ASME B1.20.1.

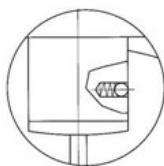


远高锻钢球阀有两种设计形式。一种是二片式结构，其中部螺纹连接，以RPTFE或PEEK密封；另一种是三片式结构，中部用螺栓连接。根据所选的阀座与垫片/填料的材料不同，适应不同的工作温度和介质。YUANGAO Forged steel ball valves have two structures, one is of 2PCS structure, threaded bonnet, RPTFE or PEEK seal. The other is of 3PCS structure. Bolted tailpieces. Different materials for seats, gaskets and packing may be chosen acc. to different using conditions. Construction is as follows.

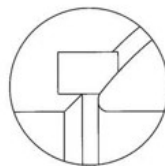
## 锻钢球阀 Forged steel ball valves



防阀杆吹出结构  
Blow out proof stem



防静电结构  
Anti static



防火结构  
Fire safe

锻钢球阀采用紧凑型与接体结构，由于结构合理，占地空间少，密封性能好，深受广大用户信赖。

Compact ball valves are trusted by many customers because of its reasonable structures small space-occupation and good sealing performance

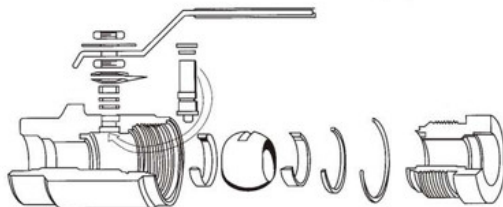
### 设计结构 Design structure

阀座采用PTFE+25%玻纤或PEEK。PTFE+25%玻纤在高压下能获得比PTFE更好的性能，而且还能减少酸性介质腐蚀，通常在800磅级的压力下采用，PEEK在高温高压下能获得较好的性能，通常在1500磅级压力下采用。

具有防火、防静电能为防阀杆吹出结构。

Seat is made of PTFE reinforced with 25% glass fibre of PEEK. PTFE with 25% glass fibre can gain better performances normally used for class 800 ball valves. PEEK can gain better performances under high pressure and high temperature normally used ofr class 1500 ball valves.

Anti static/fire safe/blow out proof stem

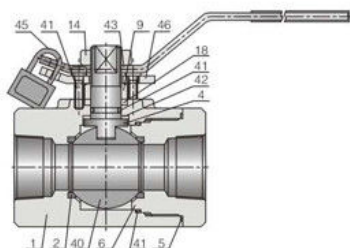


### 流量系数 Flow coefficient Cv

NPS	Cv系数 Value	
	全径 Full port	缩径 Reduced port
1/4	8	—
3/8	8	—
1/2	12	8
3/4	33	12
1	48	33
1 1/4	83	48
1 1/2	120	83
2	250	120



二片式锻钢球阀  
2PCS Forged steel ball valves



碳钢温压等级 Carbon steel temperature-pressure rate

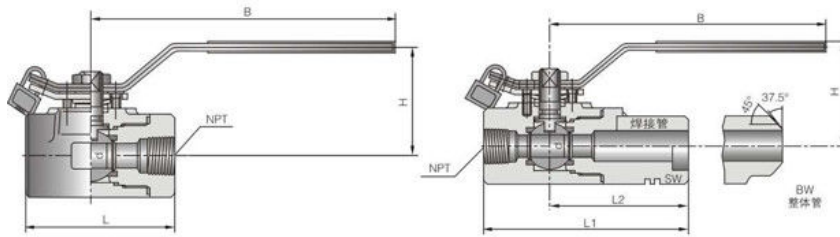
CL150~285 P.S.I @100° F  
CL300~740 P.S.I @100° F  
CL600~1480 P.S.I @100° F  
CL800~1975 P.S.I @100° F  
CL1500~3705 P.S.I @100° F

应用规范Application standards

- 1、设计制造Design and manufacture conform to:  
BSS351
- 2、连接端尺寸Connection ends conform to:  
1) 承插口尺寸按Screw ends dimension conform to  
ANSI B16.11; JB/T1751  
2) 螺纹端尺寸按Screw ends dimension conform to  
ANSI B1.20.1; JB/T7306  
3) 对焊端尺寸按Test and inspection conform to  
ANSI B16.25; JB/T12224  
4) 法兰端尺寸按Structure features:  
ANSI B16.5; JB79
- 3、阀门检查和试验Test and inspection conform to:  
API598; GB/T13927; JB/T9092
- 4、结构特征structure features;  
螺栓连接阀盖; 两段式;  
Bolted bonnet; two-piece;
- 5、材料按Materials conform to ANSI/ASTM的规定。
- 6、主体材料Main materials; A105; LF2; F5; F11;  
F22; 304(L); 316(L); F347; F321; F51; Monel; 20合金等。

序号 NO.	零件名称 Part name	A105/F6a	A105/F6aHFS	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)
1	阀体Body	A105	LF2	F304(L)	F316(L)	F51
2	阀座Seat	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK
4	阀杆Stem	410	304	304(L)	316(L)	F51
5	垫片Gasket	PTFE	PTFE	PTFE	PTFE	PTFE
6	阀盖Bonnet	A105	LF2	F304	F316	F51
9	填料压套Gland	410	304	304(L)	316(L)	F51
11	填料压板 Gland flange	A105	LF2	F304	F316	F51
14	扁螺母Flat nut	8	8	8	8	8M
18	填料Packing	PTFE	PTFE	PTFE	PTFE	PTFE
40	球体Ball	F6	F304	F304(L)	F316(L)	F51
41	O型密封圈O-ring	VITON	VITON	VITON	VITON	VITON
42	上密封垫片 Back seat gasket	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK
43	手柄Wrench	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025
44	内六角螺钉Screw	88	88	88	88	88
45	锁Lock	成品	成品	成品	成品	成品
46	定位片Locator	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025

## 二片式锻钢球阀 2PCS Forged steel ball valves



CL800 末端连接可按一端螺纹和一端接管（承插焊或对焊）设计按BS 5351  
Connection ends may be pipe-welded (butt-welding or socket welding) and/or threaded, design to BS5351

规格 (NPS) Specification	全径(F.P)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
结构长度 (mm) Face to face	L	60	60	75	80	90	110	120	140	-
中心至手柄端(mm) Center to handle end	B	160	160	160	160	170	230	230	280	-
中心高度(开)(mm) Height	H	60	60	60	65	85	105	105	125	-
流通孔径 (mm) Flow port dimension	d	6	9	13.5	19	24	32	38	49	-
重量Weight(约)(Kg)		1.2	0.9	1.3	2.2	3.5	6.5	6.5	11	-

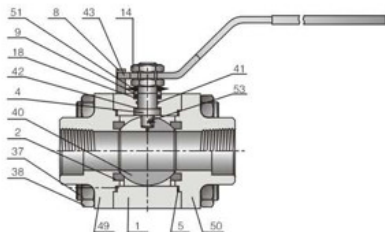
CL1500-CL2500 末端连接可按一端螺纹和一端接管（承插焊或对焊）设计按API 6D  
Connection ends may be pipe-welded (butt-welding or socket welding) and/or threaded, design to BS5351

规格 (NPS) Specification	全径(F.P)		1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
结构长度 (mm) Face to face	L1	CL1500	70	75	85	95	105	120	130	150
		CL2500	-	-	125	135	155	-	155	-
中心至手柄端(mm) Center to handle end	B	CL1500	160	160	160	170	230	230	280	280
中心高度(开)(mm) Height	H	CL1500	60	60	65	85	105	105	125	-
流通孔径 (mm) Flow port dimension	d	CL1500	6	6	13	19	25	32	38	49
重量Weight(约)(Kg)		CL1500	1.2	1.5	2.5	3.7	5.8	-	11.5	13.7





三片式锻钢球阀  
3PCS Forged steel ball valves



碳钢温压等级 Carbon steel temperature-pressure rate

CL150-285 P.S.I @100° F  
CL300-740 P.S.I @100° F  
CL600-1480 P.S.I @100° F  
CL800-1975 P.S.I @100° F  
CL1500-3705 P.S.I @100° F

典型零件材料表Main part materials list

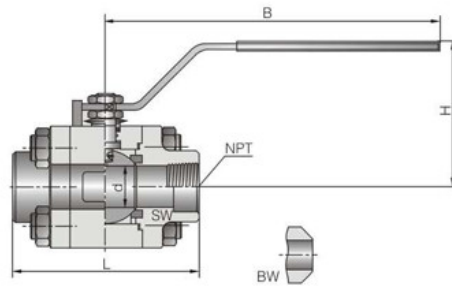
序号 NO.	零件名称 Part name	A105/F6a	LF2/304	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	阀体Body	A105	LF2	F304(L)	F316(L)	F51
2	阀座Seat	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK
4	阀杆Stern	410	304	304(L)	316(L)	F51
5	垫片Gasket	PTFE	PTFE	PTFE	PTFE	PTFE
8	圆柱销Pin	25	304	304	304	304
9	压套Gland	410	304	304(L)	316(L)	F51
14	扁螺母Flat nut	8	8	8	8M	8M
18	填料Packing	PTFE	PTFE	PTFE	PTFE	PTFE
37	双头螺栓Bolt	B7	B8	B8	B8M	B8M
38	螺母Nut	2H	8	8	8M	8M
40	球体Ball	F6	F304	F304(L)	F316(L)	F51
41	O型密封圈O-ring	VITON	VITON	VITON	VITON	VITON
42	上密封垫片 Back seat gasket	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK
43	手柄Wrench	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025
49	左阀盖Left bonnet	A105	LF2	F304	F316	F51
50	右阀盖Right bonnet	A105	LF2	F304	F316	F51
51	碟簧Butterfly spring	65Mn	65Mn	304	304	304
52	弹垫Elastic washer	65Mn	65Mn	304	304	304
53	静电弹簧 Anti-static spring	304	304	304	316L	316L

应用规范Application standards

- 1、设计制造Design and manufacture conform to:  
BS5351
- 2、连接端尺寸Connection ends conform to:  
1) 承插口尺寸按Screw ends dimension conform to  
ANSI B16.11; JB/T1751  
2) 螺纹端尺寸按Screw ends dimension conform to  
ANSI B1.20.1; JB/T7306  
3) 对焊端尺寸按Test and inspection conform to  
ANSI B16.25; JB/T12224  
4) 法兰端尺寸按Structure features:  
ANSI B16.5; JB79
- 3、阀门检查和试验Test and inspection conform to:  
API598; GB/T13927; JB/T9092
- 4、结构特征structure features:  
螺栓连接阀盖; 三段式;  
Bolted bonnet; three-piece;
- 5、材料按Materials conform to ANSI/ASTM的规定。
- 6、主体材料Main materials; A105; LF2; F5; F11;  
F22; 304(L); 316(L); F347; F321; F51; Monel; 20合金等。



三片式锻钢球阀  
3PCS Forged steel ball valves



末端连接可按一端螺纹和一端按管（承插焊或对焊）设计按BS 5351

CL800-CL1500 Connection ends may be pipe-welded (butt-welding or socket welding) and/or threaded, design to BS5351

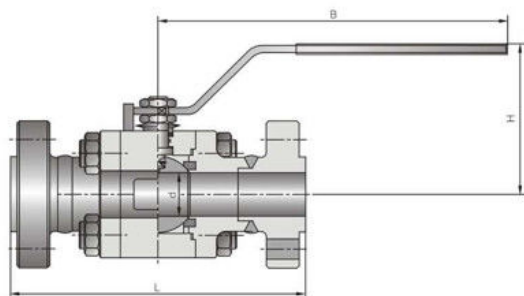
规格(NPS) Specification	全径(F.P)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	
结构长度(mm) Face to face	L	75	75	85	100	115	130	150	180	
中心至手柄端(mm) Center to handle end	B	108	108	108	146	178	178	200	200	
中心高度(mm) Height	H	51	51	51	108	81	85	105	105	
流道孔径(mm) Height (and dimensions)	d	CL800	6	9	13	18	23	28	35	49
		CL1500	6	9	13	19	25	32	38	49

CL1500 末端连接可按一端螺纹和一端按管（承插焊或对焊）设计按BS 5351

CL1500 Connection ends may be pipe-welded (butt-welding or socket welding) and/or threaded, design to BS5351

规格(NPS) Specification	全径(F.P)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	
结构长度(mm) Face to face	L	85	85	100	120	135	160	185	220	
中心至手柄端(mm) Center to handle end	B	108	108	108	146	178	178	200	200	
中心高度(mm) Height	H	51	51	51	108	81	85	105	105	
流道孔径(mm) Height (and dimensions)	d	CL800	6	9	13	18	23	28	35	49
		CL1500	6	9	13	19	25	32	38	49

三片式锻钢球阀  
3PCS Forged steel ball valves



CL1500-CL2500

末端连接可按法兰或对焊，设计按API 6D结构长度按工厂标准  
Flanged or butt-welded ends; design to API 6D face to face conforms to manufacture standard

规格(NPS) Specification	全径(F.P)		1/2	3/4	1	1 1/4	1 1/2	2
结构长度(mm) Face to face	L	CL1500	216	229	254	279	305	368
		CL2500	264	273	308	349	384	451
中心至手柄端(mm) Center to handle end	B	CL1500	230	230	350	280	400	400
		CL2500	280	280	95	350	400	400
中心高度(mm) Height	H	CL1500	75	85	85	105	110	130
		CL2500	75	85	95	105	110	130
流通孔径(mm) Height (andie dinmensions)	d	CL1500	13	19	25	32	38	49
		CL2500	13	19	25	32	38	42
重量(约)(Kg)Weight		CL1500	2.5	5.8	5.8	6.8	11.5	13.7
		CL2500	2.7	6.3	6.3	6.8	12	15

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**Application:**

Valve is a universal component industrial product that is widely used in many industries, such as petroleum, petrochemical, chemical, metallurgy, power, water conservancy, urban construction, machinery, coal, food, Sea water, Oil Refining, environment, energy.  
Steam, LPG.

**Reference Standard:**

API 600: cast carbon and alloy valves  
API 603: stainless steel valves  
API 602/BS 5352: forged valves  
API 6D: slab and through conduit valves for pipelines  
API 598 and BS EN 12266-1: valves testing  
ASME B16.10: face to face dimensions for valves  
ASME B16.5 and ASME B16.47: flanged connections  
ASME B16.25: butt weld connections design  
ASME B16.34: Pressure ratings pressure and temperature ratings by material grade  
ISO 7-1:1994, Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designation.  
ISO 4200:1991, Plain end steel tubes, welded and seamless — Dimensions.  
ISO 5208:1993, Industrial valves — Pressure testing of valves.  
ISO 5209:1977, General purpose industrial valves — Marking.  
ISO 5210:1991, Industrial valves — multi-turn valve actuator attachments.  
ISO 5752: — 1), Metal valves for use in flanged pipe systems — Face-to-face and center-to-face dimensions.  
ISO 6708:1995, Pipework components — Definition and selection of DN (nominal size) .  
ISO 7005-1:1992, Metallic flanges — Part 1: Steel flanges.  
ISO 7268:1983, Pipe components — Definition of nominal pressure.  
ASME B1.1:1989, Unified inch screw threads (UN and UNR thread form) .  
ASME B1.5:1988 (R1994), Acme screw threads.  
ASME B1.8:1988 (R1994), Stub Acme screw threads.

ASME B1.12:1987 (R1992), Screw threads — Class 5 interference — Fit thread.  
ASME B1.20.1:1983 (R1992), Pipe threads, general purpose (inch) .  
ASME B16.5:1996, Pipe flanges and flanged fittings.  
ASME B16.34:1996, Valves — Flanged, threaded and welding end.  
ASME B18.2.2:1987 (R1993), Square and hex nuts (inch series) .  
ASME A193:1996, Specification for alloy steel and stainless-steel bolting materials for high-temperature service.  
ASTM A194:1996, Specification for carbon and alloy steel nuts for bolts for high-pressure and high-temperature service.  
ASTM A307:1994, Specification for carbon steel bolts and studs, 60 000 psi tensile strength.  
MSS SP-55:1985 (R1990), Quality standard for steel castings, visual surface examination.  
1) To be published. (Revision of ISO 5752:1982)



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