

DAEMYEONG

발전소 밸브 제조 임가공 전문업체

FORGED GLOBE VALVE

FORGED GATE VALVE

FORGED CHECK VALVE

ENGINEERING DATA



D A E M Y E O N G

산업용 밸브 제조 및 가공 전문기업으로 창조적인 제품개발과
기술혁신을 위해 노력하는 기업이 되겠습니다.



C O N T E N T S

01. 회사 연혁

02. 인증서

03. 주요 생산품목

04. 설비 현황

밸브업계를 선도하는 기업, 주식회사 대명 !!!



“ 발전설비 및 화학 산업용
고온, 고압밸브 제조, 가공전문의 선두주자 ... ”

저희 주식회사 **대명**은 고온, 고압 및 산업용밸브 제작, 분해정비, 가공 전문기업입니다. 밸브제작 및 가공과 각종 기계부품 제작을 위한 다양한 공작기계와 측정장비를 갖추고 당사에서 직접 제작, 가공, 정비를 함으로서 원가 절감과 품질관리를 지속적으로 추구하는 고온, 고압 및 산업용 밸브제작 전문기업입니다. 특히 발전소 터빈 및 보일러 계통에 사용되는 고온, 고압밸브를 전문적으로 제작, 가공하고 있으며 또한 터빈이나 탈황설비 등의 특수재질 기계부품 제작, 가공과 발전설비 경량정비에도 최선을 다하고 있습니다.

앞으로도 관련분야에서 최고의 기업으로 성장할 수 있도록 끊임없는 노력과 기술 개발에 최선을 다하여 신뢰받는 기업으로 고객의 입장에서 고객과 함께 성장하며 나가는 미래지향적인 최고의 선두기업이 되도록



| HISTORY

Global Leading Company

앞선품질과 노하우로 내일의 기술을 펼쳐갑니다.



안정기

2011.02	ISO 9001 인증(품질경영 시스템)
2011.10	벤처기업 인증
2011.10	한국중부발전 정비 적격업체 인증
2012.01	한국남부발전 정비 적격업체 인증
2012.01	한국서부발전 정비 적격업체 인증
2012.11	(주) 대명브이에스로 법인 설립
2013.01	한국동서발전 정비적격업체 인증
2013.03	기업부설연구소 인정서 취득
2013.08	기계설비공사업 면허 취득
2013.10	여성기업 인증
2013.10	한국서부발전 정비적격업체 인증
2013.11	한국중부발전 정비적격업체 인증
2014.02	한국남부발전 정비적격업체 인증
2014.06	한국남동발전 정비적격업체 인증
2014.08	주식회사 대명으로 상호 변경
2014.11	한전KPS(주) 외주 반출수리제작 전국협력업체 인증 (화력)
2016.02	발전 5개사 통합 정비적격업체 인증 (Globe VV 등 30품목)
2016.09	한전KPS(주) 기계설비공사 전국협력업체 인증
2016.12	특허취득 [유지보수가 용이한 글로브밸브] 제10 - 1695938호
2017.12	대명사옥 신축 및 본사 이전

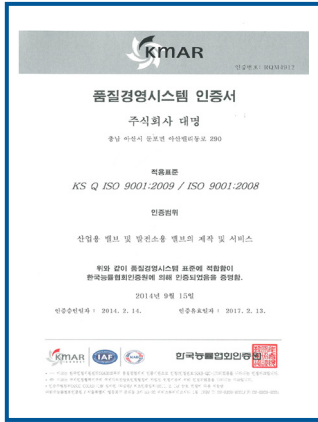
도약기

2010.04	상호변경 대명V.S
2010.09	공장이전 (충남 아산 둔포면 석곡리)

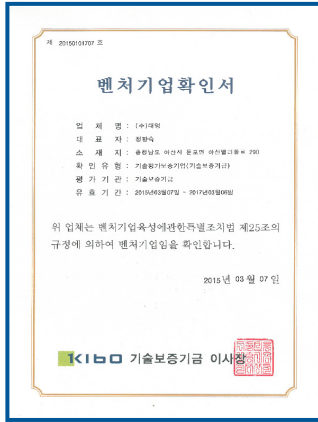
태동기

2009.02	유성정공 설립
---------	---------

CERTIFICATE



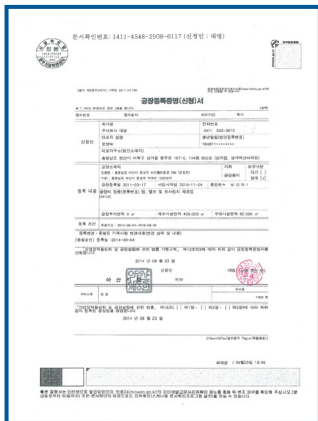
품질경영시스템 인증서



벤처기업확인서



특허증



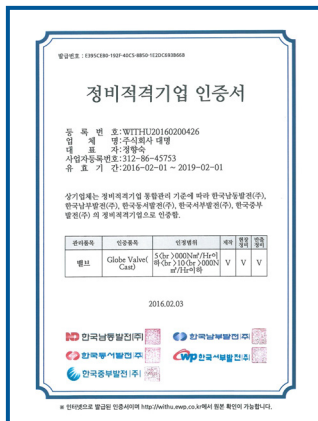
공장등록증명서



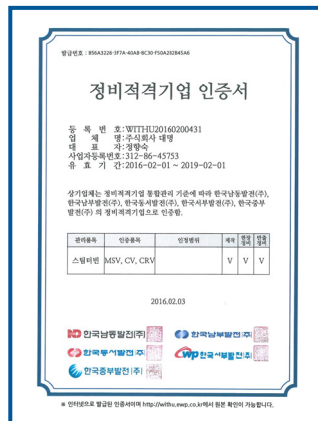
기업부설연구소 인정서



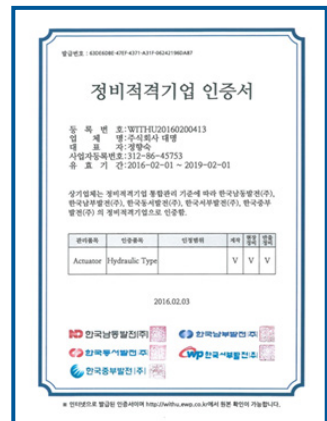
실용신안등록증



정비적격기업 인증서



정비적격기업 인증서



정비적격기업 인증서

| PRODUCT

DAEMYEONG Products

세계최고의 품질확보로 고객 요구를 만족시키려는
(주) 대명의 노력에는 끊임이 없습니다.



| FACILITIES

Creative Positive Challenge

진보된 기술과 창의력과 도전의 발판을 마련하여
미래를 창조하는 미래를 창조합니다.



(주) 대명 충남 아산시 둔포면 아산밸리로 387번길 25 / 사업자번호 : 312-86-45753
http://www.daemyeongplant.com / Email. jjk3941@naver.com
TEL. 041 532 3914~5 / FAX. 041 532 3916

Top And the Best of Service



FORGED GLOBE VALVE

- **Forged Steel Globe Valve**

Class 600 Bolted Bonnet Socket Welding Ends

Class 600 Non Bonnet Socket Welding Ends(Y-Globe)

Class 1500 Non Bonnet Socket Welding Ends

Class 1500 Non Bonnet Socket Welding Ends(Y-Globe)

Class 2500 Non Bonnet Socket Welding Ends

Class 2500 Non Bonnet Socket Welding Ends(Y-Globe)

Class 4500 Non Bonnet Socket Welding Ends

Class 4500 Non Bonnet Socket Welding Ends(Y-Globe)

Class 1500 Pressure Seal Bonnet Socket Welding Ends

Class 2500 Pressure Seal Bonnet Socket Welding Ends

Class 4500 Pressure Seal Bonnet Socket Welding Ends

FORGED GLOBE VALVE

대명의 단강 글로브 밸브는 유량조절이 가능하며, 엄격한 내부 기밀유지(Zero Seat Leaks)를 이루면서 게이트 밸브나 볼 밸브와 같이 승온으로 인한 이상승압(Pressure Locking)이나 고온고착(Thermal Binding)을 피하고자 할 때 사용한다.

미국 밸브 기준 규격인 ANSI B16.34에 의한 압력 온도기준으로 대명의 단강 글로브 밸브는 4500#까지 제작가능하고 600#이하의 글로브 밸브는 대부분 볼티드 본네트형이고 900#급 이상은 용접형 또는 프레스 쉴 형식이 많이 쓰인다. 글로브 밸브의 압력-온도 기준은 ANSI B 16.34기준에 따라 제작하고, 밸브 크기는 2"(50A) 까지 제작이 가능하다.

대명의 단강 글로브 밸브의 특징은 다음과 같이 요약 정리할 수 있다.

- 유체의 운전조건 즉, 온도, 압력, 밸브에서의 차압조건 등 모든 어려운 조건에 맞도록 밸브 내부형상을 설계할 수 있는 구조의 글로브 밸브이다.
- 글로브 밸브는 다른 볼 밸브, 버터플라이 밸브 등과 비교하면 상대적으로 매우 높은 유체흐름 저항을 갖고 있기 때문에 유량제어에서의 문제인 저유량 제어시 또는 저개도 운전시의 케비테이션이나 소음문제에 대하여 능동적으로 대처할 수 있는 밸브이다.
- Applying the Y-pattern Globe valve to decrease the flow resistance
- Minimization of the vibration problems applying the disc guide
- Excellent capabilities to control the fluid with applying the needle valve

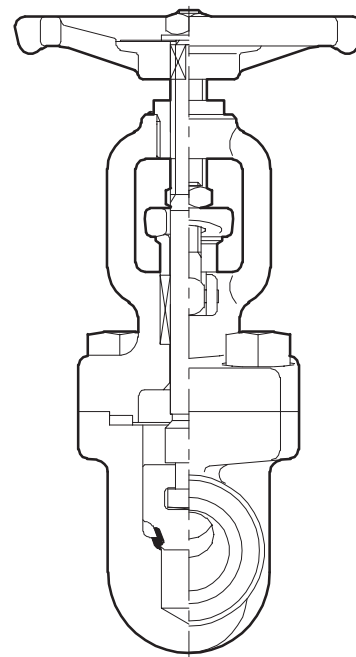
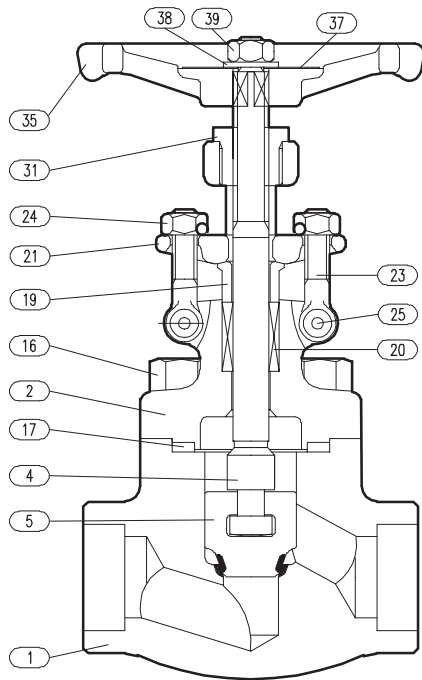




Forged Steel Globe Valve

Class 600

Bolted Bonnet
Socket Welding Ends



Specification of valve materials

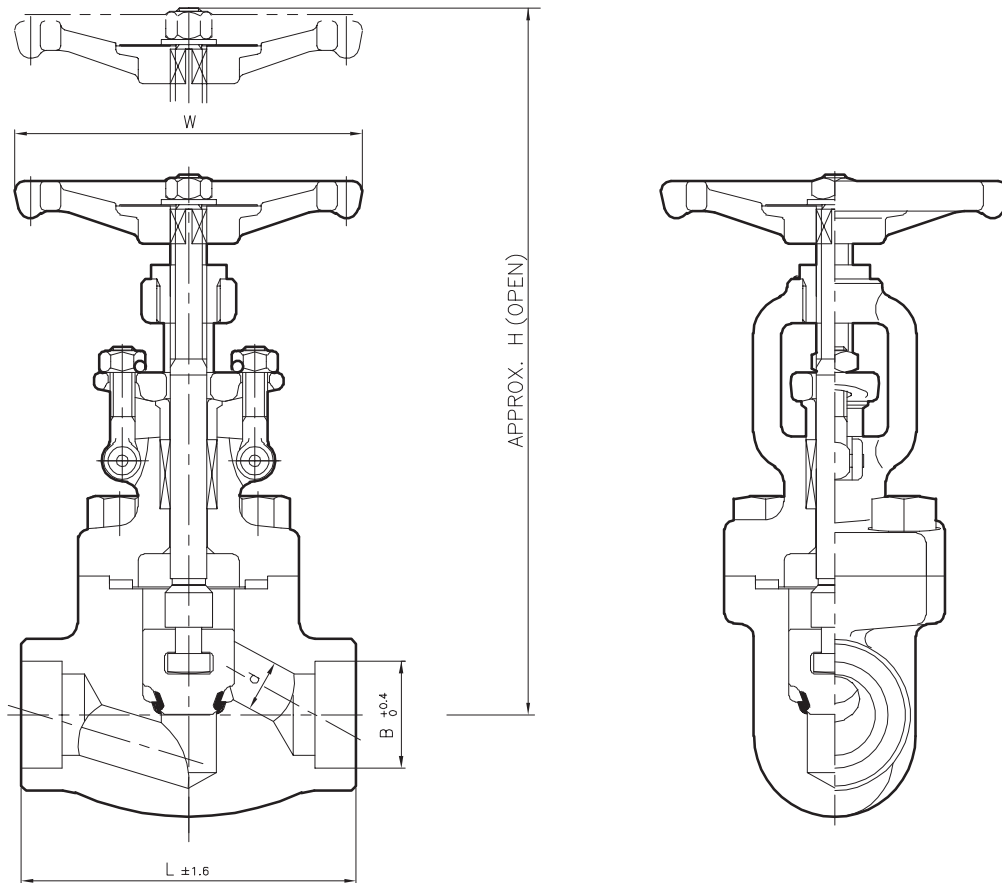
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	BONNET	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
4	STEM	1	Stainless Steel						
5	DISC	1	A743-CA40			A351-CF8	A351-CF8M		
7	SEAT RING	2	Stainless Steel						
16	BONNET BOLT	4	Ferritic Steel			Stainless Steel			
17	GASKET	1	SS304+GRAPHITE						
19	GLAND	1	Stainless Steel						
20	GLAND PACKING	1 SET	CARBON FIBER + GRAPHITE						
21	GLAND FLANGE	1	Carbon Steel			Stainless Steel			
23	GLAND BOLT	2	Carbon Steel			Stainless Steel			
24	GLAND BOLT NUT	2	Carbon Steel			Stainless Steel			
25	GLAND BOLT FIN	2	Stainless Steel						
31	SLEEVE	1	Stainless Steel						
32	SLEEVE WASHER	2	Stainless Steel						
35	HANDWHEEL	1	Malleable Iron						
37	NAMEPLATE	1	Stainless Steel						
38	H/W WASHER	1	STEEL						
39	HANDWHEEL NUT	1	Carbon Steel						
42	TAGPATE	1	Stainless Steel						



Forged Steel Globe Valve

Class 600

Bolted Bonnet
Socket Welding Ends



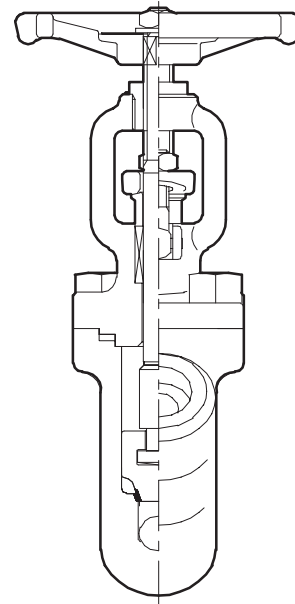
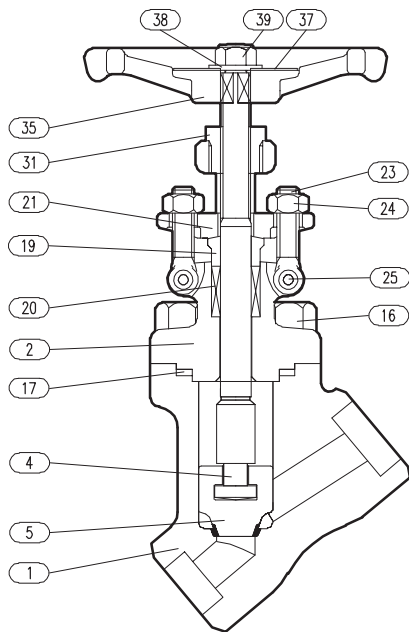
Dimensions					
SIZE (DN)	L	H	d	W	B
15	79	156	10.0	100	21.80
20	92	156	13.0	100	27.20
25	111	196	17.5	125	33.90
32	130	224	24.0	155	42.70
40	152	257	31.0	155	48.80
50	172	286	37.0	180	61.20



Forged Steel Y-Globe Valve

Class 600

Bolted Bonnet
Socket Welding Ends



Specification of valve materials

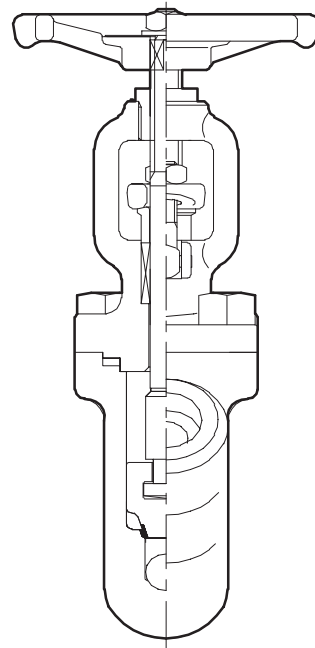
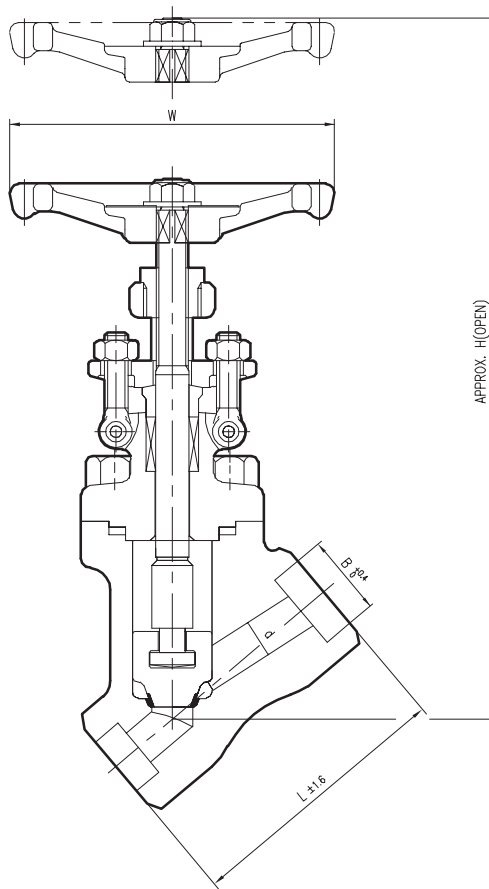
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)							
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L	
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L	
2	BONNET	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L	
4	STEM	1	Stainless Steel							
5	DISC	1	A105	A182-F11/F22	A182-F91/F92	A351-CF8	A351-CF8M			
7	SEAT RING	2	Stainless Steel							
16	BONNET BOLT	4	Ferritic Steel				Stainless Steel			
17	GASKET	1	SS304+GRAPHITE							
19	GLAND	1	Stainless Steel							
20	GLAND PACKING	1 SET	CARBON FIBER + GRAPHITE							
21	GLAND FLANGE	1	Carbon Steel				Stainless Steel			
23	GLAND BOLT	2	Stainless Steel							
24	GLAND BOLT NUT	2	Carbon Steel				Stainless Steel			
25	GLAND BOLT FIN	2	Stainless Steel							
31	SLEEVE	1	Stainless Steel							
35	HANDWHEEL	1	Malleable Iron							
37	NAMEPLATE	1	Stainless Steel							
38	H/W WASHER	1	STEEL							
39	HANDWHEEL NUT	1	Carbon Steel							
42	TAGPATE	1	Stainless Steel							



Forged Steel Y-Globe Valve

Class 600

Bolted Bonnet
Socket Welding Ends



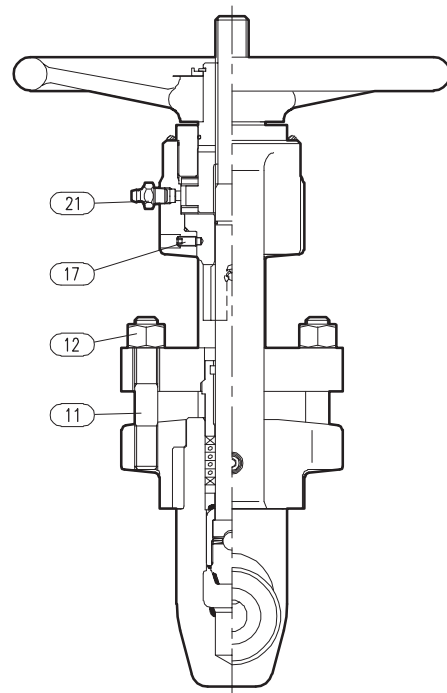
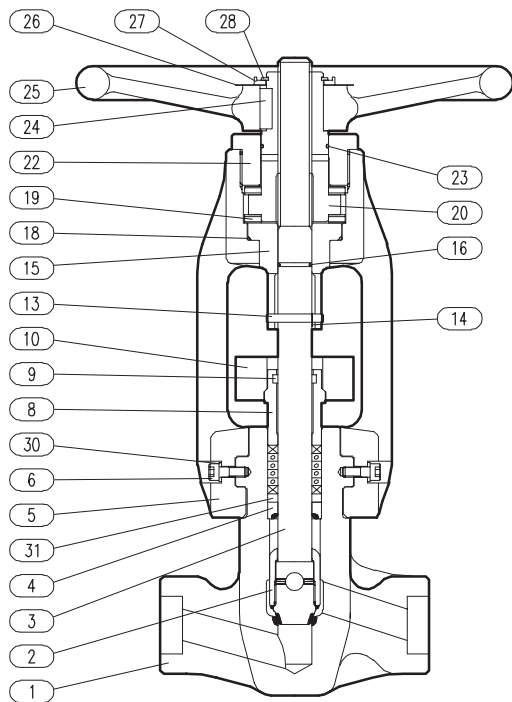
Dimensions					
SIZE (DN)	L	H	d	W	B
15	92	190	10.0	100	21.80
20	92	190	13.0	100	27.20
25	111	235	17.5	125	33.90
32	130	260	24.0	155	42.70
40	152	285	31.0	155	48.80
50	172	325	37.0	180	61.20



Forged Steel Globe Valve

Class 1500

Non Bonnet
Socket Welding Ends



Specification of valve materials

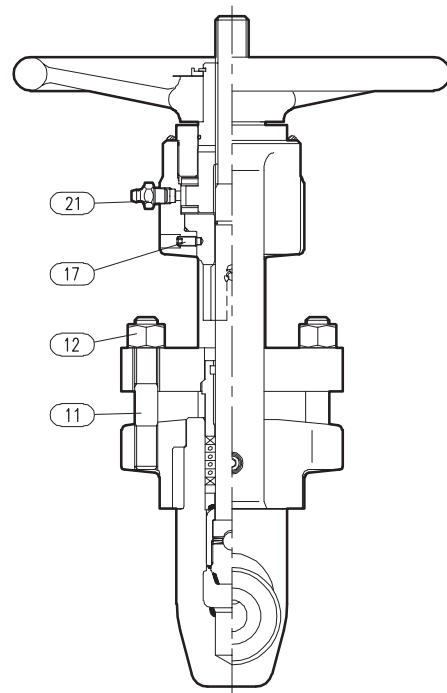
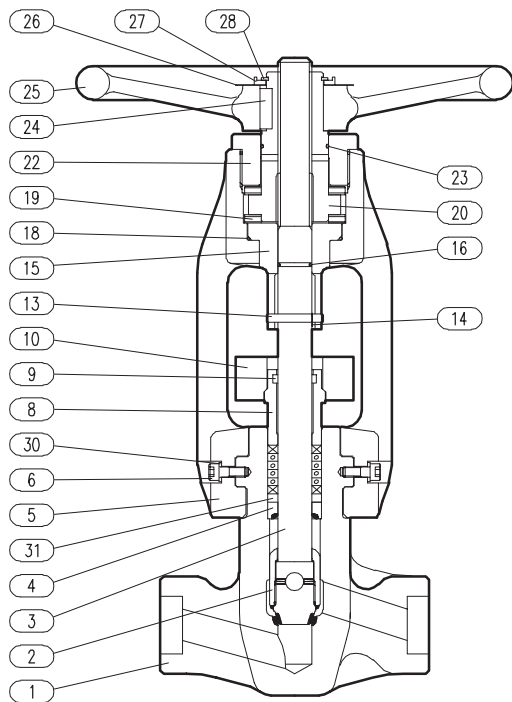
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	DISC	1 SET	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
3	STEM	1	Stainless Steel						
4	BACKSEAT	1	Stainless Steel						
5	YOKE	1	Carbon Steel						
6	LOCK BOLT	2	Stainless Steel						
7	GLAND PACKING	1 SET	Braided & Die-Formed GRAPHITE						
8	GLAND	1 SET	Stainless Steel						
9	GLAND GUIDE	1	Die-Formed GRAPHITE						
10	GLAND FLANGE	1	Carbon Steel						
11	GLAND STUD	2	Stainless Steel						
12	GLAND STUD NUT	2	Carbon Steel						
13	GUIDE PIN	1	Stainless Steel						
14	SNAP RING	1	STEEL						
15	GUIDE	1	Stainless Steel						
16	STEM O-RING	1	NBR						



Forged Steel Globe Valve

Class 1500

Non Bonnet
Socket Welding Ends



Specification of valve materials

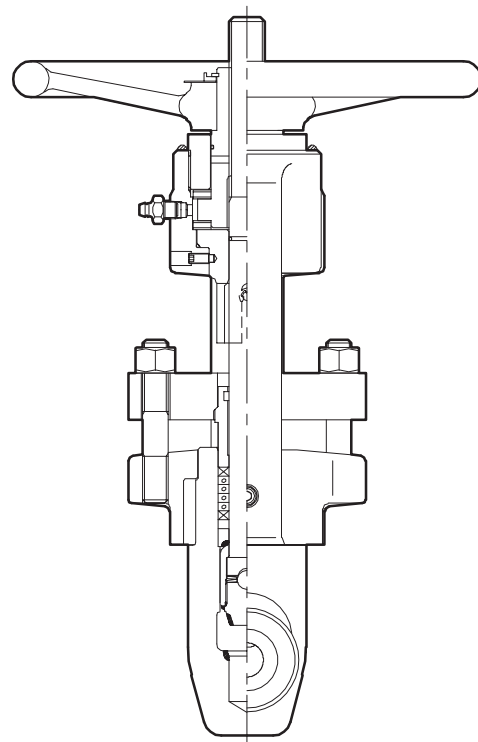
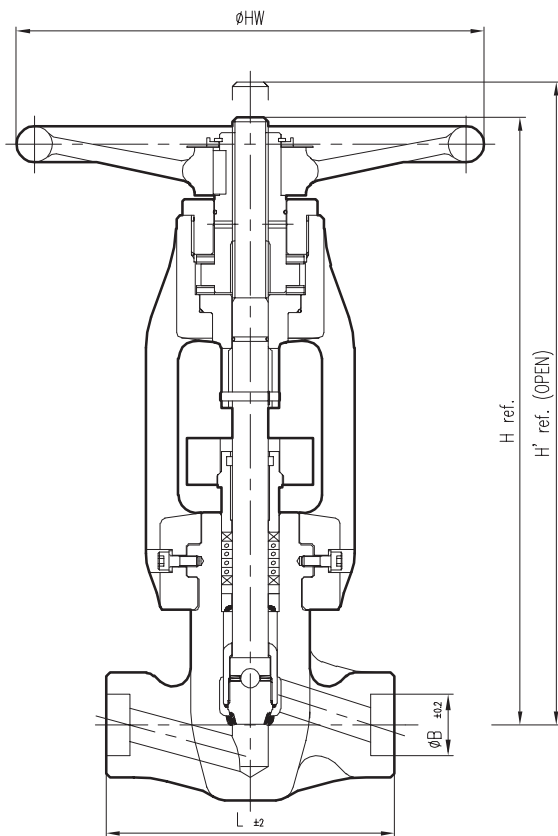
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)
17	SET SCREW	2	Stainless Steel
18	GUIDE O-RING	1	NBR
19	THRUST BEARING	2	BEARING STEEL
20	SLEEVE	1	COPPER ALLOY
21	GREASE NIPPLE	1	STEEL
22	SLEEVE NUT	1	Carbon Steel
23	SLEEVE O-RING	1	NBR
24	HANDWHEEL KEY	1	STEEL
25	HANDWHEEL	1	CAST IRON
26	NAMEPLATE	1	ALLUMINUM/S.STEEL
27	SNAP RING GUIDE	1	Carbon Steel
28	SNAP RING	1	STEEL
30	SPRING WASHER	2	STEEL
31	PACKING WASHER	1	Stainless Steel



Forged Steel Globe Valve

Class 1500

Non Bonnet
Socket Welding Ends



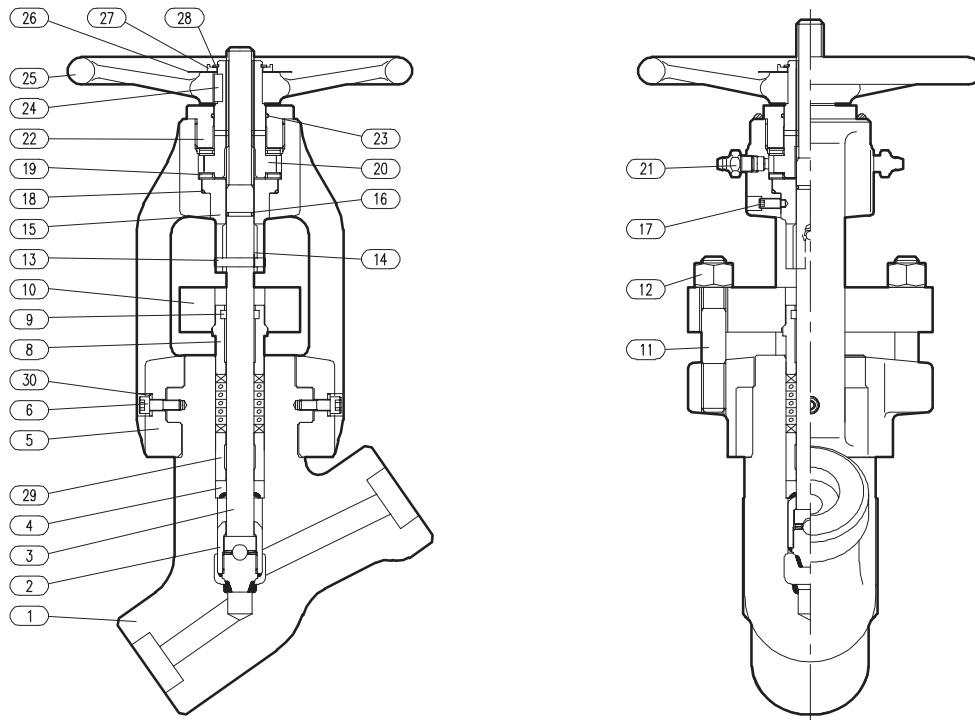
Dimensions							unit(mm)
SIZE (in.)	L	D	H	H'	HW	B	
1/2	130	12	289	305	200	22.0	
3/4	130	16	289	305	200	27.4	
1	150	20	338	358	260	34.1	
1 1/2	220	30	432	460	360	49.0	
2	260	38	475	508	410	61.5	



Forged Steel Y-Globe Valve

Class 1500

Non Bonnet
Socket Welding Ends



Specification of valve materials

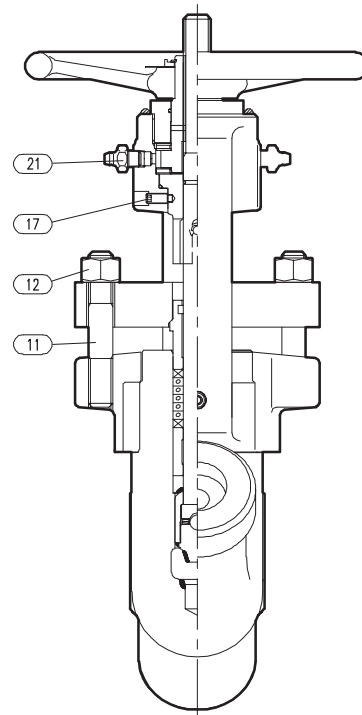
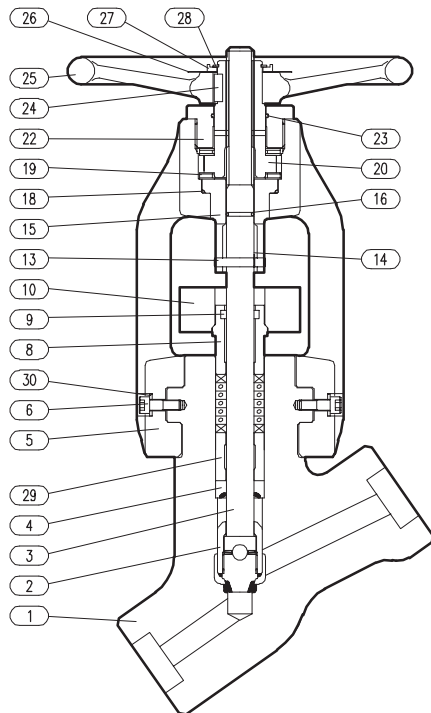
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	DISC	1 SET	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
3	STEM	1	Stainless Steel						
4	BACKSEAT	1	Stainless Steel						
5	YOKE	1	Carbon Steel						
6	LOCK BOLT	2	Stainless Steel						
7	GLAND PACKING	1 SET	Braided & Die-Formed GRAPHITE						
8	GLAND	1 SET	Stainless Steel						
9	GLAND GUIDE	1	Die-Formed GRAPHITE						
10	GLAND FLANGE	1	Carbon Steel						
11	GLAND STUD	2	Stainless Steel						
12	GLAND STUD NUT	2	Carbon Steel						
13	GUIDE PIN	1	Stainless Steel						
14	SNAP RING	1	STEEL						
15	GUIDE	1	Stainless Steel						
16	STEM O-RING	1	NBR						



Forged Steel Y-Globe Valve

Class 1500

Non Bonnet
Socket Welding Ends



Specification of valve materials

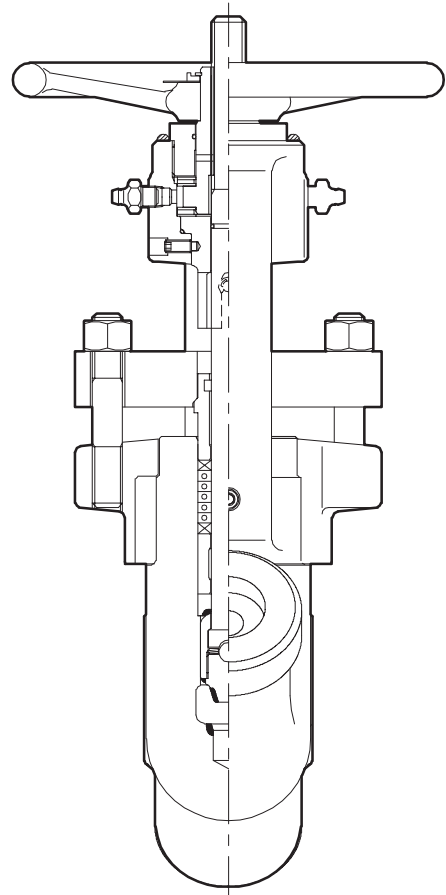
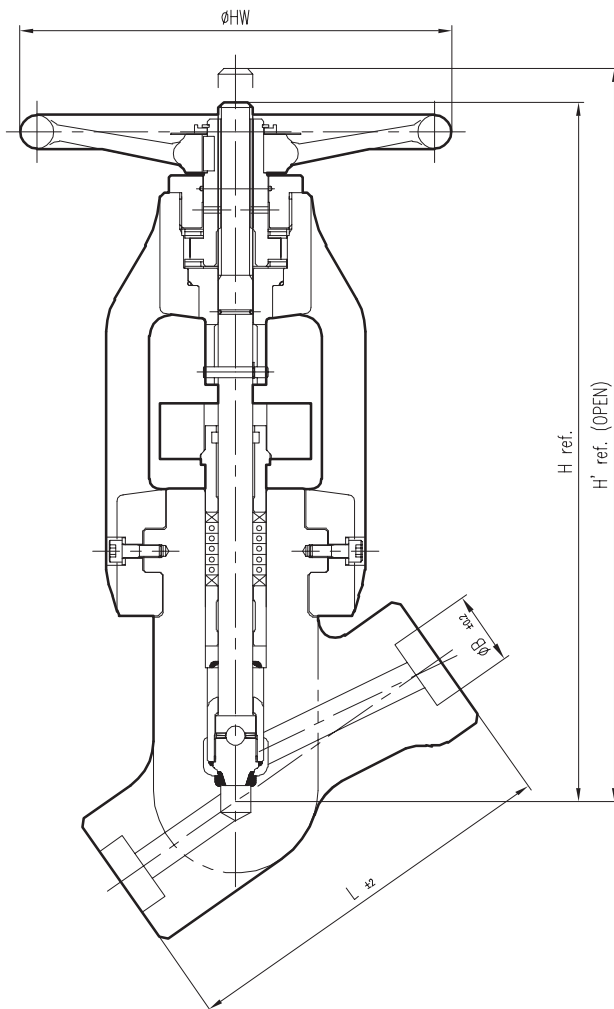
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)
17	SET SCREW	2	Stainless Steel
18	GUIDE O-RING	1	NBR
19	THRUST BEARING	2	BEARING STEEL
20	SLEEVE	1	COPPER ALLOY
21	GREASE NIPPLE	1	STEEL
22	SLEEVE NUT	1	Carbon Steel
23	SLEEVE O-RING	1	NBR
24	HANDWHEEL KEY	1	STEEL
25	HANDWHEEL	1	CAST IRON
26	NAMEPLATE	1	ALLUMINUM/S.STEEL
27	SNAP RING GUIDE	1	Carbon Steel
28	SNAP RING	1	STEEL
29	SPACER	2	Stainless Steel
30	SPRING WASHER	2	STEEL
31	PACKING WASHER	1	Stainless Steel



Forged Steel Y-Globe Valve

Class 1500

Non Bonnet
Socket Welding Ends



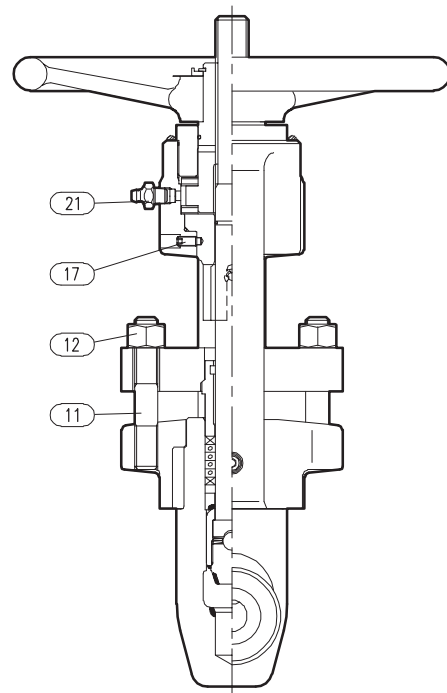
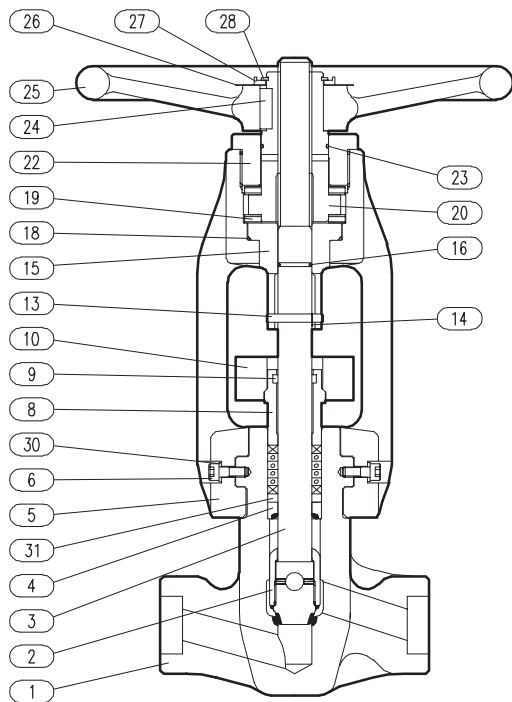
Dimensions							unit(mm)
SIZE (in.)	L	D	H	H'	HW	B	
1/2	180	8	324	340	200	22.0	
3/4	180	11	324	340	200	27.4	
1	180	14	324	340	200	34.1	
1 1/2	300	22	500	525	360	49.0	
2	300	26	500	525	360	61.5	



Forged Steel Globe Valve

Class 2500

Non Bonnet
Socket Welding Ends



Specification of valve materials

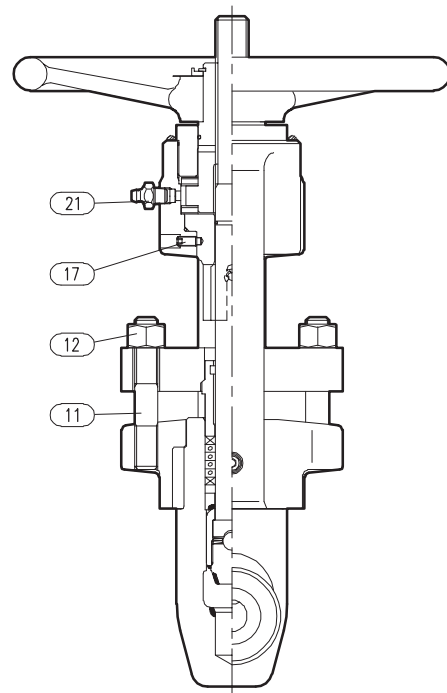
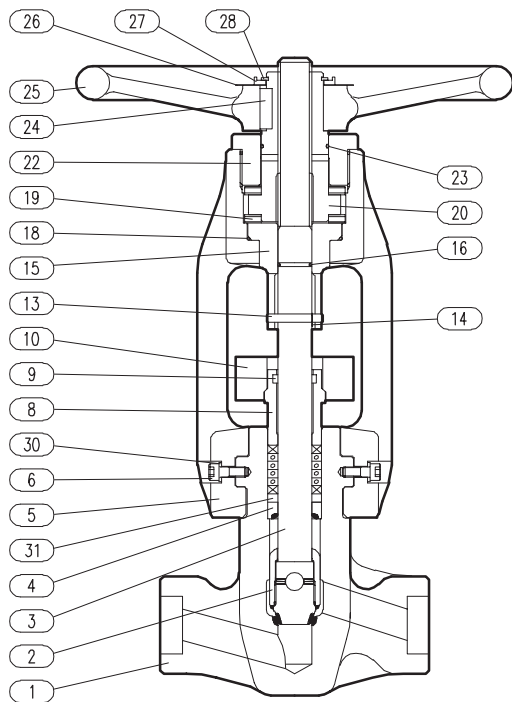
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	DISC	1 SET	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
3	STEM	1	Stainless Steel						
4	BACKSEAT	1	Stainless Steel						
5	YOKE	1	Carbon Steel						
6	LOCK BOLT	2	Stainless Steel						
7	GLAND PACKING	1 SET	Braided & Die-Formed GRAPHITE						
8	GLAND	1 SET	Stainless Steel						
9	GLAND GUIDE	1	Die-Formed GRAPHITE						
10	GLAND FLANGE	1	Carbon Steel						
11	GLAND STUD	2	Stainless Steel						
12	GLAND STUD NUT	2	Carbon Steel						
13	GUIDE PIN	1	Stainless Steel						
14	SNAP RING	1	STEEL						
15	GUIDE	1	Stainless Steel						
16	STEM O-RING	1	NBR						



Forged Steel Globe Valve

Class 2500

Non Bonnet
Socket Welding Ends



Specification of valve materials

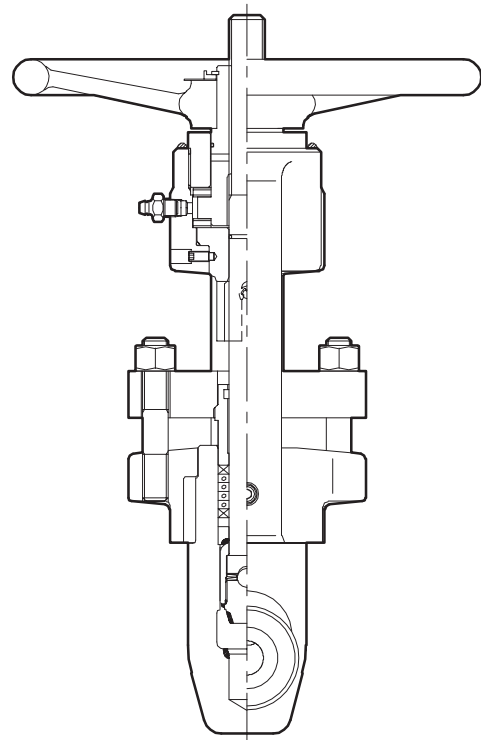
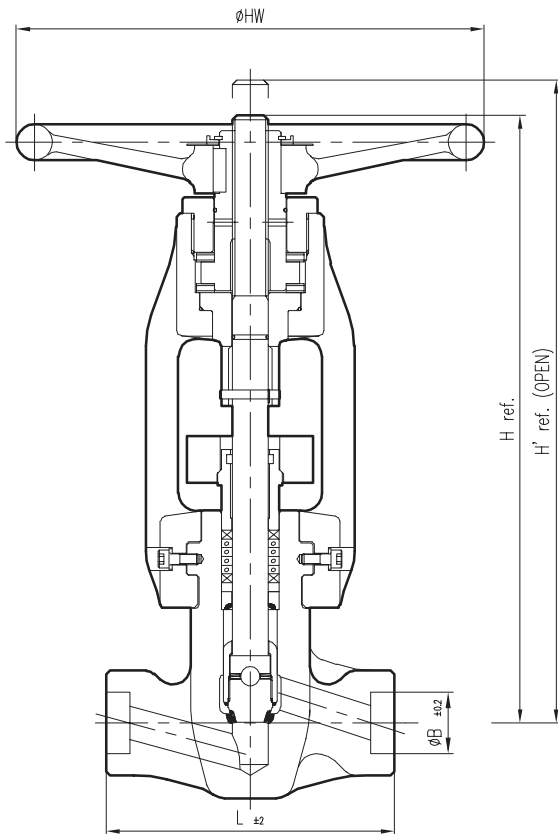
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)
17	SET SCREW	2	Stainless Steel
18	GUIDE O-RING	1	NBR
19	THRUST BEARING	2	BEARING STEEL
20	SLEEVE	1	COPPER ALLOY
21	GREASE NIPPLE	1	STEEL
22	SLEEVE NUT	1	Carbon Steel
23	SLEEVE O-RING	1	NBR
24	HANDWHEEL KEY	1	STEEL
25	HANDWHEEL	1	CAST IRON
26	NAMEPLATE	1	ALLUMINIUM/S.STEEL
27	SNAP RING GUIDE	1	Carbon Steel
28	SNAP RING	1	STEEL
30	SPRING WASHER	2	STEEL



Forged Steel Globe Valve

Class 2500

Non Bonnet
Socket Welding Ends



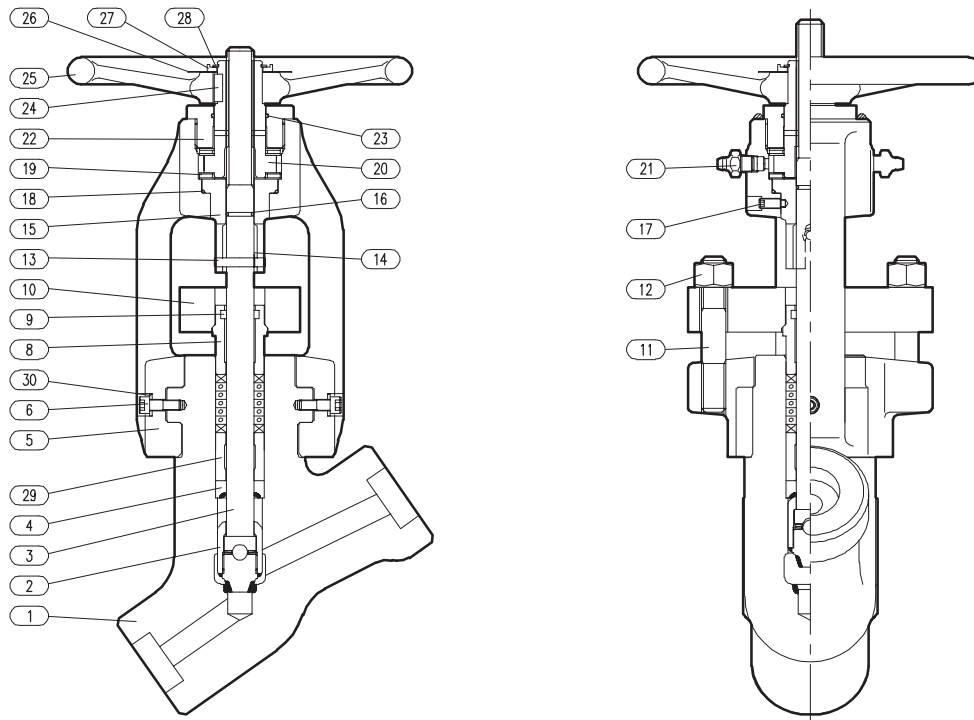
Dimensions							unit(mm)
SIZE (in.)	L	D	H	H'	HW	B	
1/2	140	10	289	305	200	22.0	
3/4	140	14	289	305	200	27.4	
1	160	18	338	358	260	34.1	
1 1/2	240	28	432	460	360	49.0	
2	280	35	475	508	410	61.5	



Forged Steel Y-Globe Valve

Class 2500

Non Bonnet
Socket Welding Ends



Specification of valve materials

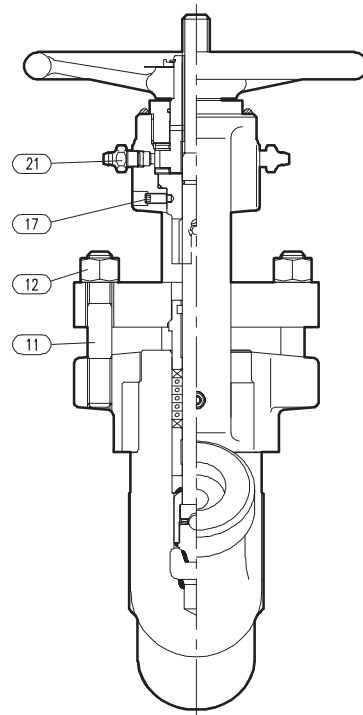
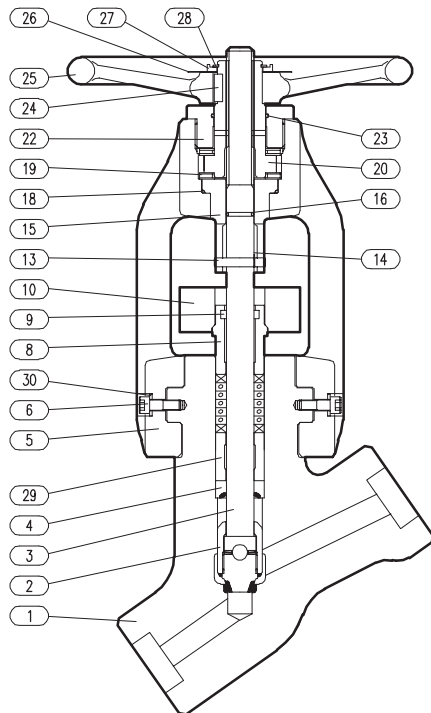
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	DISC	1 SET	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
3	STEM	1	Stainless Steel						
4	BACKSEAT	1	Stainless Steel						
5	YOKE	1	Carbon Steel						
6	LOCK BOLT	2	Stainless Steel						
7	GLAND PACKING	1 SET	Braided & Die-Formed GRAPHITE						
8	GLAND	1 SET	Stainless Steel						
9	GLAND GUIDE	1	Die-Formed GRAPHITE						
10	GLAND FLANGE	1	Carbon Steel						
11	GLAND STUD	2	Stainless Steel						
12	GLAND STUD NUT	2	Carbon Steel						
13	GUIDE PIN	1	Stainless Steel						
14	SNAP RING	1	STEEL						
15	GUIDE	1	Stainless Steel						
16	STEM O-RING	1	NBR						



Forged Steel Y-Globe Valve

Class 2500

Non Bonnet
Socket Welding Ends



Specification of valve materials

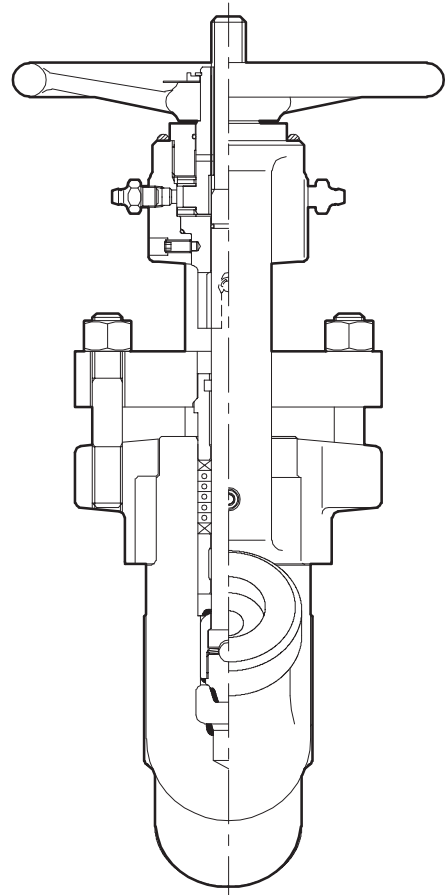
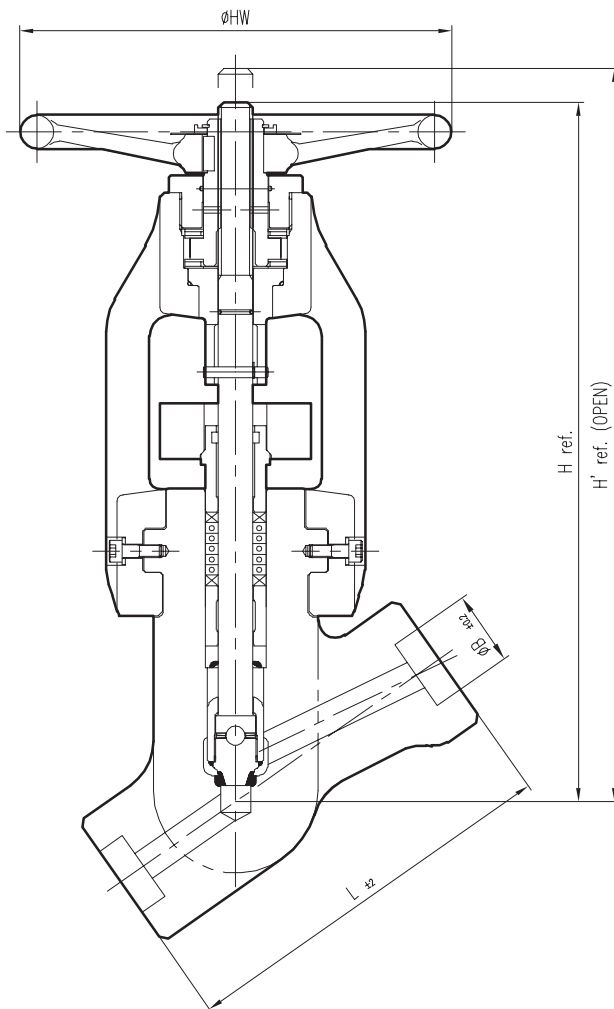
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)
17	SET SCREW	2	Stainless Steel
18	GUIDE O-RING	1	NBR
19	THRUST BEARING	2	BEARING STEEL
20	SLEEVE	1	COPPER ALLOY
21	GREASE NIPPLE	1	STEEL
22	SLEEVE NUT	1	Carbon Steel
23	SLEEVE O-RING	1	NBR
24	HANDWHEEL KEY	1	STEEL
25	HANDWHEEL	1	CAST IRON
26	NAMEPLATE	1	ALLUMINUM/S.STEEL
27	SNAP RING GUIDE	1	Carbon Steel
28	SNAP RING	1	STEEL
29	SPACER	2	Stainless Steel
30	SPRING WASHER	2	STEEL



Forged Steel Y-Globe Valve

Class 2500

Non Bonnet
Socket Welding Ends



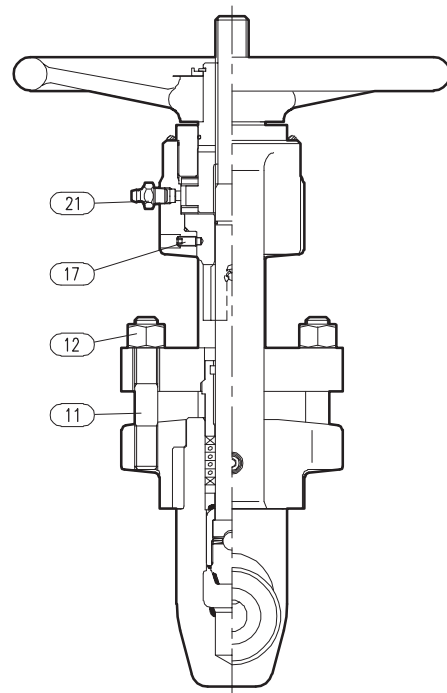
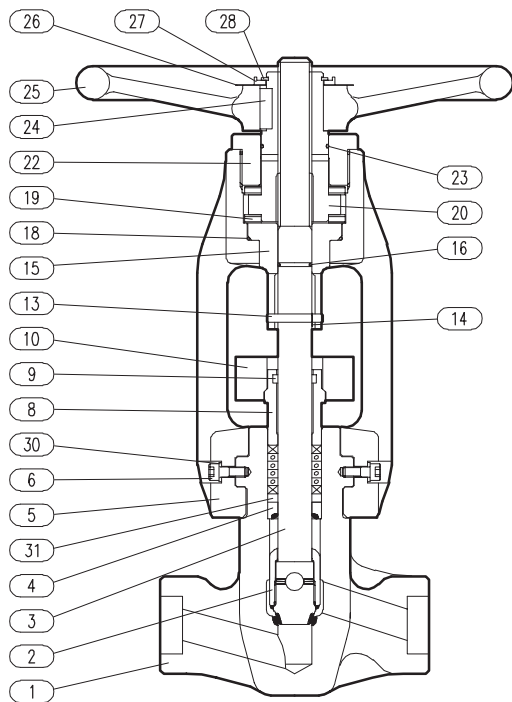
Dimensions							unit(mm)
SIZE (in.)	L	D	H	H'	HW	B	
1/2	140	10	324	340	200	22.0	
3/4	140	14	324	340	200	27.4	
1	160	18	380	400	260	34.1	
1 1/2	240	28	497	525	360	49.0	
2	280	35	547	580	410	61.5	



Forged Steel Globe Valve

Class 4500

Non Bonnet
Socket Welding Ends



Specification of valve materials

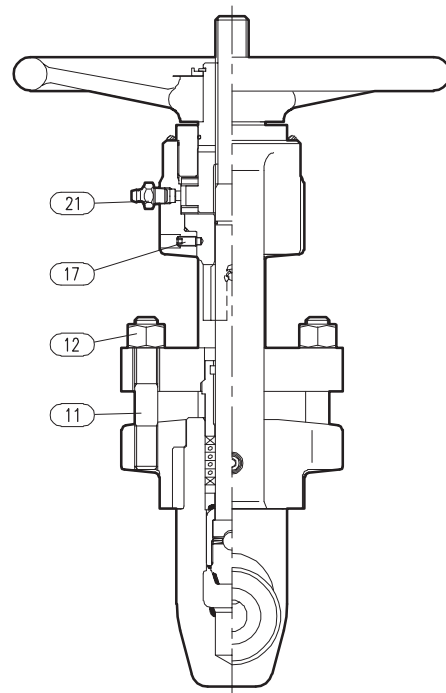
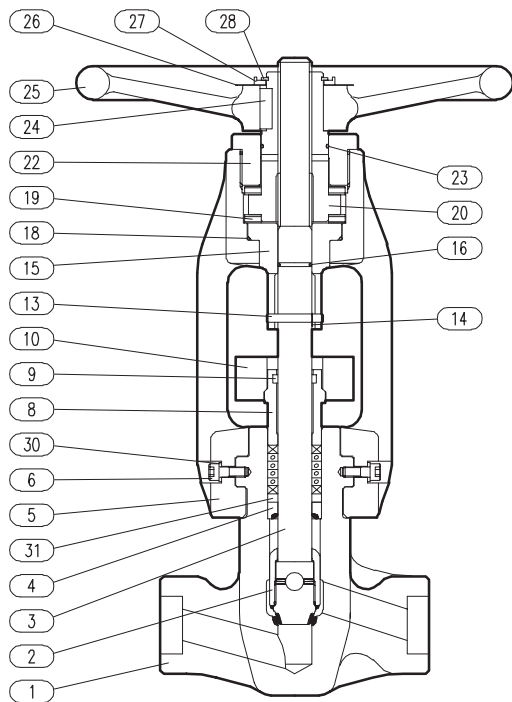
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	DISC	1 SET	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
3	STEM	1	Stainless Steel						
4	BACKSEAT	1	Stainless Steel						
5	YOKE	1	Carbon Steel						
6	LOCK BOLT	2	Stainless Steel						
7	GLAND PACKING	1 SET	Braided & Die-Formed GRAPHITE						
8	GLAND	1 SET	Stainless Steel						
9	GLAND GUIDE	1	Die-Formed GRAPHITE						
10	GLAND FLANGE	1	Carbon Steel						
11	GLAND STUD	2	Stainless Steel						
12	GLAND STUD NUT	2	Carbon Steel						
13	GUIDE PIN	1	Stainless Steel						
14	SNAP RING	1	STEEL						
15	GUIDE	1	Stainless Steel						
16	STEM O-RING	1	NBR						



Forged Steel Globe Valve

Class 4500

Non Bonnet
Socket Welding Ends



Specification of valve materials

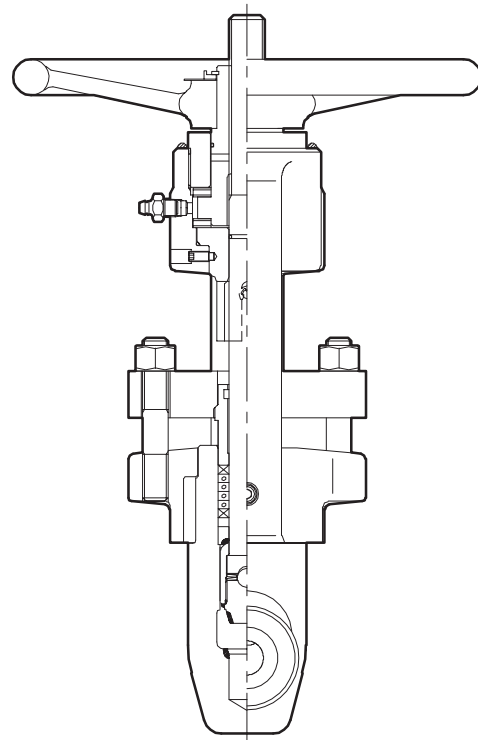
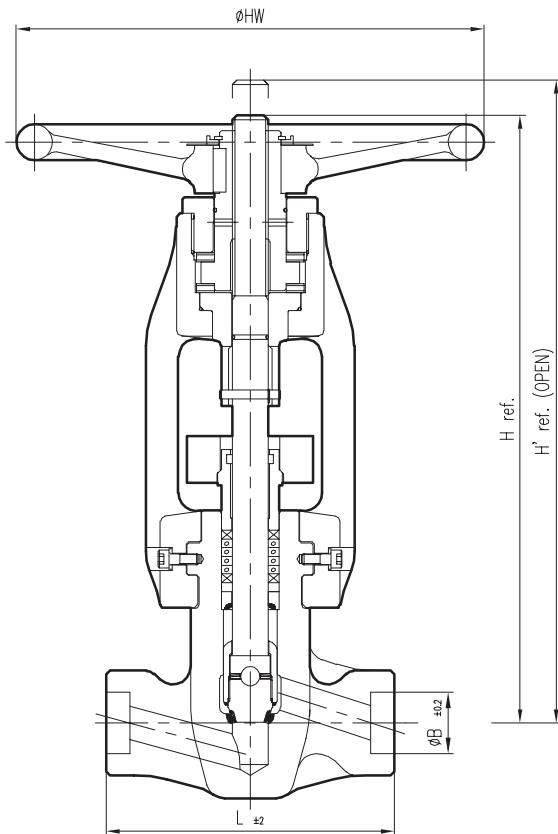
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)
17	SET SCREW	2	Stainless Steel
18	GUIDE O-RING	1	NBR
19	THRUST BEARING	2	BEARING STEEL
20	SLEEVE	1	COPPER ALLOY
21	GREASE NIPPLE	1	STEEL
22	SLEEVE NUT	1	Carbon Steel
23	SLEEVE O-RING	1	NBR
24	HANDWHEEL KEY	1	STEEL
25	HANDWHEEL	1	CAST IRON
26	NAMEPLATE	1	ALLUMINIUM/S.STEEL
27	SNAP RING GUIDE	1	Carbon Steel
28	SNAP RING	1	STEEL
30	SPRING WASHER	2	STEEL



Forged Steel Globe Valve

Class 4500

Non Bonnet
Socket Welding Ends



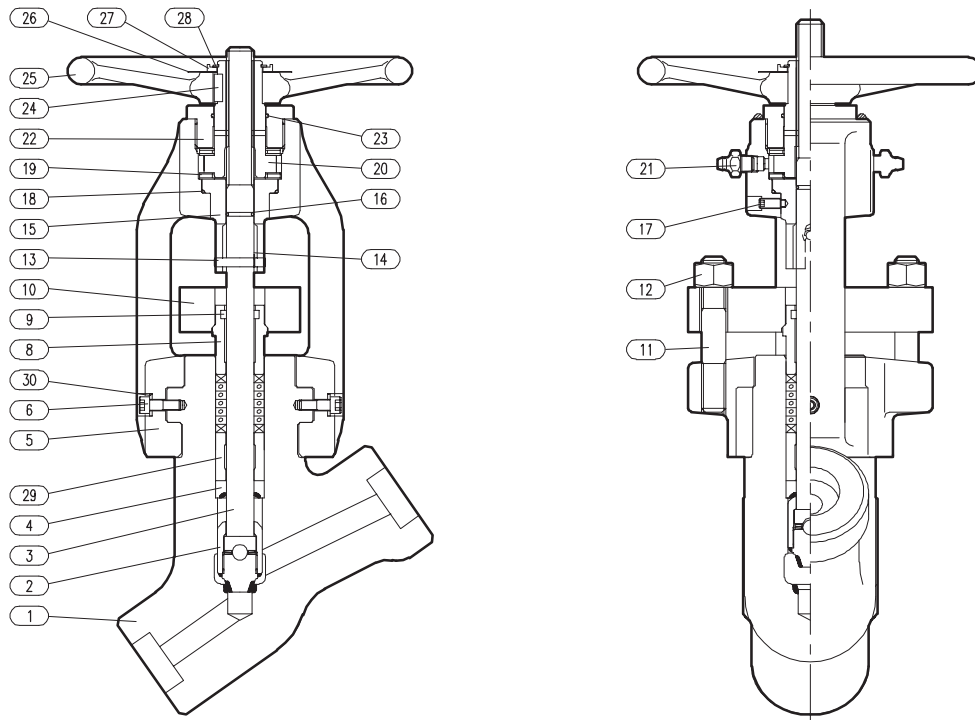
Dimensions							unit(mm)
SIZE (in.)	L	D	H	H'	HW	B	
1/2	180	8	290	305	200	22.0	
3/4	180	11	290	305	200	27.4	
1	180	14	290	305	200	34.1	
1 1/2	300	22	435	460	360	49.0	
2	300	26	435	460	360	61.5	



Forged Steel Y-Globe Valve

Class 4500

Non Bonnet
Socket Welding Ends



Specification of valve materials

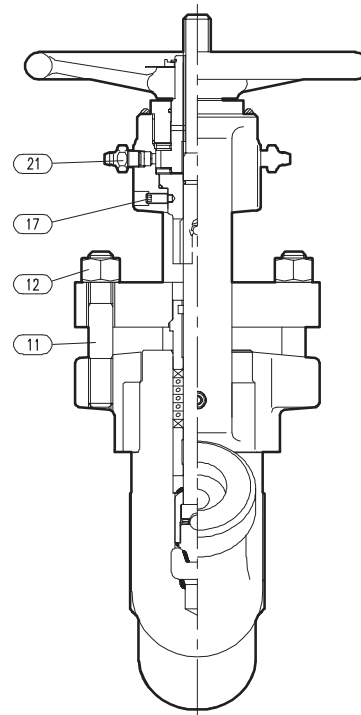
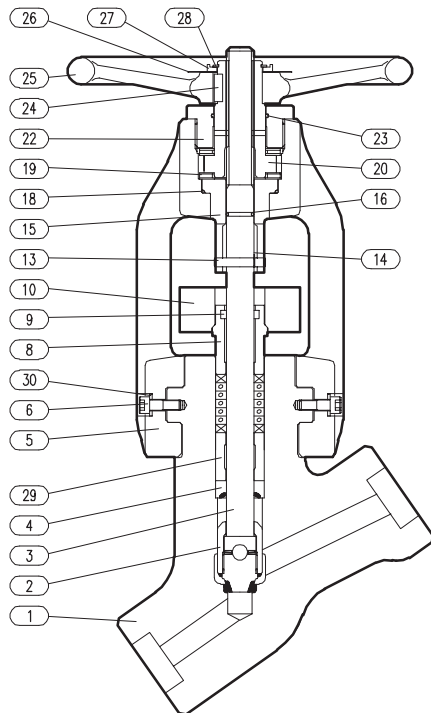
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	DISC	1 SET	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
3	STEM	1	Stainless Steel						
4	BACKSEAT	1	Stainless Steel						
5	YOKE	1	Carbon Steel						
6	LOCK BOLT	2	Stainless Steel						
7	GLAND PACKING	1 SET	Braided & Die-Formed GRAPHITE						
8	GLAND	1 SET	Stainless Steel						
9	GLAND GUIDE	1	Die-Formed GRAPHITE						
10	GLAND FLANGE	1	Carbon Steel						
11	GLAND STUD	2	Stainless Steel						
12	GLAND STUD NUT	2	Carbon Steel						
13	GUIDE PIN	1	Stainless Steel						
14	SNAP RING	1	STEEL						
15	GUIDE	1	Stainless Steel						
16	STEM O-RING	1	NBR						



Forged Steel Y-Globe Valve

Class 4500

Non Bonnet
Socket Welding Ends



Specification of valve materials

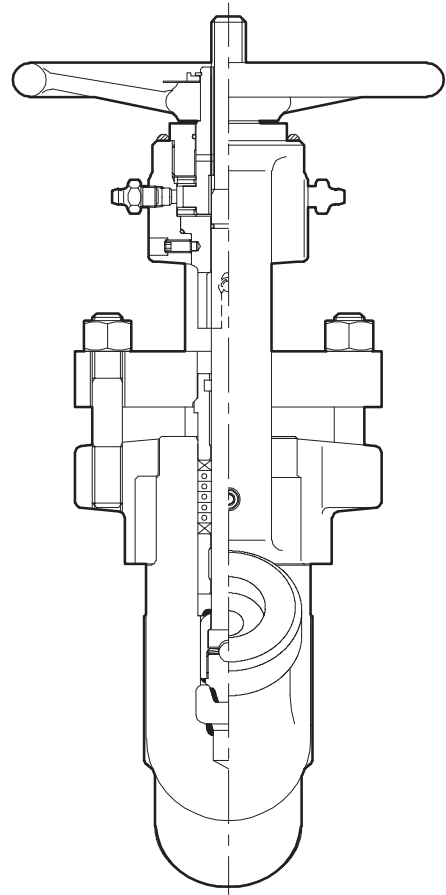
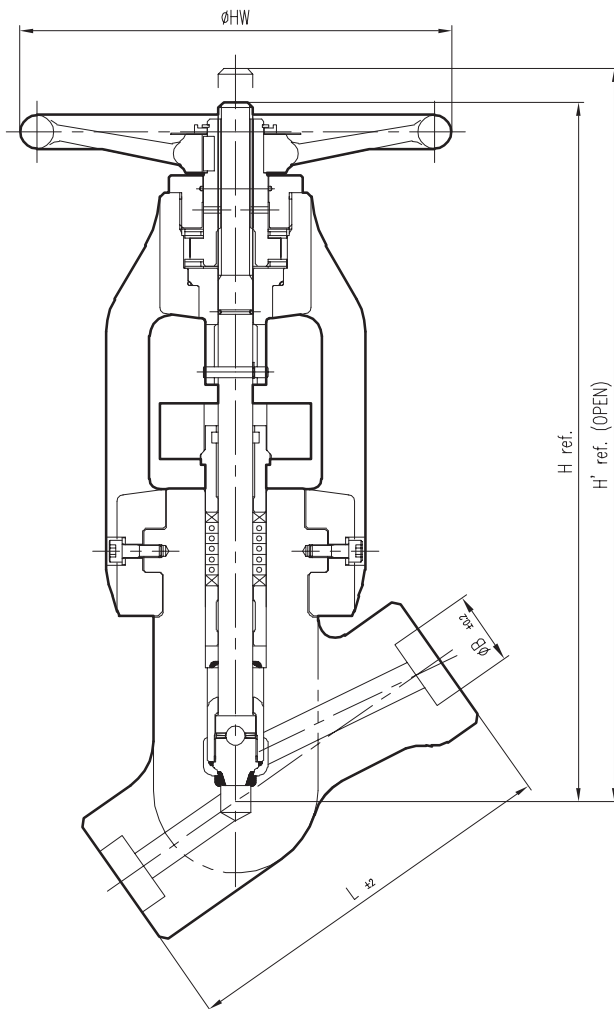
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)
17	SET SCREW	2	Stainless Steel
18	GUIDE O-RING	1	NBR
19	THRUST BEARING	2	BEARING STEEL
20	SLEEVE	1	COPPER ALLOY
21	GREASE NIPPLE	1	STEEL
22	SLEEVE NUT	1	Carbon Steel
23	SLEEVE O-RING	1	NBR
24	HANDWHEEL KEY	1	STEEL
25	HANDWHEEL	1	CAST IRON
26	NAMEPLATE	1	ALLUMINUM/S.STEEL
27	SNAP RING GUIDE	1	Carbon Steel
28	SNAP RING	1	STEEL
29	SPACER	2	Stainless Steel
30	SPRING WASHER	2	STEEL



Forged Steel Y-Globe Valve

Class 4500

Non Bonnet
Socket Welding Ends



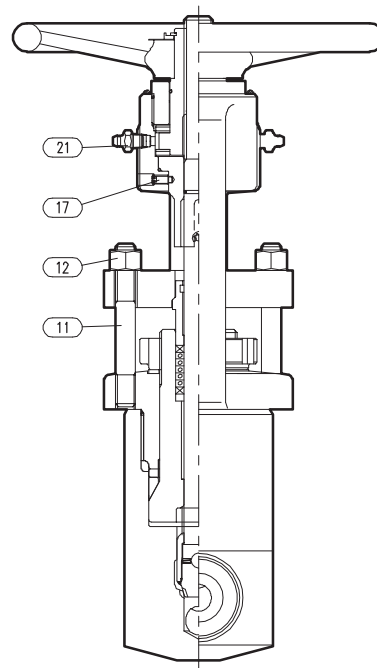
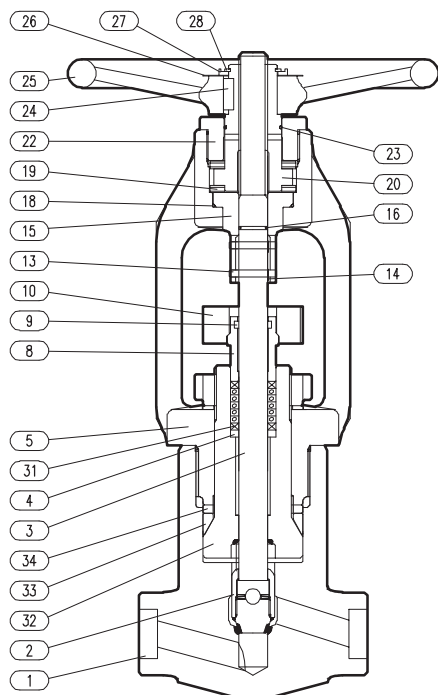
Dimensions							unit(mm)
SIZE (in.)	L	D	H	H'	HW	B	
1/2	180	8	324	340	200	22.0	
3/4	180	11	324	340	200	27.4	
1	180	14	324	340	200	34.1	
1 1/2	300	22	500	525	360	49.0	
2	300	26	500	525	360	61.5	



Forged Steel Globe Valve

Class 1500

Pressure Seal Bonnet
Socket Welding Ends



Specification of valve materials

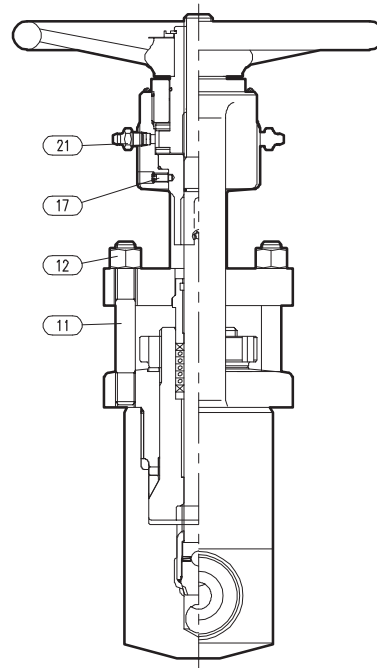
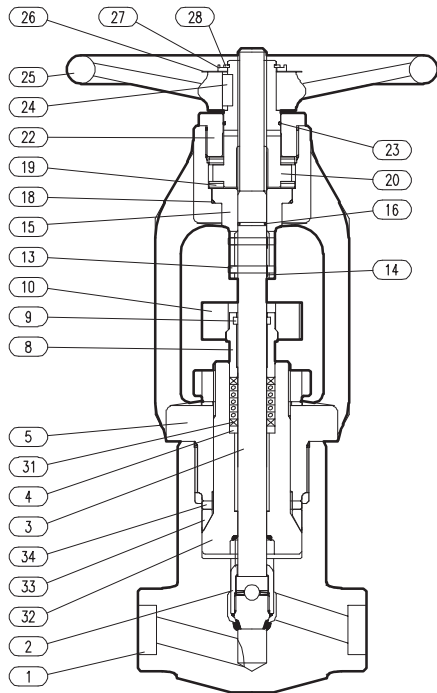
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	DISC	1 SET	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
3	STEM	1	Stainless Steel						
5	YOKE	1	Carbon Steel						
7	GLAND PACKING	1 SET	Braided & Die-Formed GRAPHITE						
8	GLAND	1 SET	Stainless Steel						
9	GLAND GUIDE	1	Die-Formed GRAPHITE						
10	GLAND FLANGE	1	Carbon Steel						
11	GLAND STUD	2	Stainless Steel						
12	GLAND STUD NUT	2	Carbon Steel						
13	GUIDE PIN	1	Stainless Steel						
14	SNAP RING	1	STEEL						
15	GUIDE	1	Stainless Steel						
16	STEM O-RING	1	NBR						
17	SET SCREW	2	Stainless Steel						



Forged Steel Globe Valve

Class 1500

Pressure Seal Bonnet
Socket Welding Ends



Specification of valve materials

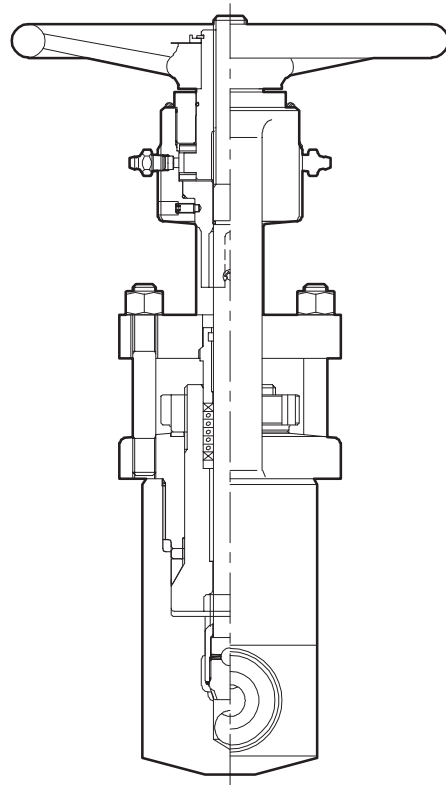
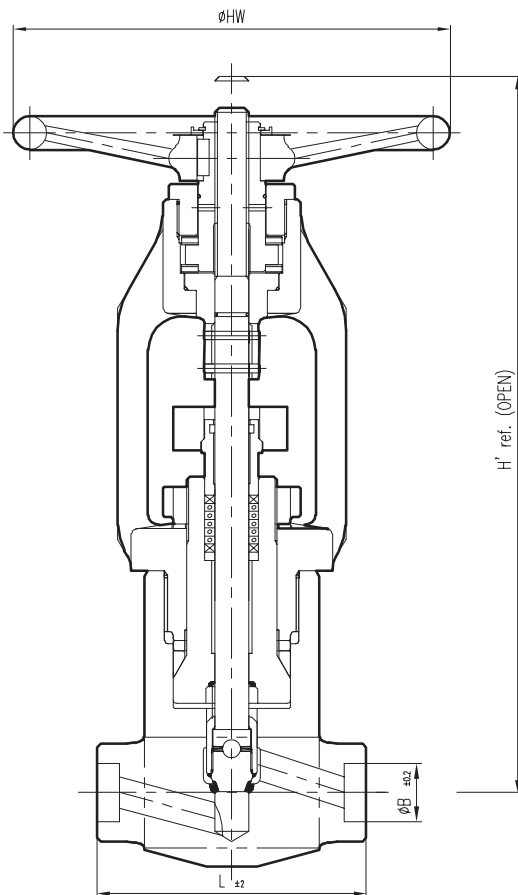
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
18	GUIDE O-RING	1	NBR						
19	THRUST BEARING	2	BEARING STEEL						
20	SLEEVE	1	COPPER ALLOY						
21	GREASE NIPPLE	1	STEEL						
22	SLEEVE NUT	1	Carbon Steel						
23	SLEEVE O-RING	1	NBR						
24	HANDWHEEL KEY	1	STEEL						
25	HANDWHEEL	1	CAST IRON						
26	NAMEPLATE	1	ALLUMINUM/S.STEEL						
27	SNAP RING GUIDE	1	Carbon Steel						
28	SNAP RING	1	STEEL						
31	PACKING WASHER	1	Stainless Steel						
31	BONNET	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
31	SEALRING	1	SOFT IRON						
31	HOLD RING	1	Carbon Steel						



Forged Steel Globe Valve

Class 1500

Pressure Seal Bonnet
Socket Welding Ends



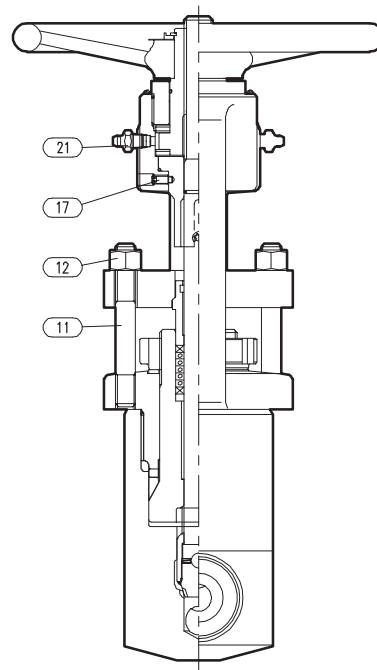
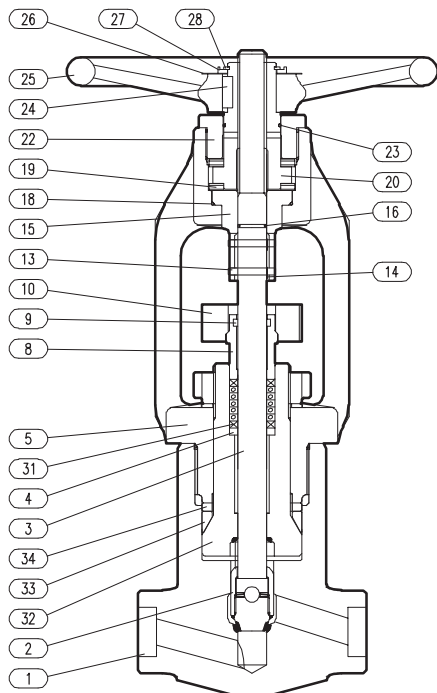
Dimensions					
SIZE (in.)	L	D	H'	HW	B
1/2	130	12	355	200	22.0
3/4	130	16	355	200	27.4
1	150	20	420	260	34.1
1 1/2	220	30	535	360	49.0
2	260	38	595	410	61.5



Forged Steel Globe Valve

Class 2500

Pressure Seal Bonnet
Socket Welding Ends



Specification of valve materials

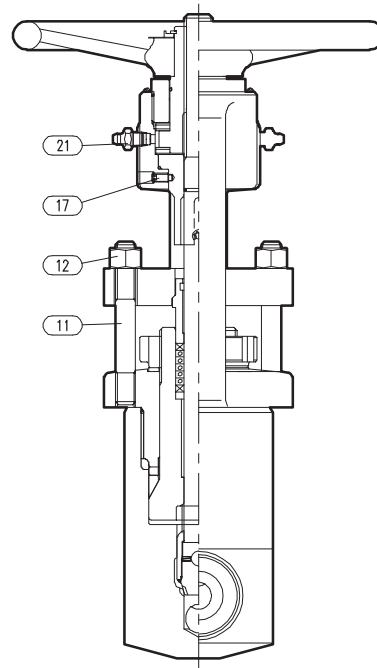
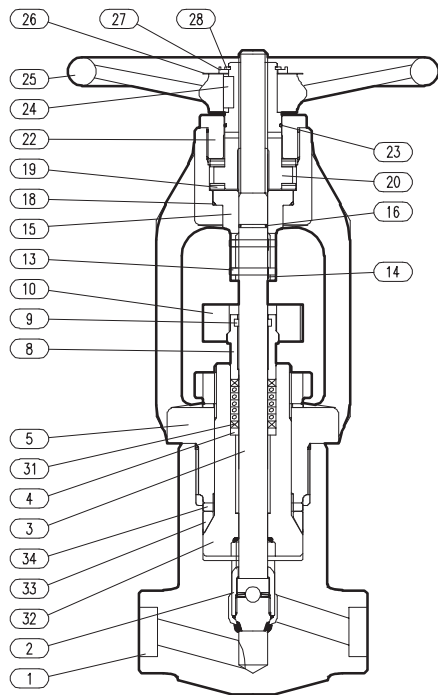
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	DISC	1 SET	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
3	STEM	1	Stainless Steel						
5	YOKE	1	Carbon Steel						
7	GLAND PACKING	1 SET	Braided & Die-Formed GRAPHITE						
8	GLAND	1 SET	Stainless Steel						
9	GLAND GUIDE	1	Die-Formed GRAPHITE						
10	GLAND FLANGE	1	Carbon Steel						
11	GLAND STUD	2	Stainless Steel						
12	GLAND STUD NUT	2	Carbon Steel						
13	GUIDE PIN	1	Stainless Steel						
14	SNAP RING	1	STEEL						
15	GUIDE	1	Stainless Steel						
16	STEM O-RING	1	NBR						
17	SET SCREW	2	Stainless Steel						



Forged Steel Globe Valve

Class 2500

Pressure Seal Bonnet
Socket Welding Ends



Specification of valve materials

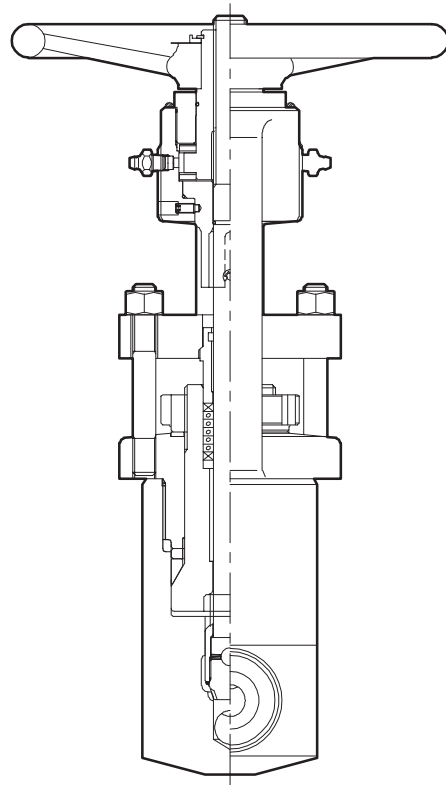
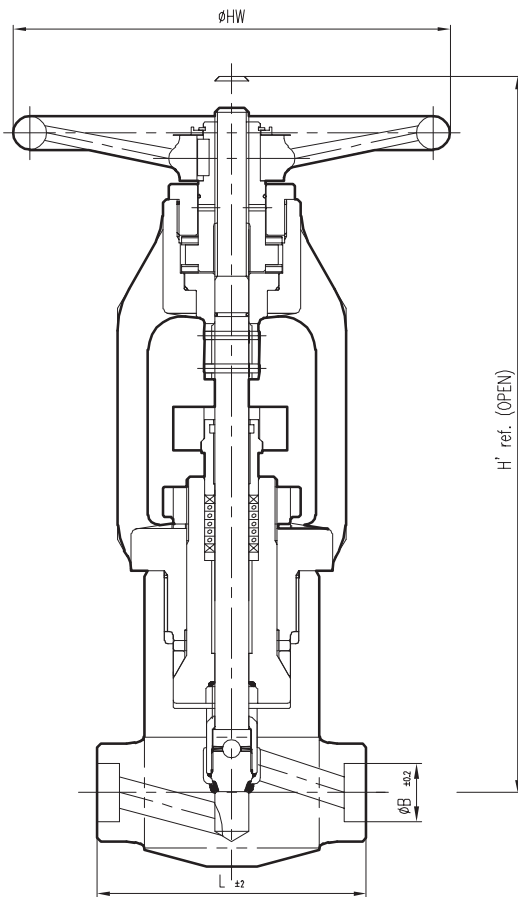
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
18	GUIDE O-RING	1	NBR						
19	THRUST BEARING	2	BEARING STEEL						
20	SLEEVE	1	COPPER ALLOY						
21	GREASE NIPPLE	1	STEEL						
22	SLEEVE NUT	1	Carbon Steel						
23	SLEEVE O-RING	1	NBR						
24	HANDWHEEL KEY	1	STEEL						
25	HANDWHEEL	1	CAST IRON						
26	NAMEPLATE	1	ALUMINUM/S.STEEL						
27	SNAP RING GUIDE	1	Carbon Steel						
28	SNAP RING	1	STEEL						
31	PACKING WASHER	1	Stainless Steel						
31	BONNET	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
31	SEALRING	1	SOFT IRON						
31	HOLD RING	1	Carbon Steel						



Forged Steel Globe Valve

Class 2500

Pressure Seal Bonnet
Socket Welding Ends



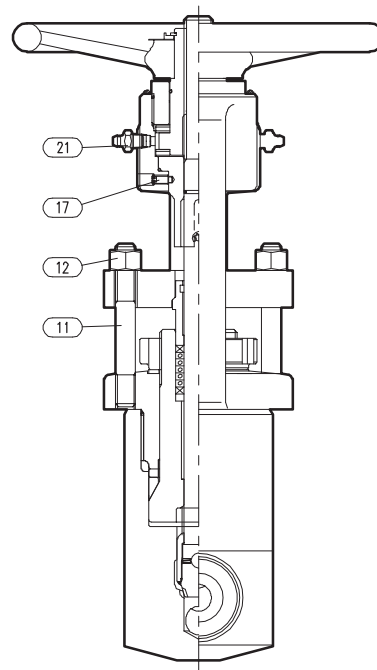
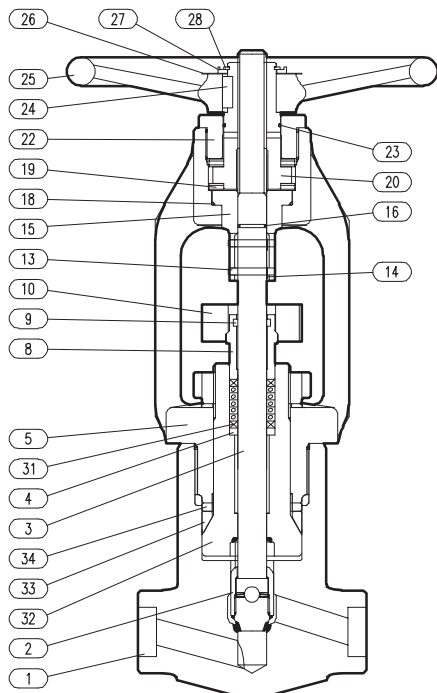
Dimensions					
SIZE (in.)	L	D	H'	HW	B
1/2	140	10	365	200	22.0
3/4	140	14	365	200	27.4
1	160	18	420	260	34.1
1 1/2	240	28	545	360	49.0
2	280	35	610	410	61.5



Forged Steel Globe Valve

Class 4500

Pressure Seal Bonnet
Socket Welding Ends



Specification of valve materials

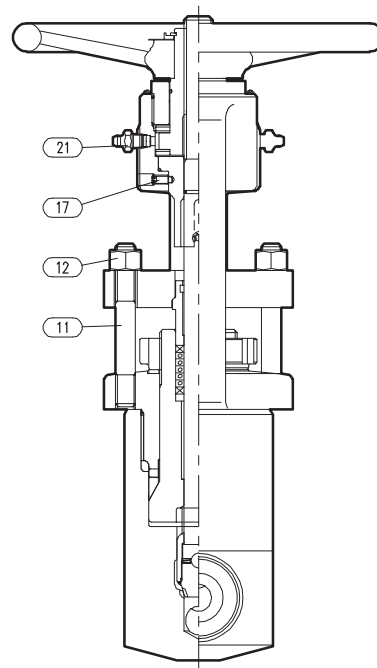
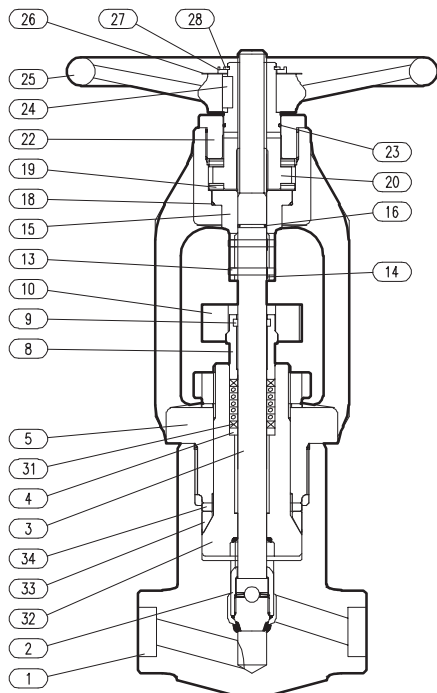
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	DISC	1 SET	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
3	STEM	1	Stainless Steel						
5	YOKE	1	Carbon Steel						
7	GLAND PACKING	1 SET	Braided & Die-Formed GRAPHITE						
8	GLAND	1 SET	Stainless Steel						
9	GLAND GUIDE	1	Die-Formed GRAPHITE						
10	GLAND FLANGE	1	Carbon Steel						
11	GLAND STUD	2	Stainless Steel						
12	GLAND STUD NUT	2	Carbon Steel						
13	GUIDE PIN	1	Stainless Steel						
14	SNAP RING	1	STEEL						
15	GUIDE	1	Stainless Steel						
16	STEM O-RING	1	NBR						
17	SET SCREW	2	Stainless Steel						



Forged Steel Globe Valve

Class 4500

Pressure Seal Bonnet
Socket Welding Ends



Specification of valve materials

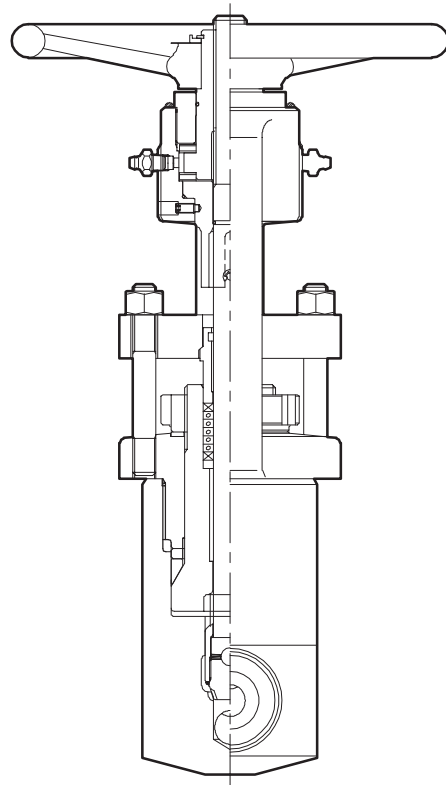
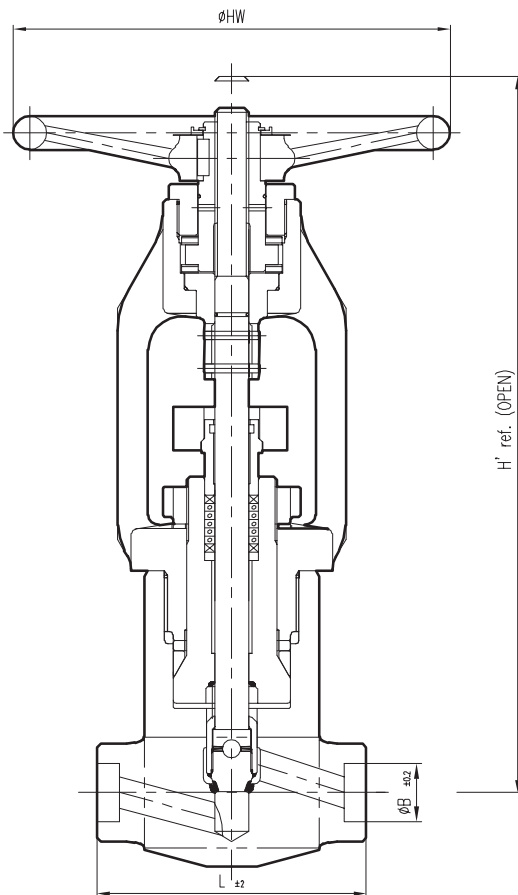
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
18	GUIDE O-RING	1	NBR						
19	THRUST BEARING	2	BEARING STEEL						
20	SLEEVE	1	COPPER ALLOY						
21	GREASE NIPPLE	1	STEEL						
22	SLEEVE NUT	1	Carbon Steel						
23	SLEEVE O-RING	1	NBR						
24	HANDWHEEL KEY	1	STEEL						
25	HANDWHEEL	1	CAST IRON						
26	NAMEPLATE	1	ALLUMINUM/S.STEEL						
27	SNAP RING GUIDE	1	Carbon Steel						
28	SNAP RING	1	STEEL						
31	PACKING WASHER	1	Stainless Steel						
32	BONNET	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
33	SEALRING	1	SOFT IRON						
34	HOLD RING	1	Carbon Steel						



Forged Steel Globe Valve

Class 4500

Pressure Seal Bonnet
Socket Welding Ends



Dimensions					unit(mm)
SIZE (in.)	L	D	H'	HW	B
1/2	180	8	360	200	22.0
3/4	180	11	360	200	27.4
1	180	14	360	200	34.1
1 1/2	300	22	570	360	49.0
2	300	26	570	360	61.5

FORGED GATE VALVE

- **Forged Steel Gate Valve**

Class 600 Bolted Bonnet Socket Welding Ends

Class 1500 Bolted Bonnet Socket Welding Ends

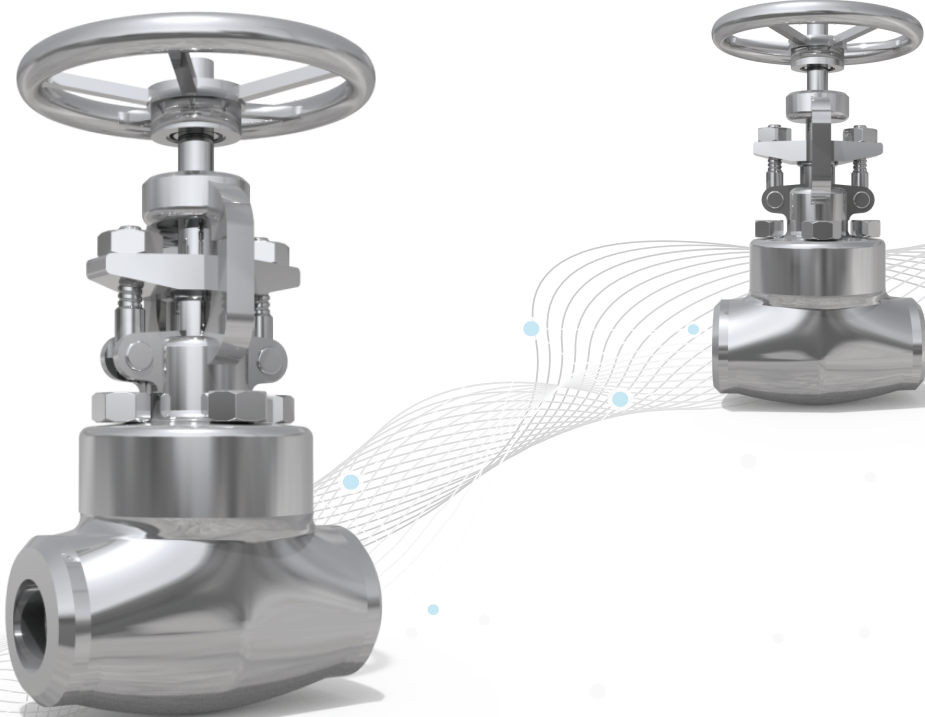
Class 2500 Bolted Bonnet Socket Welding Ends

FORGED GATE VALVE

대명의 단강 게이트 밸브는 소형 차단용 밸브로서 여러 산업분야에 매우 다양한 형태로 널리 사용되는 밸브이다. 게이트라는 디스크가 시트면과 마찰하면서 열리거나 닫힘으로써 유체 흐름을 제어하는데, 제어의 주 목적은 유로의 차단 개방이다. 게이트 밸브의 종류는 게이트의 씰링 메카니즘에 따라 구분되는데 다음과 같다. 웨지 게이트, 후렉시블 게이트, 페러럴 슬라이드 게이트로 분류된다. 게이트 밸브의 몸체 구성방식은 본넬트의 구조에 따라 볼티드 본넬트, 프레스 쉘 본넬트 형이 있다. 미국 밸브 기준 규격인 ANSI B16.34에 의한 압력 온도기준으로 대명의 단강 게이트 밸브는 4500#까지 제작가능하고 600#이하의 게이트 밸브는 대부분 볼티드 본넬트형이고 900#급 이상은 용접형 또는 프레스 쉘 형식이 많이 쓰인다. 게이트 밸브의 압력-온도 기준은 ANSI B 16.34기준에 따라 제작하고, 밸브 크기로는 2"(50A)까지 제작이 가능하다.

대명의 단강 게이트 밸브는 아래와 같은 특징을 갖는다.

- Low flow resistance coefficient
- Low pressure drop
- Large size valves with short end to end are available
- Overcome the thermal expansion problems due to the increased temperature with applying the flexible wedge disc or parallel slide disc for the high temperature conditions
- Excellent performance of open/close operations

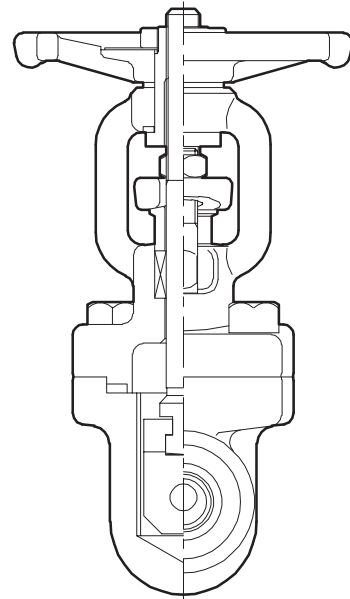
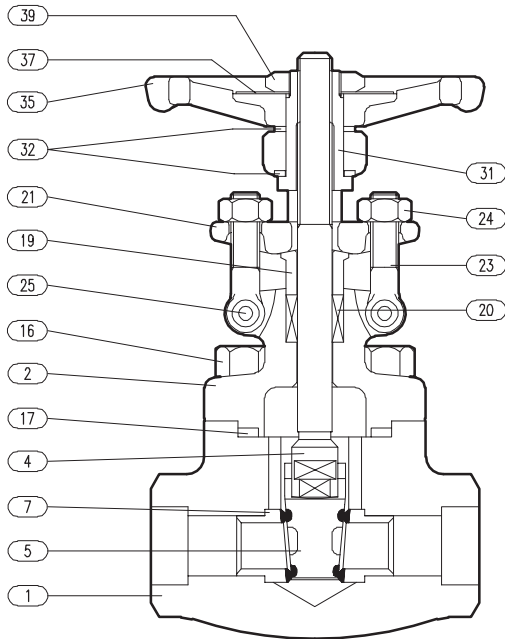




Forged Steel Gate Valve

Class 600

Bolted Bonnet
Socket Welding Ends



Specification of valve materials

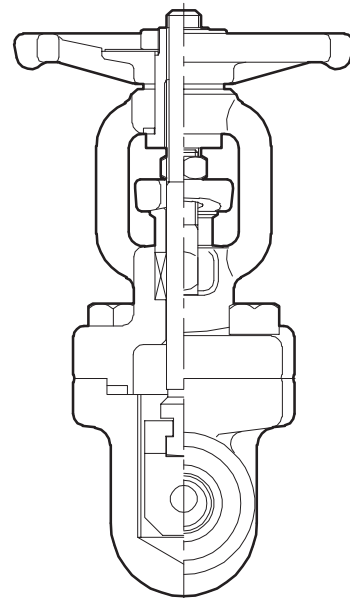
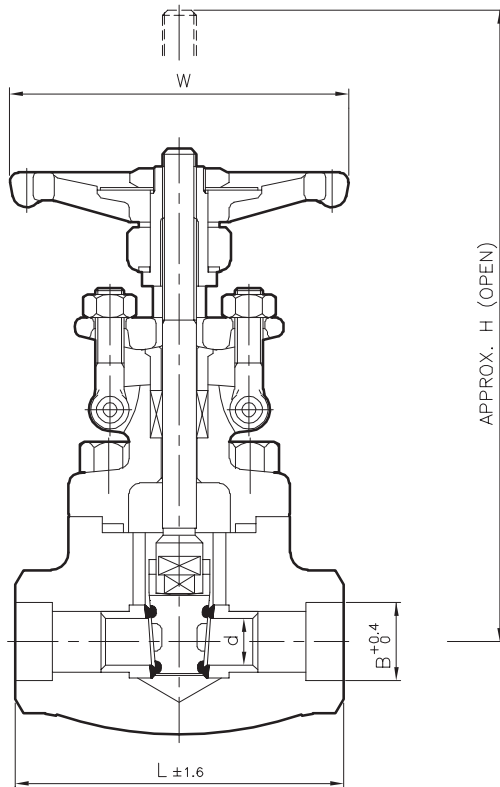
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	BONNET	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
4	STEM	1	Stainless Steel						
5	DISC	1	A743-CA40			A351-CF8	A351-CF8M		
7	SEAT RING	2	Stainless Steel						
16	BONNET BOLT	4	Ferritic Steel			Stainless Steel			
17	GASKET	1	SS304+GRAPHITE						
19	GLAND	1	Stainless Steel						
20	GLAND PACKING	1 SET	CARBON FIBER + GRAPHITE						
21	GLAND FLANGE	1	Carbon Steel			Stainless Steel			
23	GLAND BOLT	2	Stainless Steel						
24	GLAND BOLT NUT	2	Carbon Steel			Stainless Steel			
25	GLAND BOLT FIN	2	Stainless Steel						
31	SLEEVE	1	Stainless Steel						
32	SLEEVE WASHER	2	Stainless Steel						
35	HANDWHEEL	1	Malleable Iron						
37	NAMEPLATE	1	Stainless Steel						
39	HANDWHEEL NUT	1	Carbon Steel						
42	TAGPATE	1	Stainless Steel						



Forged Steel Gate Valve

Class 600

Bolted Bonnet
Socket Welding Ends



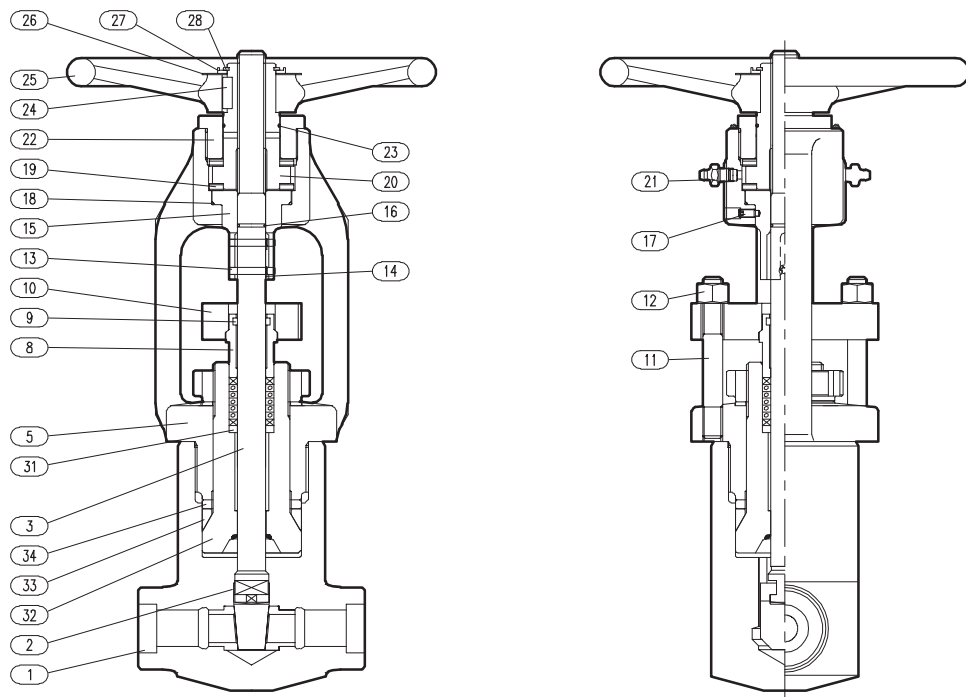
Dimensions					
SIZE (DN)	L	H	d	W	B
15	79	154	13.0	100	21.80
20	92	154	13.0	100	27.20
25	111	193	19.0	125	33.90
32	115	218	25.5	155	42.70
40	120	246	30.2	155	48.80
50	140	316	36.5	180	61.20



Forged Steel Gate Valve

Class 1500

Pressure Seal Bonnet
Socket Welding Ends



Specification of valve materials

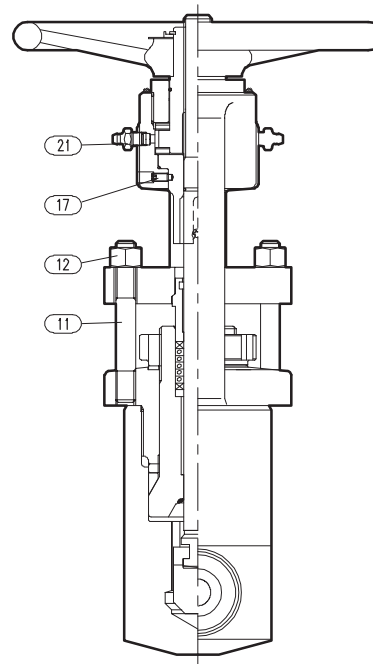
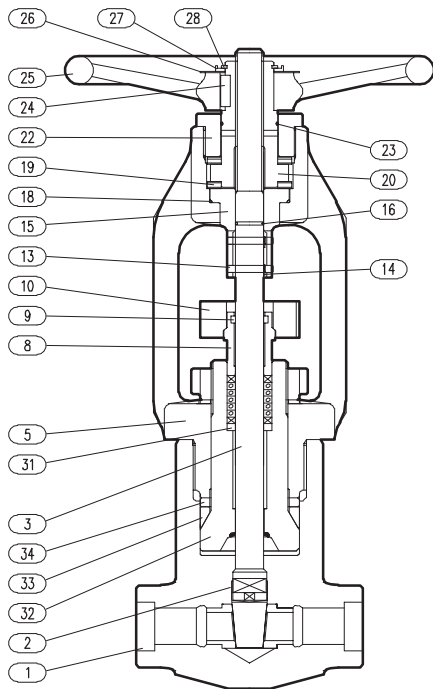
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	DISC	1 SET	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
3	STEM	1	Stainless Steel						
5	YOKE	1	Carbon Steel						
7	GLAND PACKING	1 SET	Braided & Die-Formed GRAPHITE						
8	GLAND	1 SET	Stainless Steel						
9	GLAND GUIDE	1	Die-Formed GRAPHITE						
10	GLAND FLANGE	1	Carbon Steel						
11	GLAND STUD	2	Stainless Steel						
12	GLAND STUD NUT	2	Carbon Steel						
13	GUIDE PIN	1	Stainless Steel						
14	SNAP RING	1	STEEL						
15	GUIDE	1	Stainless Steel						
16	STEM O-RING	1	NBR						
17	SET SCREW	2	Stainless Steel						



Forged Steel Gate Valve

Class 1500

Pressure Seal Bonnet
Socket Welding Ends



Specification of valve materials

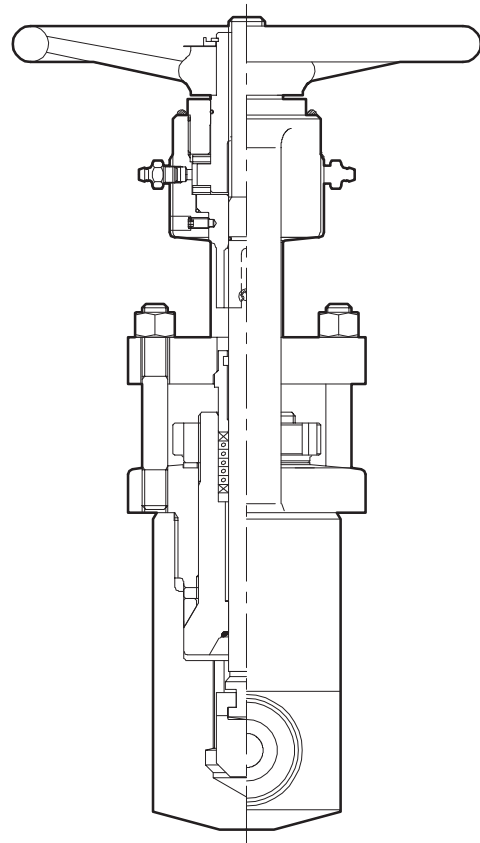
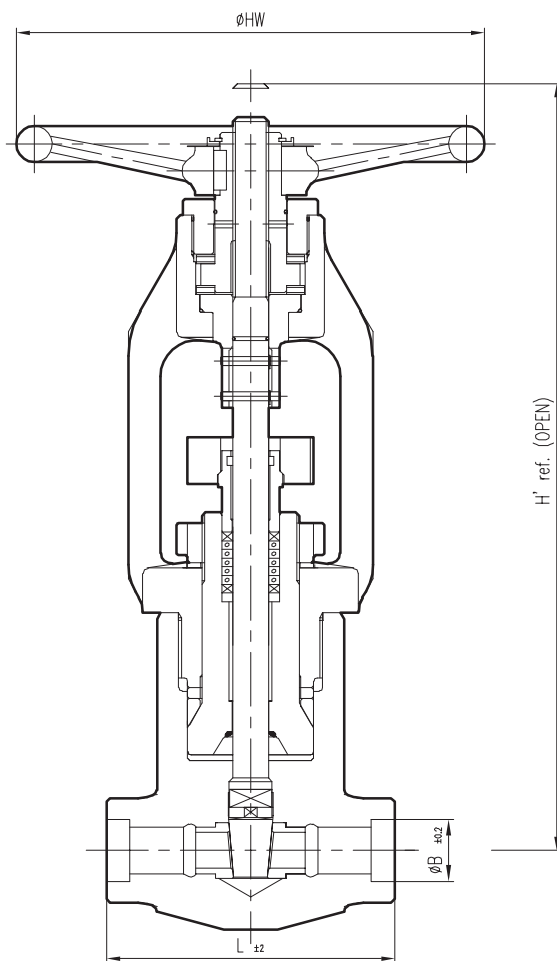
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
18	GUIDE O-RING	1	NBR						
19	THRUST BEARING	2	BEARING STEEL						
20	SLEEVE	1	COPPER ALLOY						
21	GREASE NIPPLE	1	STEEL						
22	SLEEVE NUT	1	Carbon Steel						
23	SLEEVE O-RING	1	NBR						
24	HANDWHEEL KEY	1	STEEL						
25	HANDWHEEL	1	CAST IRON						
26	NAMEPLATE	1	ALLUMINUM/S.STEEL						
27	SNAP RING GUIDE	1	Carbon Steel						
28	SNAP RING	1	STEEL						
31	PACKING WASHER	1	Stainless Steel						
32	BONNET	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
33	SEALRING	1	SOFT IRON						
34	HOLD RING	1	Carbon Steel						



Forged Steel Gate Valve

Class 1500

Pressure Seal Bonnet
Socket Welding Ends



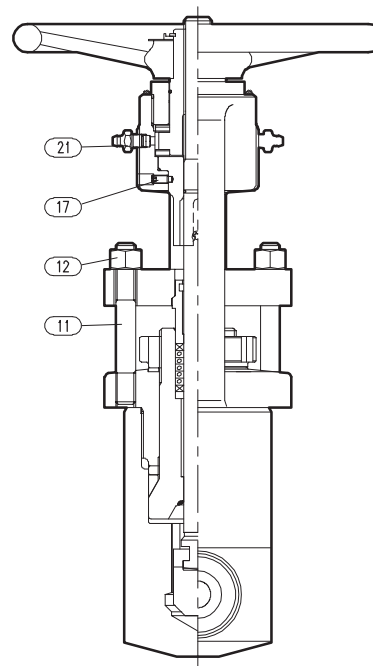
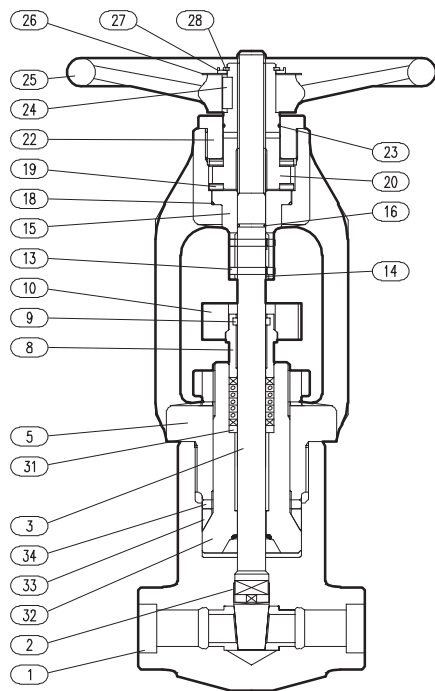
Dimensions					
SIZE (in.)	L	D	H'	HW	B
1/2	130	12	340	170	22.0
3/4	130	16	340	170	27.4
1	150	20	360	200	34.1
1 1/2	200	32	460	260	49.0
2	240	40	540	300	61.5



Forged Steel Gate Valve

Class 2500

Pressure Seal Bonnet
Socket Welding Ends



Specification of valve materials

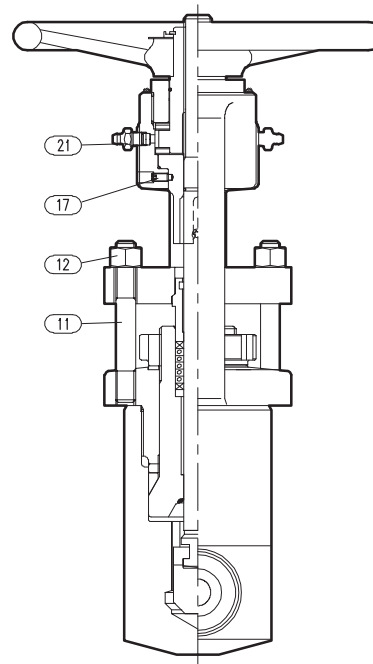
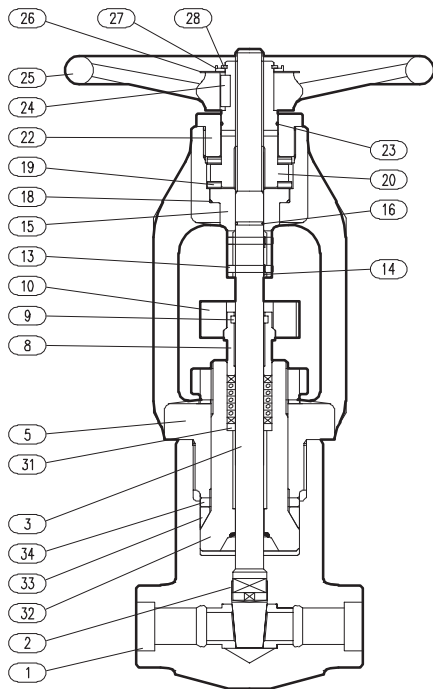
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	DISC	1 SET	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
3	STEM	1	Stainless Steel						
5	YOKE	1	Carbon Steel						
7	GLAND PACKING	1 SET	Braided & Die-Formed GRAPHITE						
8	GLAND	1 SET	Stainless Steel						
9	GLAND GUIDE	1	Die-Formed GRAPHITE						
10	GLAND FLANGE	1	Carbon Steel						
11	GLAND STUD	2	Stainless Steel						
12	GLAND STUD NUT	2	Carbon Steel						
13	GUIDE PIN	1	Stainless Steel						
14	SNAP RING	1	STEEL						
15	GUIDE	1	Stainless Steel						
16	STEM O-RING	1	NBR						
17	SET SCREW	2	Stainless Steel						



Forged Steel Gate Valve

Class 2500

Pressure Seal Bonnet
Socket Welding Ends



Specification of valve materials

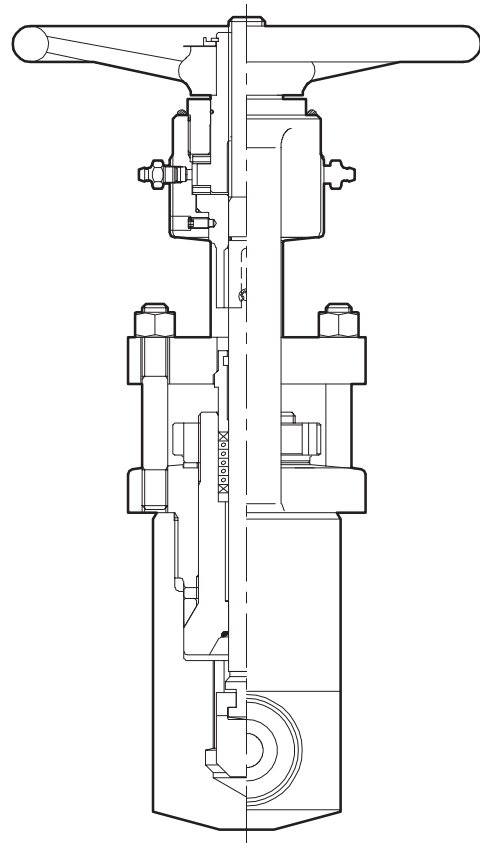
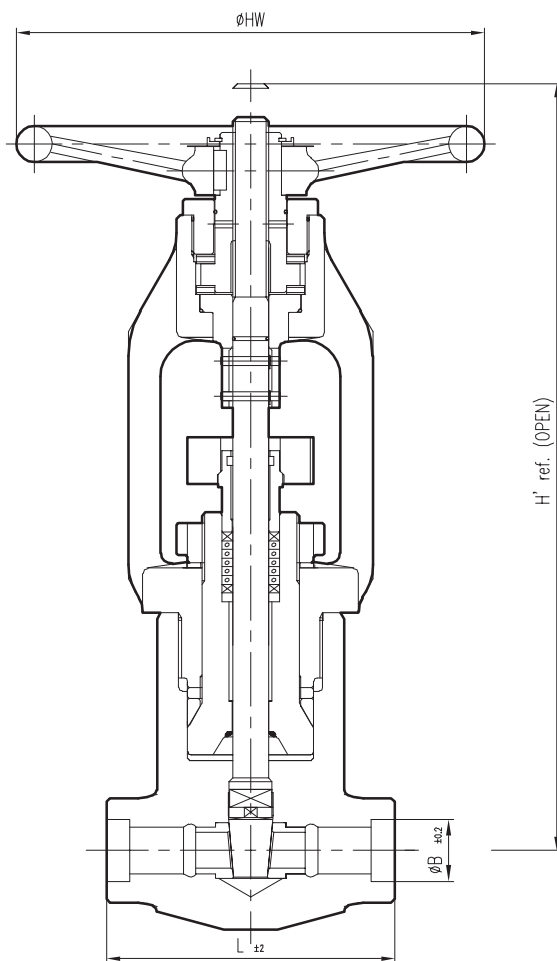
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
18	GUIDE O-RING	1	NBR						
19	THRUST BEARING	2	BEARING STEEL						
20	SLEEVE	1	COPPER ALLOY						
21	GREASE NIPPLE	1	STEEL						
22	SLEEVE NUT	1	Carbon Steel						
23	SLEEVE O-RING	1	NBR						
24	HANDWHEEL KEY	1	STEEL						
25	HANDWHEEL	1	CAST IRON						
26	NAMEPLATE	1	ALLUMINUM/S.STEEL						
27	SNAP RING GUIDE	1	Carbon Steel						
28	SNAP RING	1	STEEL						
31	PACKING WASHER	1	Stainless Steel						
32	BONNET	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
33	SEALRING	1	SOFT IRON						
34	HOLD RING	1	Carbon Steel						



Forged Steel Gate Valve

Class 2500

Pressure Seal Bonnet
Socket Welding Ends



Dimensions					
SIZE (in.)	L	D	H'	HW	B
1/2	160	19	370	260	22.0
3/4	160	19	370	260	27.4
1	160	19	370	260	34.1
1 1/2	280	35	600	410	49.0
2	280	35	600	410	61.5

FORGED CHECK VALVE

- **Forged Steel Lift Check Valve**

Class 600 Bolted Cover Socket Welding Ends

Class 600 Bolted Cover Socket Welding Ends(Y-Lift)

Class 1500 Pressure Seal Cover Socket Welding Ends

Class 1500 Pressure Seal Cover Socket Welding Ends(Y-Lift)

Class 2500 Pressure Seal Cover Socket Welding Ends

Class 2500 Pressure Seal Cover Socket Welding Ends(Y-Lift)

Class 4500 Pressure Seal Cover Socket Welding Ends

Class 4500 Pressure Seal Cover Socket Welding Ends(Y-Lift)

FORGED CHECK VALVE

대명 단강 체크 밸브는 배관계통 구성에 있어서 계통의 운전 상태에 따라 자력으로 개폐하는(SELF ACTUATING) 밸브이다. 체크밸브는 외양 및 작동 특성별로 스윙체크, 리프트 체크로 대별할 수 있으며 밸브 선정에 있어서 무엇보다도 중요한 밸브내의 압력 강하량의 크기문제, 체크밸브 사이의 유체흐름 속도의 문제, 밸브의 설치 위치와 누설한계 등의 문제 및 계통 특성상 체크밸브의 닫힘 시간의 문제를 고려한 후에 체크밸브의 형식을 결정하여야 한다.

스윙체크밸브(SWING CHECK VALVE)

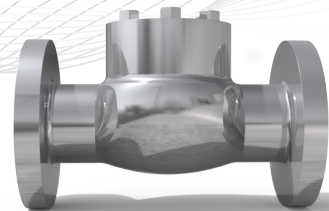
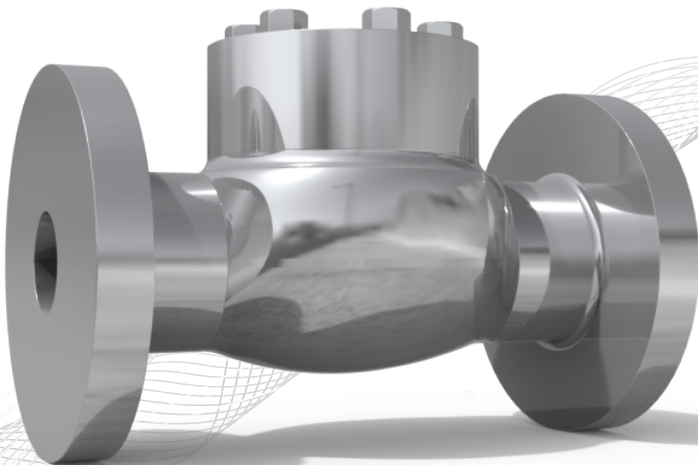
체크 밸브중에서 가장 널리 많이 쓰이고 있는 형식으로서 간단한 구조와 신뢰성 있는 동작을 특징으로 한다. 디스크와 시트의 접촉 형식은 금속 대 금속, 금속 대 탄성질의 합성고무, 금속 대 합성고무링이 삽입된 금속판으로 접촉된다. 스윙의 각도는 $0^{\circ} \sim 45^{\circ}$ 로 설계되며 수평 설치 시를 고려하여 $5^{\circ} \sim 7^{\circ}$ 만큼 전방향으로 경사되어있다. 유체의 역류에 의한 순간 닫힘 시(SLAMMING) 디스크의 운동량을 적게하여 급폐가 용이하고 수격현상을 감소시킬 수 있게 스윙의 각도는 밸브에서의 마찰로 인한 압력손실이 허용하는 범위내에서 적게 설계 하였다

리프트 체크 밸브(LIFT CHECK VALVE)

스윙 체크 밸브에 비하여 유체의 속도가 비교적 빠른 조건에서 사용하며 내누설 특성이 양호하다. 글로브 밸브의 외양과 비슷하며 디스크 모양에 따라 피스톤 형식과 볼 형태의 것이 있다.

대명의 단강 체크 밸브의 특징은 다음과 같이 요약 정리할 수 있다.

- Quick operations to reverse flow
- Little damages of disc stopper for frequent operations
- High performance with the low differential pressure without any chattering

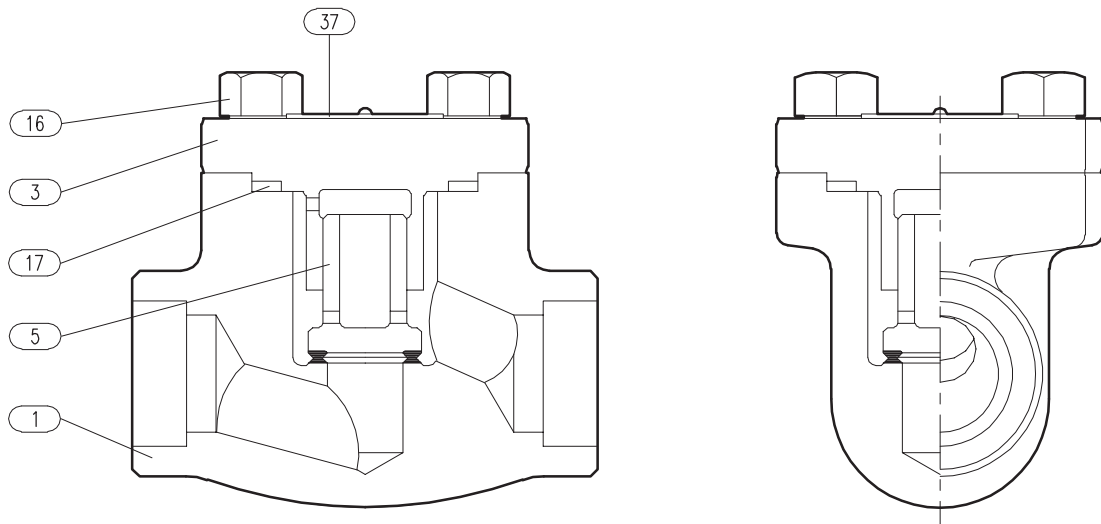
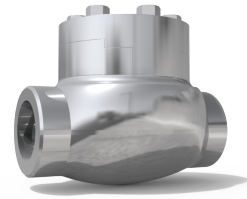




Forged Steel Lift Check Valve

Class 600

Bolted Cover
Socket Welding Ends



Specification of valve materials

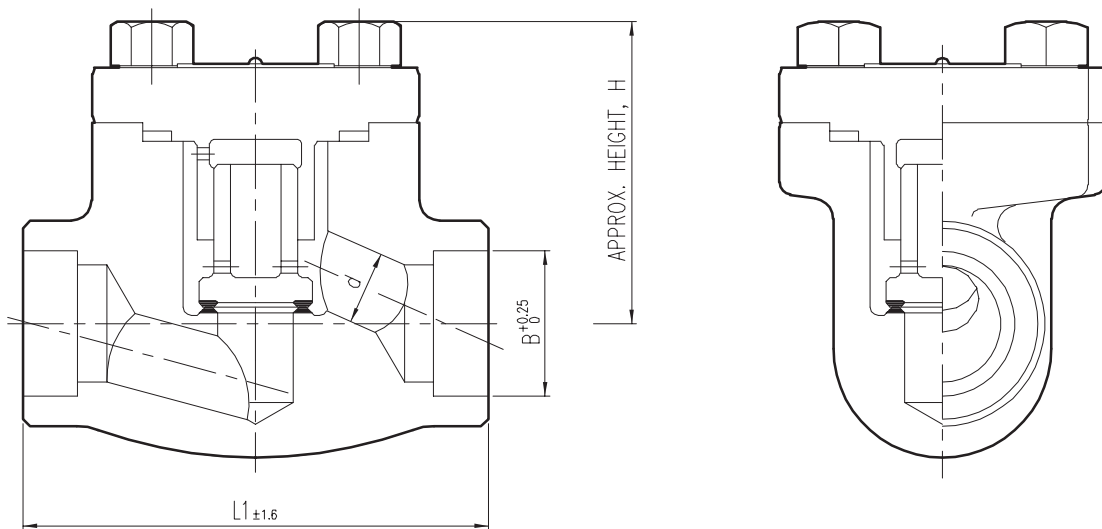
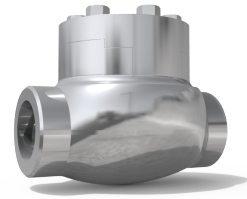
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
3	COVER	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
5	DISC	1	A276-410			A276-304		A276-316	
16	COVER BOLT	4	Stainless Steel						
17	GASKET	1	SS304+GRAPHITE						
37	MANEPATE	1	ALLUMINUM						
41	RIVET	1	BRASS						



Forged Steel Lift Check Valve

Class 600

Bolted Cover
Socket Welding Ends



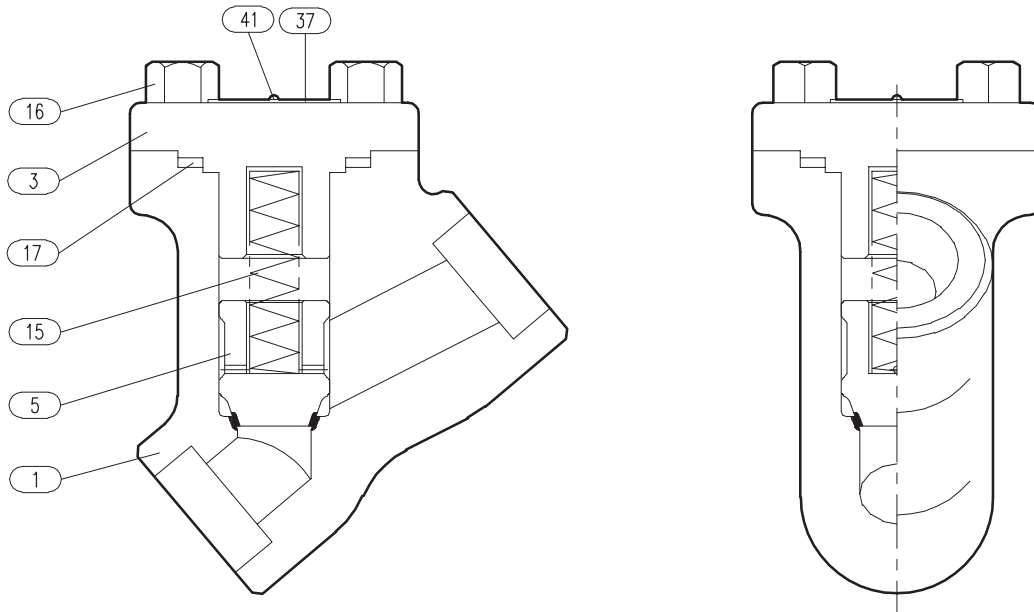
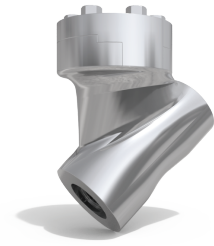
Dimensions				
SIZE (DN)	L	H	d	B
15	79	56	10.0	21.80
20	92	56	13.0	27.20
25	111	72	17.5	33.90
32	130	99	25.0	42.70
40	152	99	30.0	48.80
50	172	116	37.0	61.20



Forged Steel Lift Y-Lift Check Valve

Class 600

Bolted Cover
Socket Welding Ends



Specification of valve materials

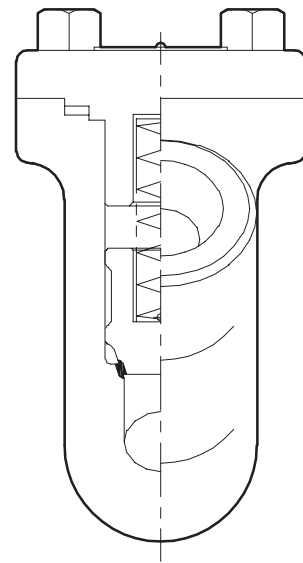
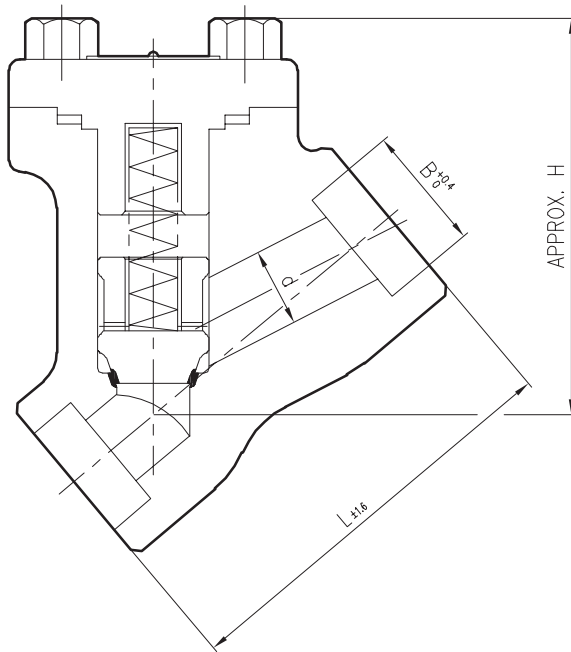
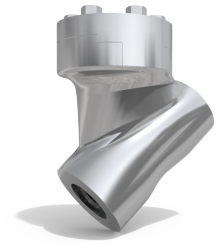
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
3	COVER	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
5	DISC	1	A276-410			A276-304		A276-316	
15	DISC SPRING	1	Stainless Steel						
16	COVER BOLT	4	Stainless Steel						
17	GASKET	1	SS304+GRAPHITE						
37	NAMEPLATE	1	ALLUMINUM						
41	RIVET	1	BRASS						



Forged Steel Lift Y-Lift Check Valve

Class 600

Bolted Cover
Socket Welding Ends



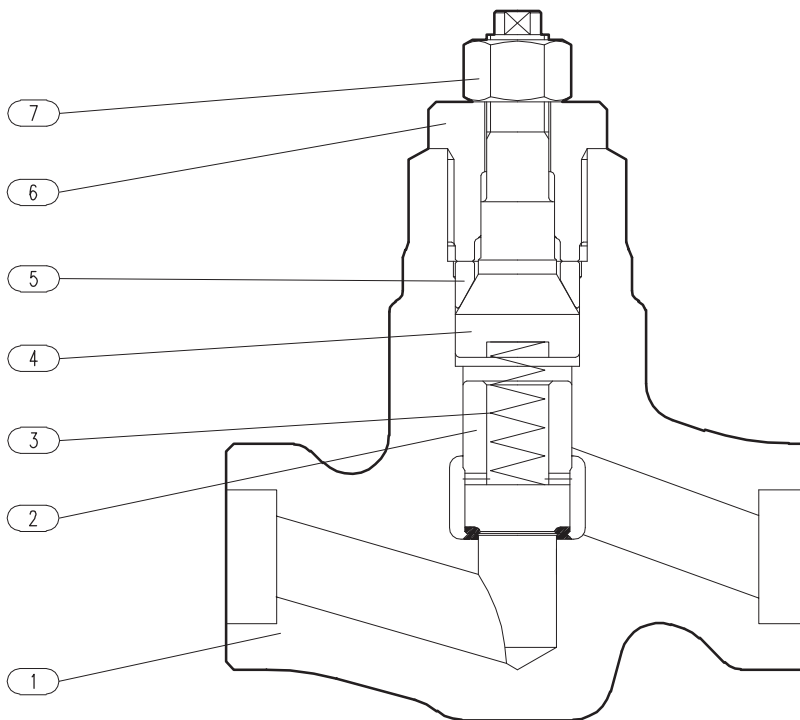
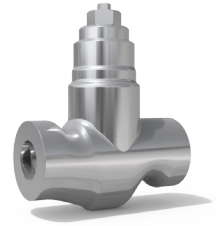
Dimensions				
SIZE (DN)	L	H	d	B
15	92	88	10.0	21.80
20	92	88	13.0	27.20
25	111	107	17.5	33.90
32	152	131	24.0	42.70
40	152	131	31.0	48.80
50	172	156	37.0	61.20



Forged Steel Lift Check Valve

Class 1500

Pressure Seal Cover
Socket Welding Ends



Specification of valve materials

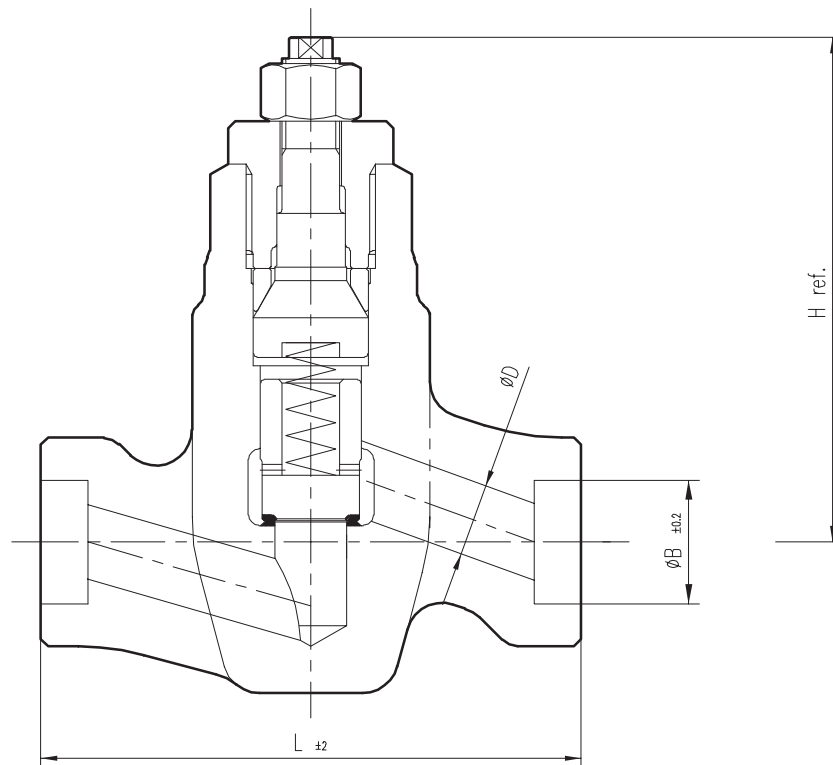
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	DISC	1	A276-410			A182-F304	A182-F304L	A182-F316	A182-F316L
3	DISC SPRING	1	INCONEL						
4	COVER	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
5	SEAL RING	1	SOFT IRON						
6	RETAINER	1	A105	Low Alloy Steel		Stainless Steel			
7	NUT	1	Carbon Steel						



Forged Steel Lift Check Valve

Class 1500

Pressure Seal Cover
Socket Welding Ends



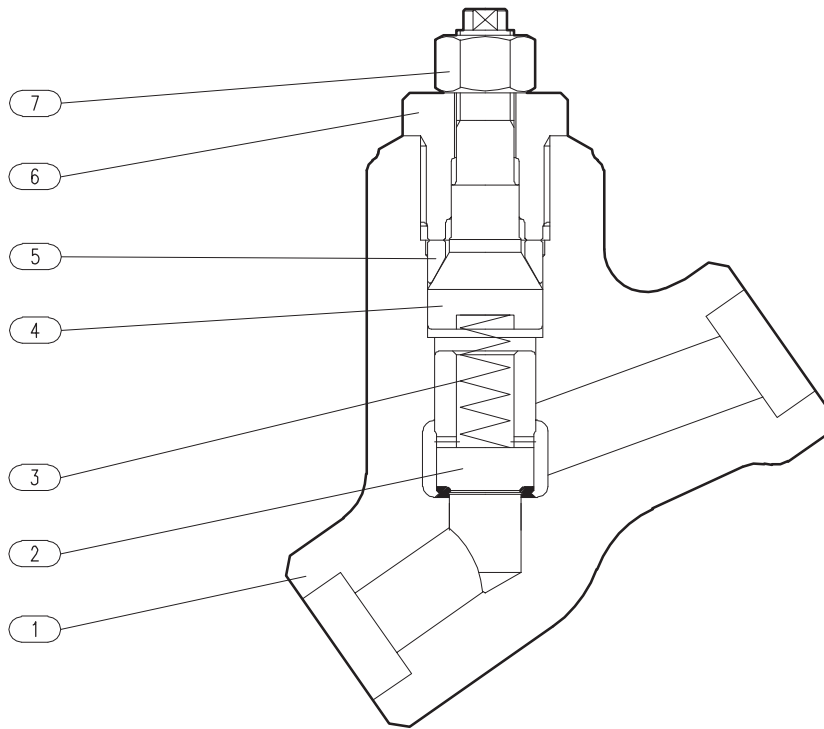
Dimensions				unit(mm)
SIZE (in.)	L	D	H	B
1/2	130	12	125	22.0
3/4	130	16	125	27.4
1	150	20	140	34.1
1 1/2	220	30	205	49.0
2	260	38	220	61.5



Forged Steel Lift Y-Lift Check Valve

Class 1500

Pressure Seal Cover
Socket Welding Ends



Specification of valve materials

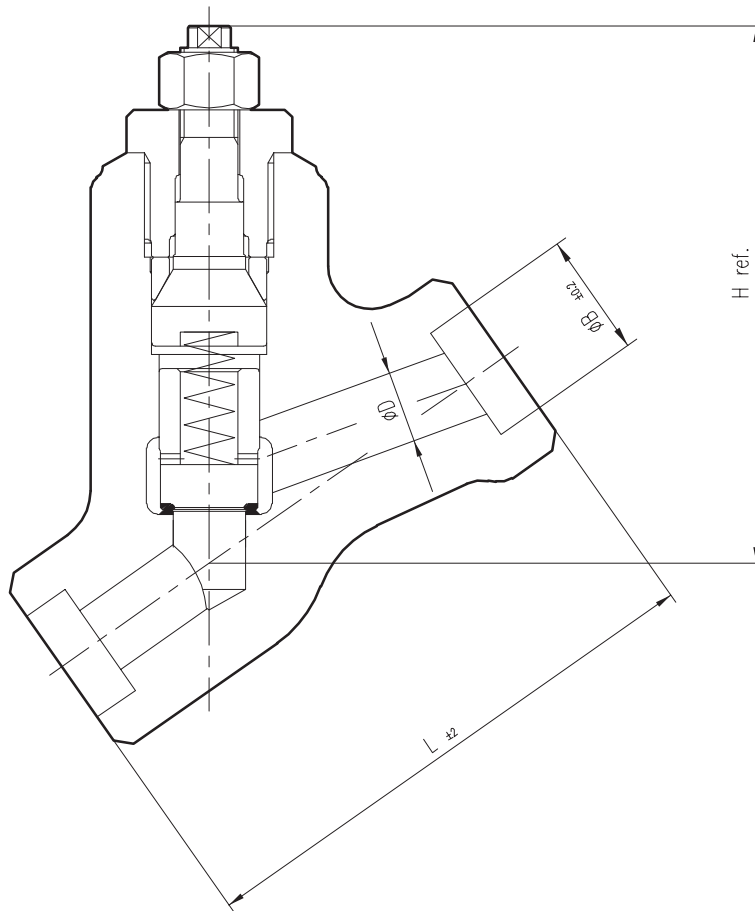
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	DISC	1	A276-410			A182-F304	A182-F304L	A182-F316	A182-F316L
3	DISC SPRING	1	INCONEL						
4	COVER	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
5	SEAL RING	1	SOFT IRON						
6	RETAINER	1	A105	Low Alloy Steel			Stainless Steel		
7	NUT	1	Carbon Steel						



Forged Steel Lift Y-Lift Check Valve

Class 1500

Pressure Seal Cover
Socket Welding Ends



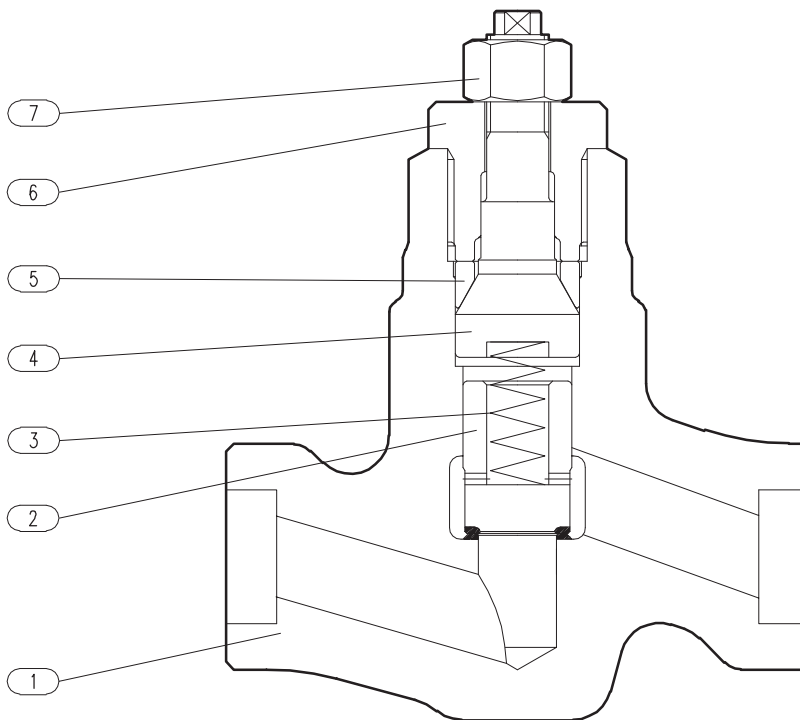
Dimensions				
SIZE (in.)	L	D	H	B
1/2	130	12	135	22.0
3/4	130	16	135	27.4
1	150	20	150	34.1
1 1/2	220	30	215	49.0
2	260	38	235	61.5



Forged Steel Lift Check Valve

Class 2500

Pressure Seal Cover
Socket Welding Ends



Specification of valve materials

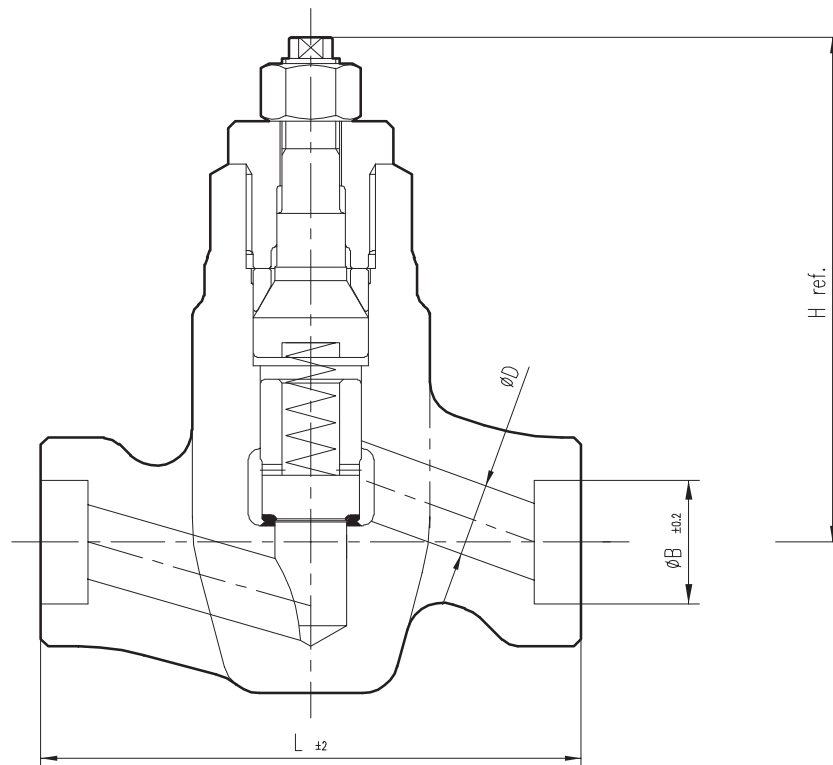
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	DISC	1	A276-410			A182-F304	A182-F304L	A182-F316	A182-F316L
3	DISC SPRING	1	INCONEL						
4	COVER	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
5	SEAL RING	1	SOFT IRON						
6	RETAINER	1	A105	Low Alloy Steel		Stainless Steel			
7	NUT	1	Carbon Steel						



Forged Steel Lift Check Valve

Class 2500

Pressure Seal Cover
Socket Welding Ends



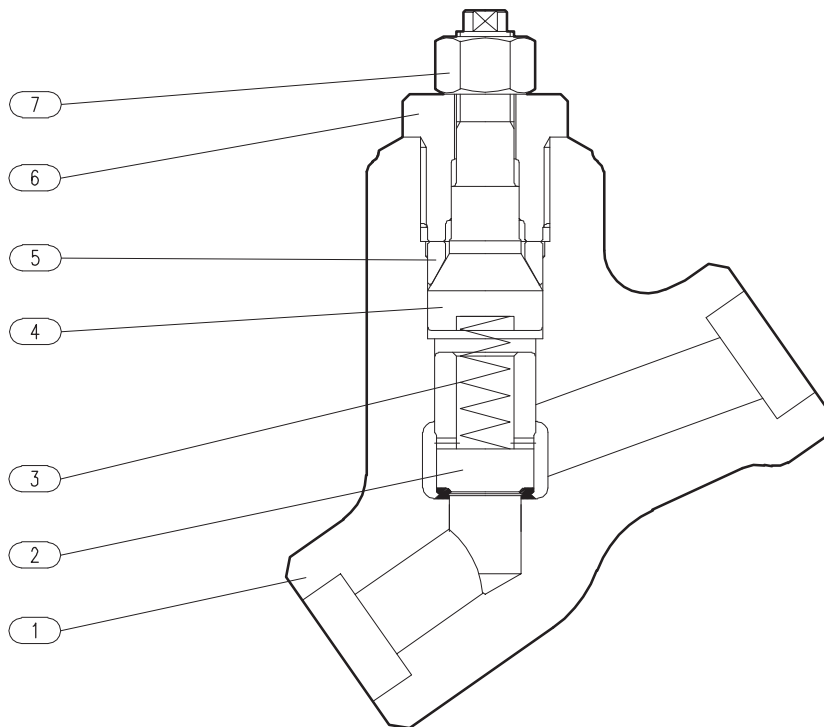
Dimensions				
SIZE (in.)	L	D	H	B
1/2	140	10	130	22.0
3/4	140	14	130	27.4
1	160	18	145	34.1
1 1/2	240	28	210	49.0
2	280	35	230	61.5



Forged Steel Lift Y-Lift Check Valve

Class 2500

Pressure Seal Cover
Socket Welding Ends



Specification of valve materials

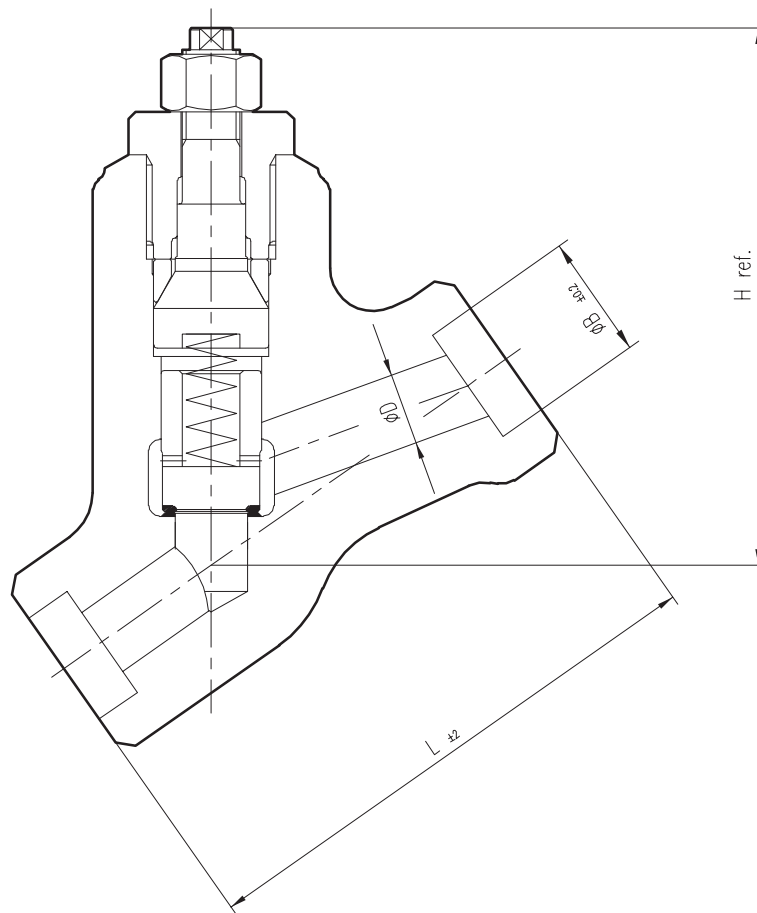
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	DISC	1	A276-410			A182-F304	A182-F304L	A182-F316	A182-F316L
3	DISC SPRING	1	INCONEL						
4	COVER	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
5	SEAL RING	1	SOFT IRON						
6	RETAINER	1	A105	Low Alloy Steel		Stainless Steel			
7	NUT	1	Carbon Steel						



Forged Steel Lift Y-Lift Check Valve

Class 2500

Pressure Seal Cover
Socket Welding Ends



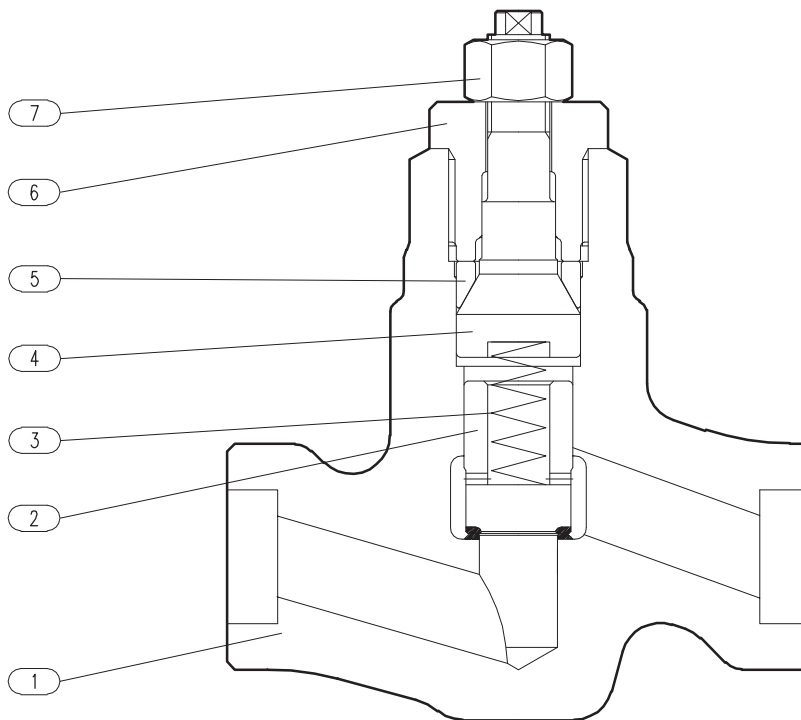
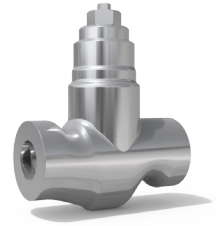
Dimensions				
SIZE (in.)	L	D	H	B
1/2	140	10	140	22.0
3/4	140	14	140	27.4
1	160	18	155	34.1
1 1/2	240	28	220	49.0
2	280	35	240	61.5



Forged Steel Lift Check Valve

Class 4500

Pressure Seal Cover
Socket Welding Ends



Specification of valve materials

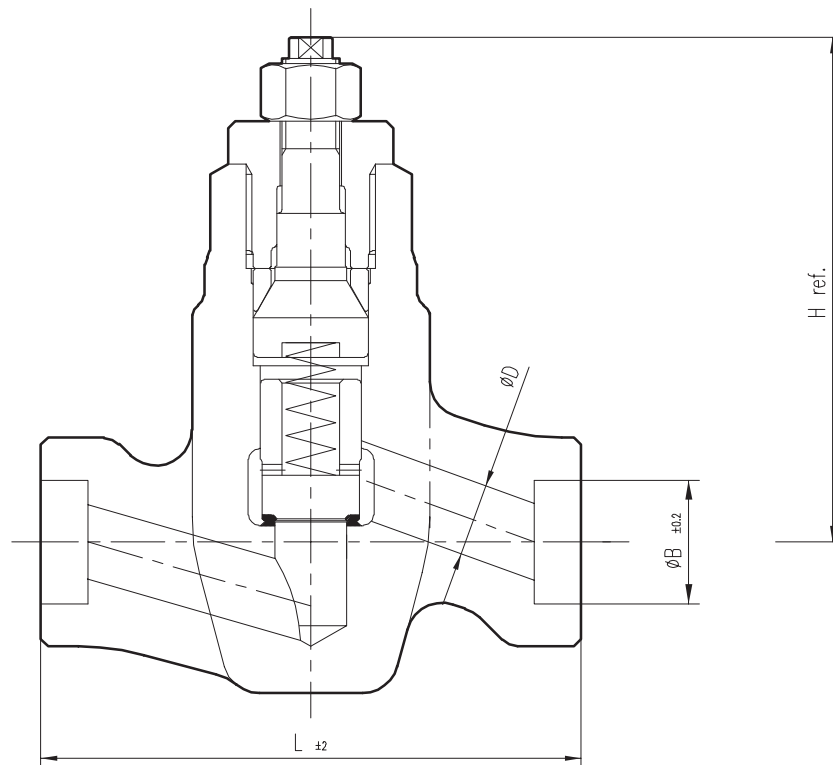
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	DISC	1	A276-410			A182-F304	A182-F304L	A182-F316	A182-F316L
3	DISC SPRING	1	INCONEL						
4	COVER	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
5	SEAL RING	1	SOFT IRON						
6	RETAINER	1	A105	Low Alloy Steel		Stainless Steel			
7	NUT	1	Carbon Steel						



Forged Steel Lift Check Valve

Class 4500

Pressure Seal Cover
Socket Welding Ends



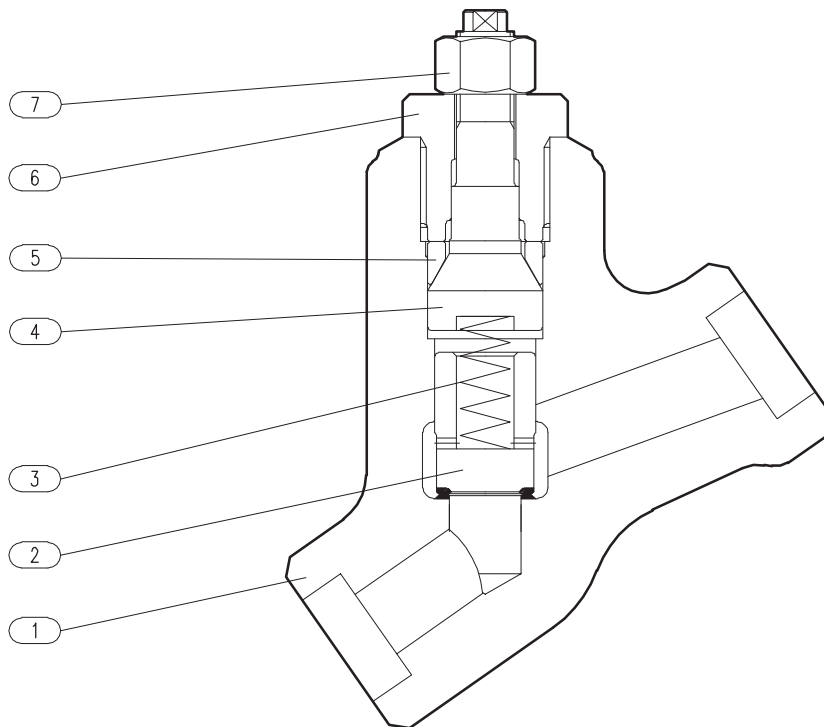
Dimensions				unit(mm)
SIZE (in.)	L	D	H	B
1/2	180	8	140	22.0
3/4	180	11	140	27.4
1	180	14	140	34.1
1 1/2	300	22	205	49.0
2	300	26	205	61.5



Forged Steel Lift Y-Lift Check Valve

Class 4500

Pressure Seal Cover
Socket Welding Ends



Specification of valve materials

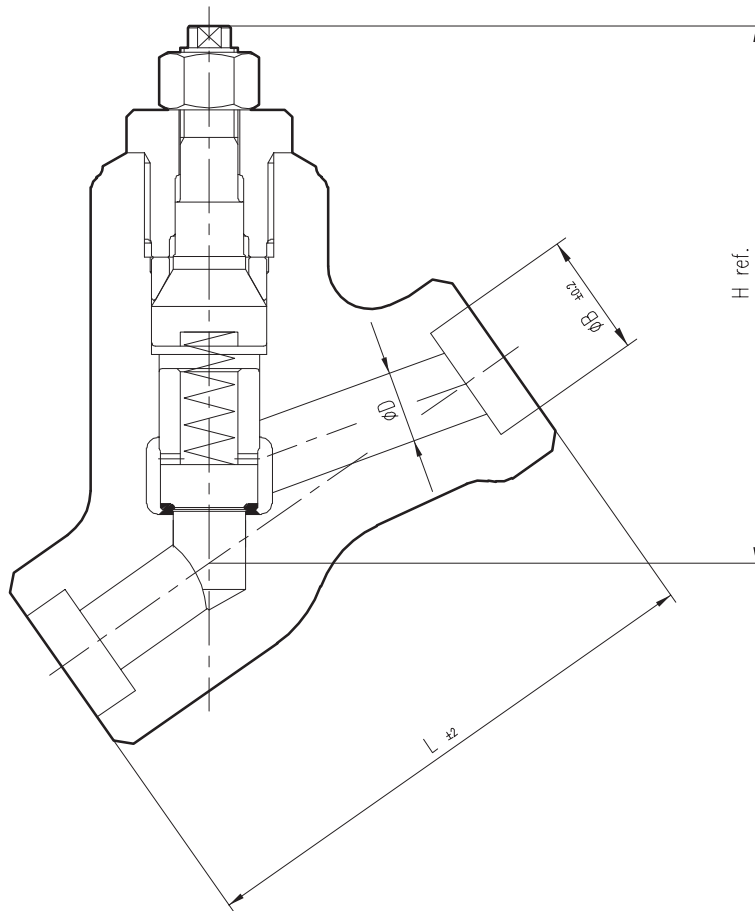
PART NO.	PART NAME	QTY REQ'D	MATERIAL (ASTM SPECIFICATION)						
			A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
1	BODY	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
2	DISC	1	A276-410			A182-F304	A182-F304L	A182-F316	A182-F316L
3	DISC SPRING	1	INCONEL						
4	COVER	1	A105	A182-F11/F22	A182-F91/F92	A182-F304	A182-F304L	A182-F316	A182-F316L
5	SEAL RING	1	SOFT IRON						
6	RETAINER	1	A105	Low Alloy Steel		Stainless Steel			
7	NUT	1	Carbon Steel						



Forged Steel Lift Y-Lift Check Valve

Class 4500

Pressure Seal Cover
Socket Welding Ends



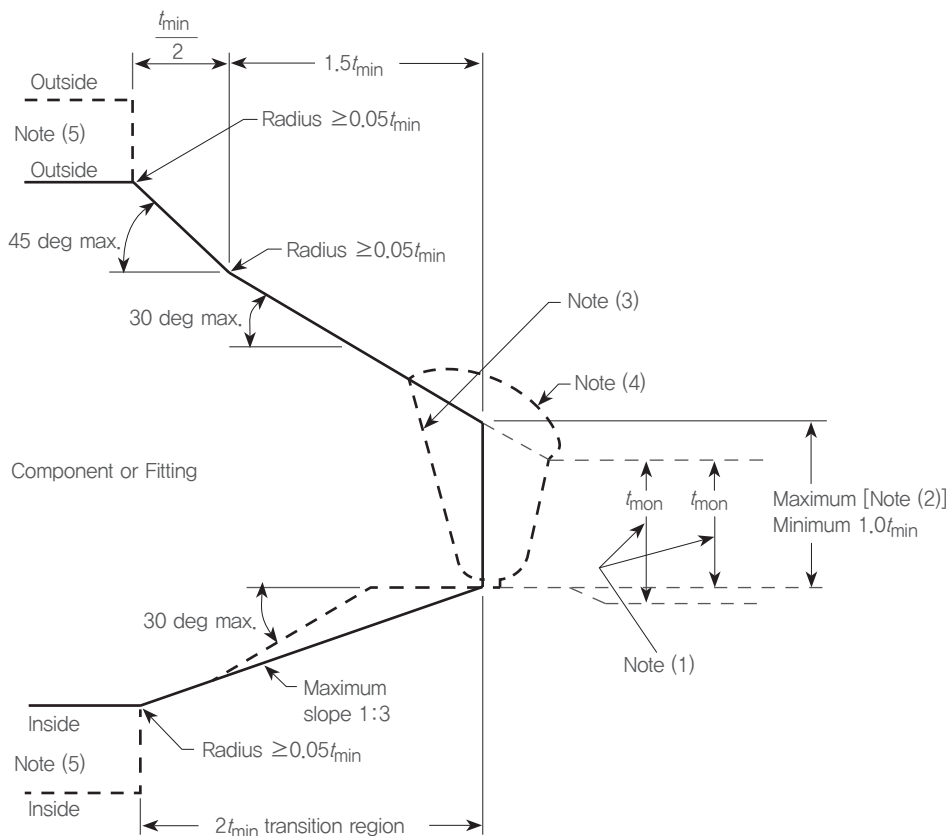
Dimensions				
SIZE (in.)	L	D	H	B
1/2	180	8	150	22.0
3/4	180	11	150	27.4
1	180	14	150	34.1
1 1/2	300	22	215	49.0
2	300	26	215	61.5

ENGINEERING DATA

- **Butt Welding Ends Specification**
- **Globe Valve Analysis**
- **CFD of Globe Valve**

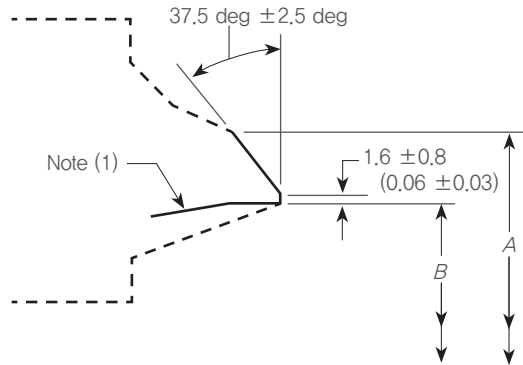
Fig. 1

Maximum Envelope for Welding End Transitions

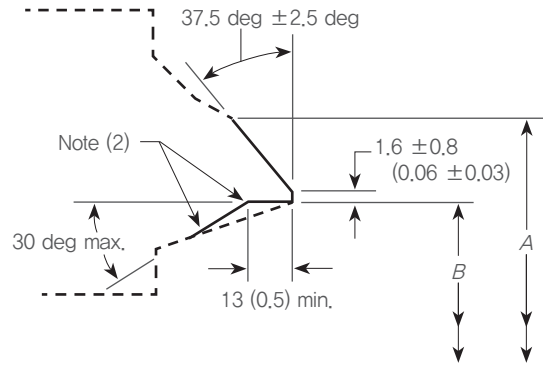


NOTES

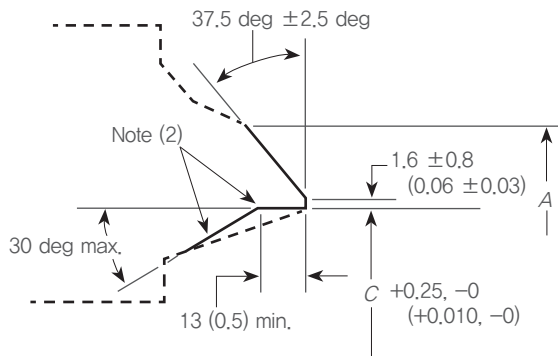
- (1) The value of t_{min} is whichever of the following is applicable:
 - (a) the minimum ordered wall thickness of the pipe to include pipe that is purchased to a nominal wall thickness with an undertolerance other than 12.5%
 - (b) 0.875 times the nominal wall thickness of pipe ordered to a pipe schedule wall thickness that has an undertolerance of 12.5%
 - (c) the minimum ordered wall thickness of the cylindrical welding end of a component or fitting (or the thinner of the two) when the joint is between two components
- (2) The maximum thickness at the end of the components is
 - (a) the greater of $t_{min} + 4\text{mm}(0.16\text{in.})$ or $1.15 t_{min}$ when ordered on a minimum wall basis
 - (b) the greater of $t_{min} + 4\text{mm}(0.16\text{in.})$ or $1.10 t_{nom}$ when nominal wall basis
- (3) Weld bevel shown is for illustration only.
- (4) The weld reinforcement permitted by applicable code may lie outside the maximum envelope.
- (5) Where transitions using maximum slope do not intersect inside or outside surface, as shown by phantom outlines, maximum slopes shown or alternate radii shall be used.

Fig. 2**Bevels for Wall Thickness Over 3mm (0.12 in.) to 22mm(0.88 in.) , Inclusive**

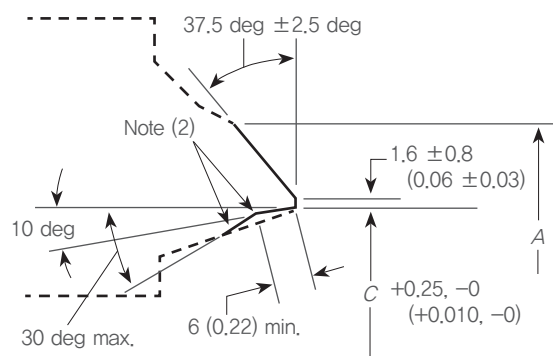
(a) Welding End Detail for Joint Without Backing Ring



(b) Welding End Detail for Joint Using Split Rectangular Backing Ring



(c) Welding End Detail for Joint Using Continuous Rectangular Backing Ring



(d) Welding End Detail for Joint Using Continuous Tapered Backing Ring

GENERAL NOTES

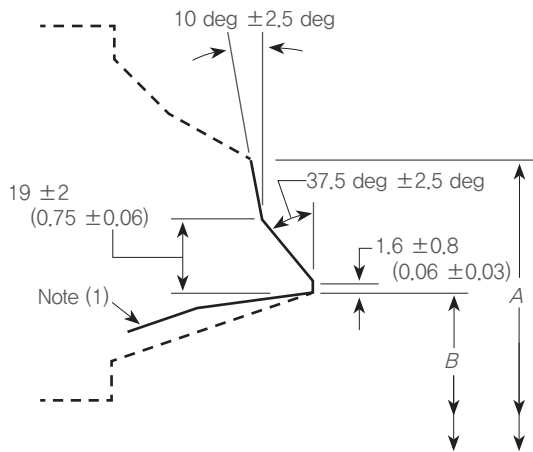
- (a) Broken lines denote maximum envelope for transitions from welding bevel and root face into body of component. See Fig. 1 for details.
- (b) See section 5 for tolerances other than those given in these illustrations.
- (c) Purchase order must specify contour of any backing ring to be used.
- (d) Linear dimensions are in millimeters with inch values in parentheses.

NOTES

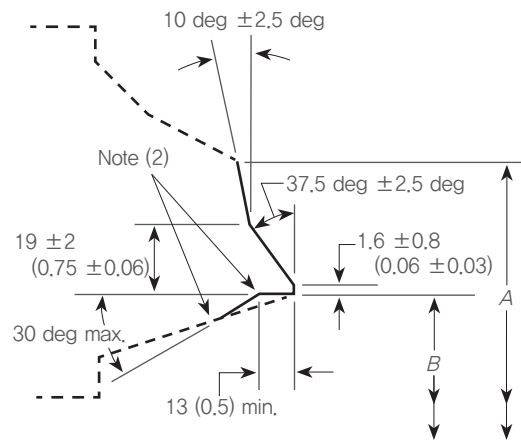
- (1) Internal surface may be as-formed or machined for dimension B at root face. Contour within the envelope shall be in accordance with section 2.
- (2) Intersections should be slightly rounded.

Fig. 3

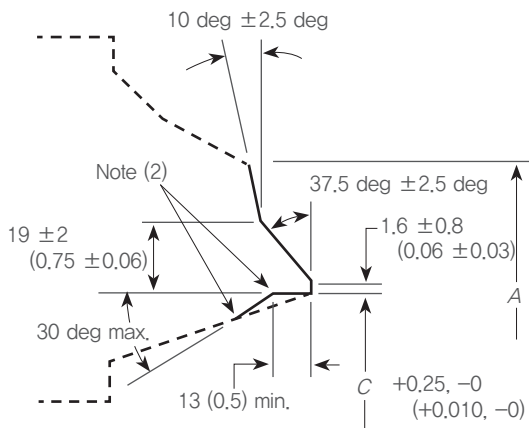
Weld Bevel Details for Wall Thickness Over 22 mm (0.88 in.)



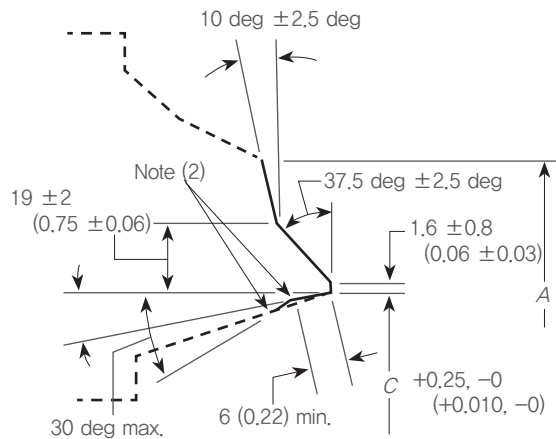
(a) Welding End Detail for Joint Without Backing Ring



(b) Welding End Detail for Joint Using Split Rectangular Backing Ring



(c) Welding End Detail for Joint Using Continuous Rectangular Backing Ring



(d) Welding End Detail for Joint Using Continuous Tapered Backing Ring

GENERAL NOTES

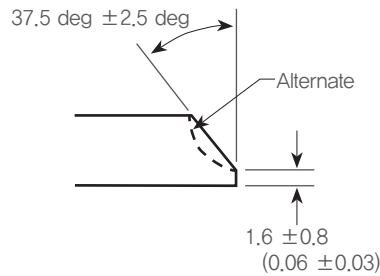
- (a) Broken lines denote maximum envelope for transitions from welding bevel and root face into body of component. See Fig. 1 for details.
- (b) See section 5 for tolerances other than those given in these illustrations.
- (c) Purchase order must specify contour of any backing ring to be used.
- (d) Linear dimensions are in millimeters with inch values in parentheses.

NOTES

- (1) Internal surface may be as-formed or machined for dimension B at root face. Contour within the envelope shall be in accordance with section .2
- (2) Intersections should be slightly rounded.

Fig. 4

Weld Bevel Details for GTAW Root Pass
[Wall Thickness Over 3 mm (0.12 in.) to 10 mm (0.38 in.), Inclusive]

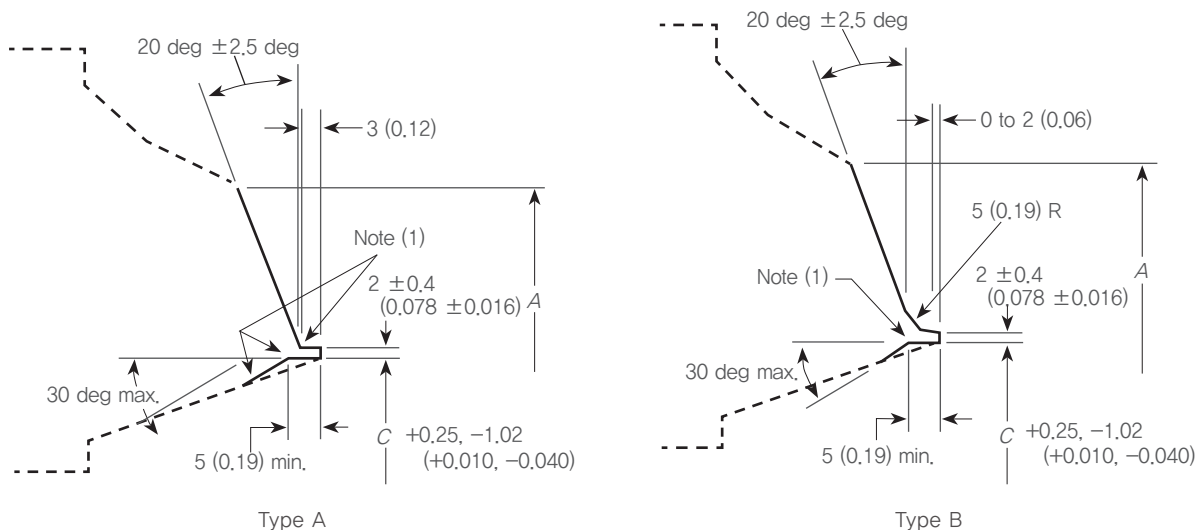


GENERAL NOTES

- (a) This detail applies for gas tungsten arc welding (GTAW) of the root pass where nominal wall thickness is over 3mm
- (b) Linear dimensions are in millimeters with inch values in parentheses.

Fig. 5

Weld Bevel Details for GTAW Root Pass
[Wall Thickness Over 10mm (0.38 in.) to 25 mm(1.0 in.), Inclusive]



GENERAL NOTES

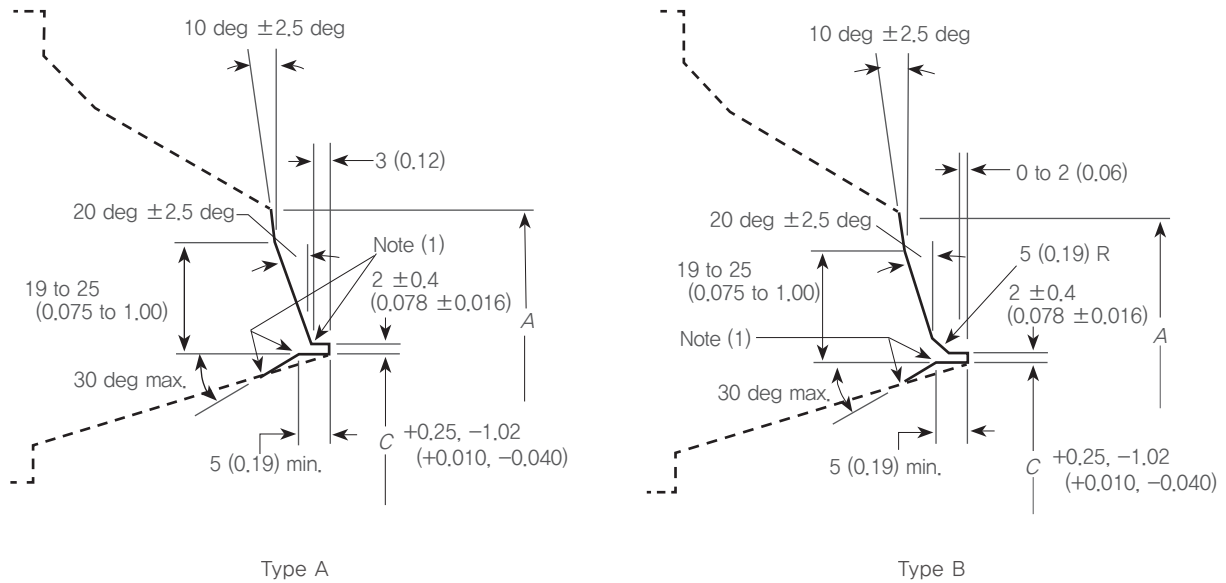
- (a) This detail applies for gas tungsten arc welding (GTAW) of the root pass where nominal wall thickness is over 10mm (0.38 in.) to 25mm (1.0 in.), inclusive.
- (b) Broken lines denote maximum envelope for transitions from welding groove and land into body of component. See Fig. 1 for details.
- (c) See section 5 for tolerances other than those given in these illustrations.
- (d) Linear dimensions are in millimeters with inch values in parentheses.

NOTES

- (1) Inside corners should be slightly rounded.

Fig. 6

**Weld Bevel Details for GTAW Root Pass
[Wall Thickness Over 25mm (1.0 in.)]**



GENERAL NOTES

- (a) This detail applies for gas tungsten arc welding (GTAW) of the root pass where nominal wall thickness is greater than 25mm (1.0 in.)
- (b) Broken lines denote maximum envelope for transitions from welding groove and land into body of component. See Fig. 1 for details.
- (c) See section 5 for tolerances other than those given in these illustrations
- (d) Linear dimensions are in millimeters with inch values in parentheses.

NOTES

- (1) Inside corners should be slightly rounded.

**Table 1 Dimensions of Welding Ends
(See Figs. 1 Through 6)**

Nominal Pipe Size (NPS)	Schedule No. [Note (1)]	O.D. at Welding Ends					t
		Wrought or Fabricated Components, A [note (1)]	Cast Components, A	B	C [Note (2)]		
2 ½	30	73	75	63.5	63.6	4.78	
	40	73	75	62.5	62.93	5.16	
	80	73	75	59	59.69	7.01	
	160	73	75	54	55.28	9.53	
	XXS	73	75	45	47.43	14.02	
3	30	88.9	91	79.5	79.5	4.78	
	40	88.9	91	78	78.25	5.49	
	80	88.9	91	73.5	74.53	7.62	
	160	88.9	91	66.5	68.38	11.13	
	XXS	88.9	91	58.5	61.19	15.24	
3 ½	30	101.6	105	92	92.2	4.78	
	40	101.6	105	92	90.52	5.74	
	80	101.6	105	85.5	86.42	8.08	
4	30	114.3	117	104.5	104.9	4.78	
	40	114.3	117	102	102.73	6.02	
	80	114.3	117	97	98.28	8.56	
	120	114.3	117	92	93.78	11.13	
	160	114.3	117	87.5	89.65	13.49	
	XXS	114.3	117	80	83.3	17.12	
5	40	141.3	144	128	128.8	6.55	
	80	141.3	144	122	123.58	9.53	
	120	141.3	144	116	118.04	12.7	
	160	141.3	144	109.5	112.47	15.88	
	XXS	141.3	144	103	106.92	19.05	
6	40	168.3	172	154	154.82	7.11	
	80	168.3	172	146.5	148.06	10.97	
	120	168.3	172	140	142.29	14.27	
	160	168.3	172	132	135.31	18.26	
	XXS	168.3	172	124.5	128.85	21.95	
8	20	219.1	223	206.5	206.95	6.35	
	30	219.1	223	205	205.74	7.04	
	40	219.1	223	203	203.75	8.18	
	60	219.1	223	198.5	200.02	10.31	
	80	219.1	223	193.5	195.84	12.7	
	100	219.1	223	189	191.65	15.09	
	120	219.1	223	182.5	186.11	18.26	
	140	219.1	223	178	181.98	20.62	
	XXS	219.1	223	174.5	179.16	22.23	
	160	219.1	223	173	177.79	23.01	
10	20	273	278	260.5	260.85	6.35	
	30	273	278	257.5	258.31	7.8	
	40	273	278	254.5	255.74	9.27	
	60	273	278	247.5	249.74	12.7	
	80	273	278	243	245.55	15.09	
	100	273	278	236.5	240.01	18.26	

**Table 1 Dimensions of Welding Ends
(Cont'd) (See Figs. 1 Through 6)**

Nominal Pipe Size (NPS)	Schedule No. [Note (1)]	O.D. at Welding Ends					t
		Wrought or Fabricated Components, A [note (1)]	Cast Components, A	B	C [Note (2)]		
10 (Cont'd)	120	273	278	230	234.44	21.44	
	140	273	278	222	227.51	25.4	
	160	273	278	216	221.95	28.58	
12	20	323.8	329	311	311.65	6.35	
	30	323.8	329	307	308.1	3.38	
	STD	323.8	329	305	306.08	9.53	
	40	323.8	329	303	304.72	10.31	
	XS	323.8	329	298.5	300.54	12.7	
14	20	355.6	362	340	340.7	7.92	
	STD	355.6	362	336.5	337.88	9.53	
	40	355.6	362	333.5	335.08	11.13	
	XS	355.6	362	330	332.34	12.7	
	60	355.6	362	325.5	328.15	15.09	
	80	355.6	362	3174.5	321.22	19.05	
	100	355.6	362	308	312.86	23.83	
	120	355.6	362	300	305.93	27.79	
	140	355.6	362	292	299	31.75	
160	355.6	362	284	292.07	35.71		
16	20	406.4	413	390.5	391.5	7.92	
	STD	406.4	413	387.5	388.68	9.53	
	40	406.4	413	381	383.14	12.7	
	60	406.4	413	373	376.21	16.66	
	80	406.4	413	363.5	367.84	21.44	
	100	406.4	413	354	359.53	26.19	
	120	406.4	413	344.5	351.18	30.96	
	140	406.4	413	333.5	341.43	36.53	
	160	406.4	413	325.5	334.5	40.49	
18	20	457.2	464	441.5	442.3	7.92	
	30	457.2	464	435	436.68	11.13	
	STD	457.2	464	438	439.48	9.53	
	XS	457.2	464	432	433.94	12.7	
	40	457.2	464	428.5	431.19	14.27	
	60	457.2	464	419	422.82	19.05	
	80	457.2	464	409.5	414.46	23.83	
	100	457.2	464	398.5	404.78	29.36	
	120	457.2	464	387.5	395.03	34.93	
	140	457.2	464	378	386.77	39.67	
	160	457.2	464	366.5	376.99	45.24	
	20	STD	508	516	489	490.28	9.53
XS		508	516	482.5	484.74	12.7	
40		508	516	478	480.55	15.09	

Table 1 Dimensions of Welding Ends (Cont'd)
(See Figs. 1 Through 6)

Nominal Pipe Size (NPS)	Schedule No. [Note (1)]	Wrought or Fabricated Components, A [note (1)]	O.D. at Welding Ends			
			Cast Components, A	B	C [Note (2)]	t
20 (Cont'd)	60	508	516	467	470.88	20.62
	80	508	516	455.5	461.13	26.19
	100	508	516	443	450.02	32.54
	120	508	516	432	440.29	38.1
	140	508	516	419	429.17	44.45
	160	508	516	408	419.44	50.01
22	STD	558.8	567	539	541.08	9.53
	XS	558.8	567	533	535.54	12.7
	60	558.8	567	514	518.56	22.23
	80	558.8	567	501	507.75	28.58
	100	558.8	567	488.5	496.63	34.93
	120	558.8	567	476	485.52	41.28
	140	558.8	567	463	474.41	47.63
	160	558.8	567	450.5	463.3	53.98
24	STD	609.6	619	590.5	591.88	9.53
	XS	609.6	619	584	586.34	12.7
	30	609.6	619	581	583.59	14.27
	40	609.6	619	574.5	577.97	17.48
	60	609.6	619	560.5	565.49	24.61
	80	609.6	619	547.5	554.38	30.96
	100	609.6	619	532	540.49	38.89
	120	609.6	619	517.5	528.03	46.02
	140	609.6	619	505	516.91	52.37
	160	609.6	619	490.5	504.37	59.54
	26	10	660.4	670	645.5	645.5
STD		660.4	670	641.34	642.68	9.53
20		660.4	670	635	637.14	12.7
28	10	711.2	721	695.5	696.3	7.92
	STD	711.2	721	692.14	693.48	9.53
	20	711.2	721	686	687.94	12.7
	30	711.2	721	679.5	682.37	15.88
30	10	762	772	746	747.1	7.92
	STD	762	772	742.94	744.28	9.53
	20	762	772	736.5	738.74	12.7
	30	762	772	730	733.17	15.88
32	10	812.8	825	797	797.9	7.92
	STD	812.8	825	793.74	795.08	9.53
	20	812.8	825	787.5	789.54	12.7
	30	812.8	825	781	783.97	15.88
	40	812.8	825	778	781.17	17.48
34	10	863.6	876	848	848.7	7.92
	STD	863.6	876	844.54	845.88	9.53
	20	863.6	876	838	840.34	12.7
	30	863.6	876	832	834.77	15.88
	40	863.6	876	828.5	831.97	17.48

Table 1 Dimensions of Welding Ends (Cont'd)
(See Figs. 1 Through 6)

Nominal Pipe Size (NPS)	Schedule No. [Note (1)]	O.D. at Welding Ends					t
		Wrought or Fabricated Components, A [note (1)]	Cast Components, A	B	C [Note (2)]		
36	10	914.4	927	898.5	889.5	7.92	
	STD	914.4	927	895.34	896.68	9.53	
	20	914.4	927	889	891.14	12.7	
	30	914.4	927	882.5	885.57	15.88	
	40	914.4	927	876.5	880.02	19.05	
38	STD	965.2	978	946	947.48	9.53	
	XS	965.2	978	940	941.94	12.7	
40	STD	1016	1029	997	998.28	9.53	
	XS	1016	1029	990.5	992.74	12.7	
42	STD	1066.8	1079	1047.5	1049.08	9.53	
	XS	1066.8	1079	1041.5	1043.54	12.7	
44	STD	1117.6	1130	1098.5	1099.88	9.53	
	XS	1117.6	1130	1092	1094.34	12.7	
46	STD	1168.4	1181	1149.5	1150.68	9.53	
	XS	1168.4	1181	1143	1145.14	12.7	
48	STD	1219.2	1232	1200	1201.48	9.53	
	XS	1219.2	1232	1194	1195.94	12.7	

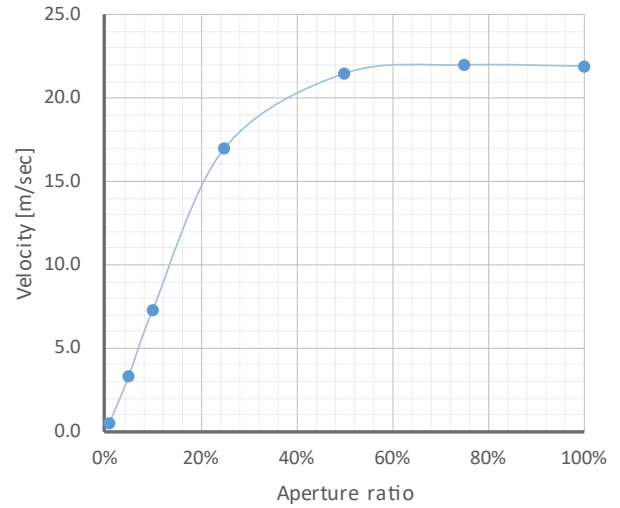
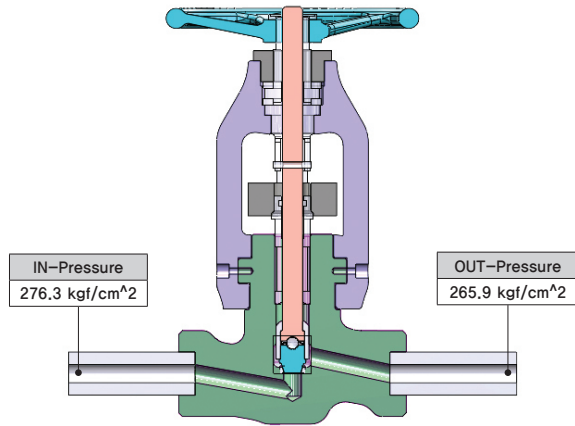
GENERAL NOTES

- (a) Dimensions are in millimeters.
- (b) See section 5 for tolerances.

NOTES

- (1) Data are from ASME B36.10M or a more precise rounding of the inch dimensions from Table I-1. Data in the table are also applicable to ASME B36.19M when the wall thickness conforms to ASME B36.10M. Letter designations signify
 - (a) STD = standard wall thickness
 - (b) XS = extra strong wall thickness
 - (c) XXS = double, extra strong wall thickness
- (2) Internal machining for continuous backing rings for sizes NPS 2 and smaller is not contemplated. See para. 4.2 for C dimension for sizes not listed.

Globe Valve Analysis

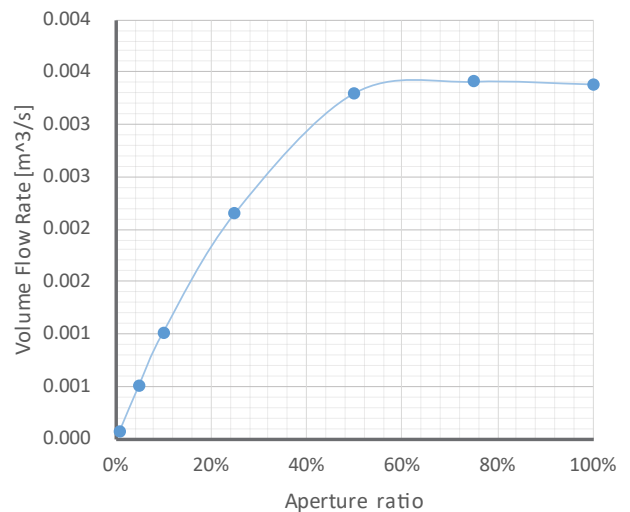
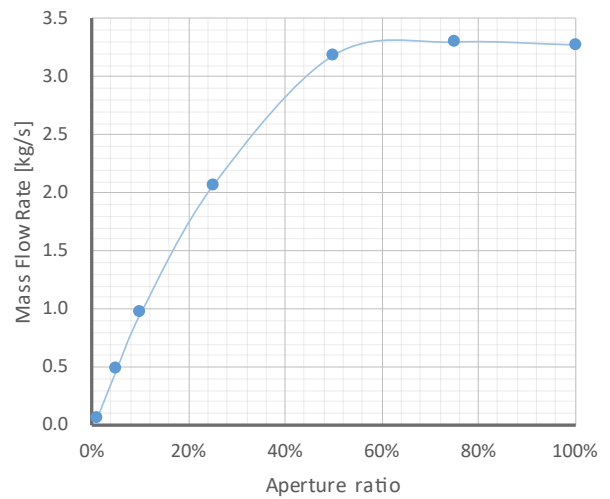


General condition

- Steady state internal flow
- Consider heat transfer
- Convection coefficient : 10 W/m²/K
- Ambient temperature : 25 °C

Boundary condition

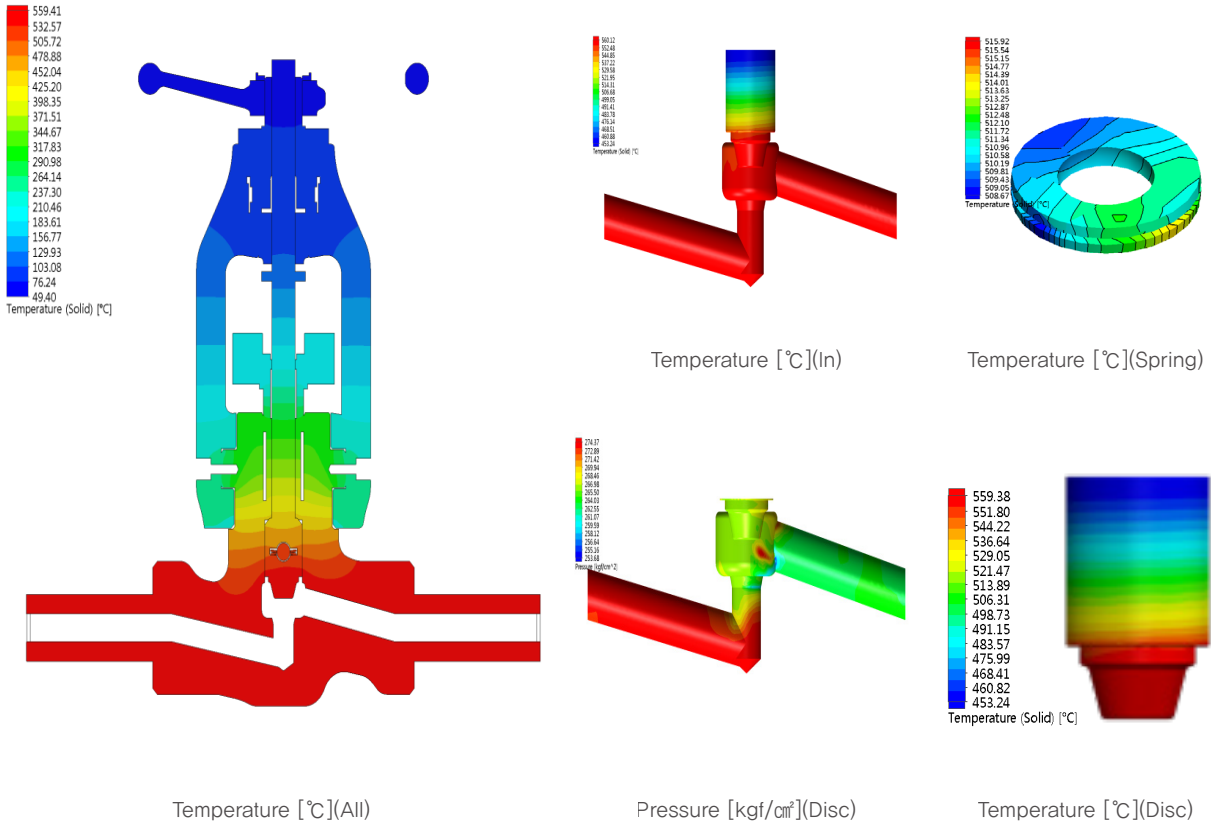
- Inlet pressure : 276.3 kgf/cm²
- Inlet temperature : 560 °C
- Outlet Pressure : 265.9 kgf/cm²



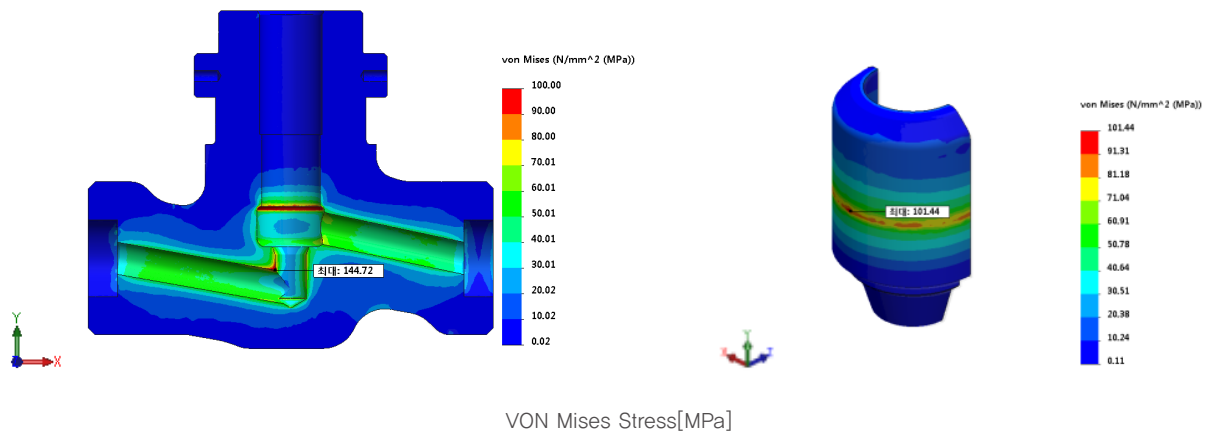
Aperture ratio	Velocity	Mass Flow Rate	Volume Flow Rate
%	[m/s]	[kg/s]	[m ³ /s]
1%	0.54852	0.07885	0.00008
5%	3.33098	0.49638	0.00051
10%	7.29405	0.98239	0.00102
25%	16.98429	2.08280	0.00215
50%	21.44647	3.20257	0.00330
75%	21.95586	3.31067	0.00342
100%	21.88638	3.28580	0.00339

CFD of Globe Valve

Viscous Flow : 100% of Aperature ratio



Structural Analysis : 100% of Aperature ratio



- 최대 응력: 144.72 MPa
- 재료의 항복 강도(A182 F91, $\sigma_y = 504$ MPa) 대비 약 28.7% 수준으로 안전함
- FOS = 항복강도/최대응력 = 3.48



D A E M Y E O N G

(주) 대명 충남 아산시 둔포면 아산밸리로 387번길 25 / 사업자번호 : 312-86-45753
http://www.daemyeongplant.com / Email. jjk3941@naver.com
TEL. 041 532 3914~5 / FAX. 041 532 3916

Top And the Best of Service



Top And the Best of Service

