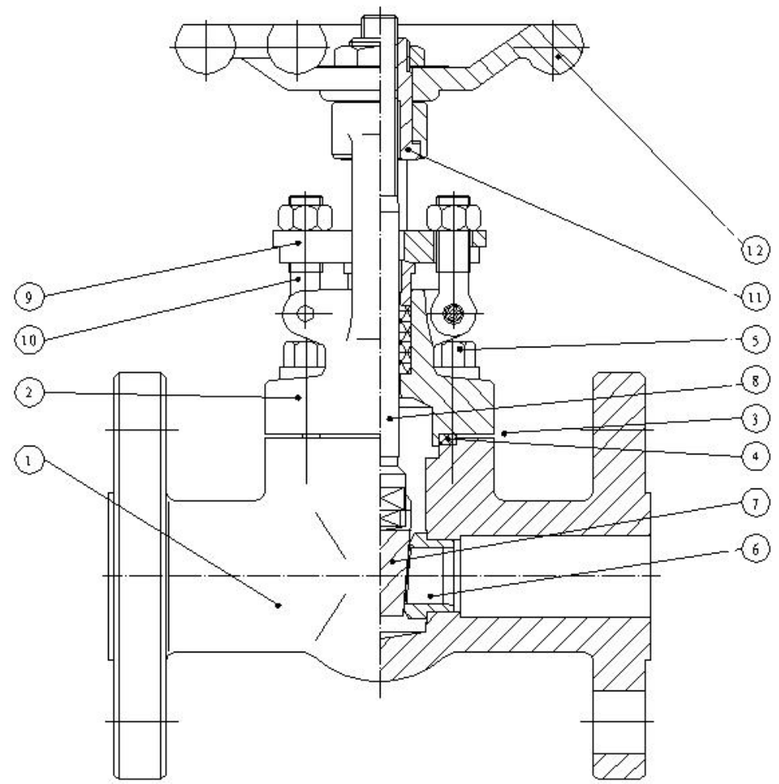
Integral Flanged Valves

Overview

Integral Flanged Valves

Typical gate valve shown.
Forged steel, outside screw and yoke (OS&Y), rising stem, non-rising handwheel.
Full or standard port. Bolted or welded bonnet joint.
Integral backseat
Integral end flanges.



1. **BODY.** The body is forged steel and designed to the basic dimensional requirements of the applicable specifications such as API 602, ASME B16.34, ASME B16.10 and ASME B16.5. The body is available in both the full or standard port design. End flanges are forged integral with the body.
2. **BONNET.** The bonnet is forged steel, has an integral backseat and incorporates the stuffing box, which has dimensions per the applicable specifications such as API 602.
3. **BODY-BONNET JOINT.** Two different bonnet joint designs are available. These are either the bolted bonnet or the threaded and seal welded type.
4. **GASKET.** The bolted bonnet joint design valve uses a contained, controlled compression, spiral wound type gasket.
5. **BONNET BOLTING.** The bonnet bolting is manufactured of alloy steel in accordance with the requirements of the applicable specifications such as API 602 and ASME B16.34.
6. **SEAT RINGS.** The seat rings are steel and make up part of the valve trim. They are pressed into the valve body and wedged into place, forming a seal with the body. The seating surfaces are ground and lapped.
7. **WEDGE.** The wedge, which is a solid design, is forged or investment cast steel and is part of the valve trim. The seating surfaces are ground and lapped.
8. **STEM.** The stem is forged steel and part of the valve trim. It contains an integral back seat shoulder, which mates with the integral backseat of the bonnet. The stem is designed to the basic dimensional requirements of the applicable specifications such as API 602.
9. **GLAND AND FLANGE.** The gland, gland flange assembly utilizes a separate, two piece design. This self aligning design allows the flange to be unevenly tightened while the gland maintains its parallel alignment with the stem and stuffing box.
10. **GLAND BOLTS AND NUTS.** The steel/stainless steel gland bolt and nut assembly is a stud, double nut arrangement. This design allows complete removal from the valve when service is required. The use of industry standard thread full length studs and nuts also allows easy replacement should these items be lost or in need of replacement.
11. **YOKE SLEEVE.** The yoke sleeve is of forged stainless steel material having a high melting point and is resistant to wear and corrosion.
12. **HANDWHEEL.** The handwheel is forged carbon steel of an open spoke design. This robust construction along with appropriate sizing allows for ease of operation.

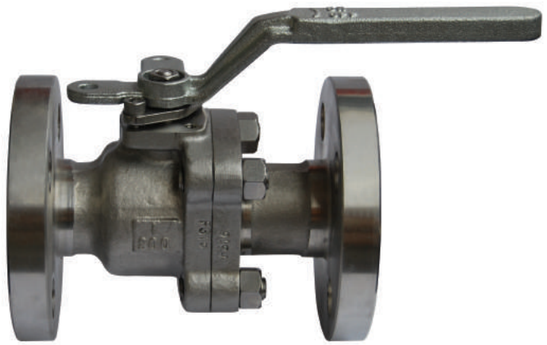
Integral Flanged Valves- Ball Valves- Bolted Bonnet-Full Port

YAAO FORGE

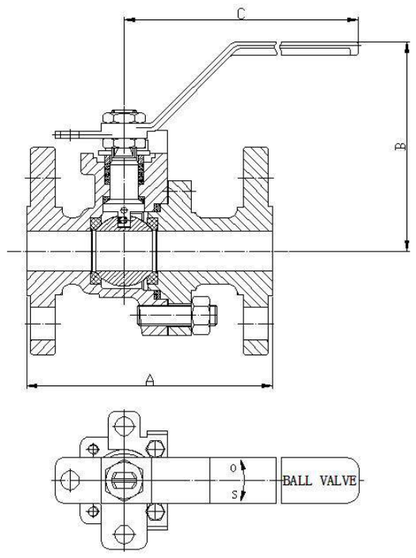
150 Lb.

300 Lb.

600 Lb.



Design construction:
API 602 - ASME BI6.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Spiral-wound gasket
Integral backseat
Integral body flanges
Face to face according to ASME B16.10
Flanges according to ASME B16.5
Ratings:
-carbon steel class 150 285 psig@ 100°F
20 bar + 38°C
-carbon steel class 300 740 psig@ 100°F
51 bar + 38°C



150LB.	NPS	Dimensions(mm)		
		A	B	C
	1/2	108	90	150
	3/4	117	95	160
	1	127	105	170
	1-1/2	165	120	200
	2	178	150	250

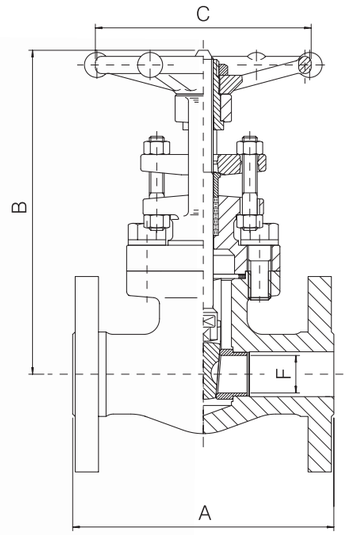
300LB.	NPS	Dimensions(mm)		
		A	B	C
	1/2	140	90	150
	3/4	152	95	160
	1	165	105	170
	1-1/2	190	120	200
	2	216	150	250

600LB.	NPS	Dimensions(mm)		
		A	B	C
	1/2	165	90	150
	3/4	190	95	160
	1	216	105	170
	1-1/2	241	120	200
	2	292	150	250

Integral Flanged Valves- Gate Type- Bolted Bonnet- Full Port

YAAO FORGE

1500 Lb.



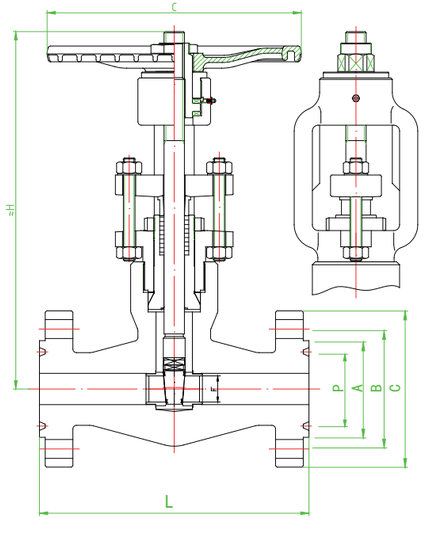
Design construction:
ASME B16.34 - BS 5352
Full port type
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Spiral wound gasket
Integral backseat
Integral body flanges
Face to face according to ASME B16.10
Flanges according to ASME B16.5
Ring joint type gasket available on request
Ratings:
- carbon steel class 1500 3705 psig @ 100°F
255 bar + 38°C

1500 LB.	FULL PORT					
	SIZE	mm	15	20	25	40	50
	A	mm	216	229	254	305	368.5
	B	mm	215	250	270	350	445
	C	mm	97	138	138	172	234
	F	mm	14	18	24	36,6	48
	Weight	kg	8,2	13	16,2	29	55

Integral Flanged Valves- Gate Type- Bolted Bonnet- Full Port

YAAO FORGE

2500 Lb.



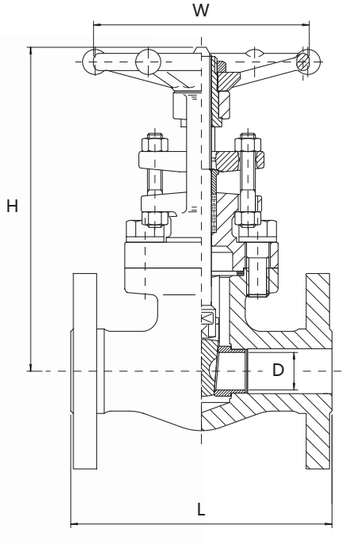
Design construction:
ASME B16.34 - BS 5352
Full port type
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Self aligning two piece packing gland
Body Bonnet Gasket ring joint type
Spiral wound type gasket on request
Integral backseat
Integral body flanges
Face to face according to ASME B16.10
Flanges according to ASME B16.5
Ratings:
- carbon steel class 2500 6170 psig @ 100°F
425 bar + 38°C

DN		L	H	W	P	A	B	C	T	F	n-	kg
(in)	公制											
1/2	15	264	321	180	42.9	65.1	89.0	133	30.5	6.35	4-23	16.7
3/4	20	273	321	180	50.8	73.0	95.2	140	32.0	6.35	4-23	17.0
1	25	308	321	180	60.3	82.5	107.9	159	35.0	6.35	4-26	24.3
1¼	32	352.2	373	200	72.2	101.6	130.2	184	38.5	7.92	4-29	30.8
1½	40	387.2	406	200	82.6	114.0	146.0	203	44.5	7.92	4-32	40.5
2	50	454.2	495	300	101.6	133.0	171.4	235	51.0	7.92	8-29	45.5

Integral Flanged Valves- Globe Type- Bolted Bonnet- Full & StandardPort

YAAO FORGE

150Lb.-600Lb.



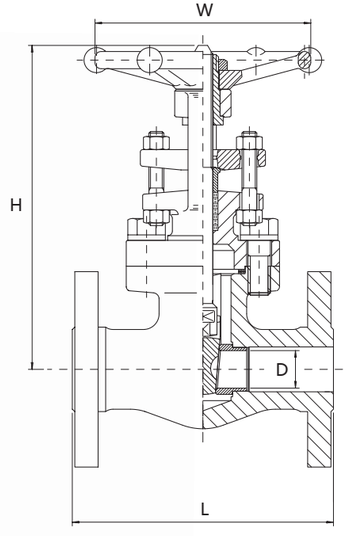
Design construction:
ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Loose disc stem assembly
Self aligning two piece packing gland
Spiral wound gasket
Integral backseat
Integral body flanges
Face to face according to ASME B16.10
Flanges according to ASME B16.5
Ratings:
- carbon steel class 150 285 psig @ 100°F
20 bar + 38°C
- carbon steel class 300 740 psig @ 100°F
51 bar + 38°C

压力级 CLASS	规格 NPS(in)	1/2	3/4	1	1¼	1½	2	2½
150	D	10	13	19.1	21	31.8	38.1	48.5
300								
600								
150	L	108	117	127	140	165	203	216
300		152	178	203	216	229	267	292
600		165	190	216	229	241	292	330
150	H	158	163	193	250	250	291	350
300								
600								
150	W	100	100	125	160	160	180	240
300								
600								
150	kg	4.5	6.9	9.8	13.5	19.5	28.0	35.4
300		4.8	7.7	11.0	16.8	21.2	32.6	38.0
600		5.6	7.8	12.5	17.0	23.5	38.8	42.6

YAAO FORGE

Integral Flanged Valves- Globe Type- Bolted Bonnet- Full & StandardPort

900Lb.-1500Lb.



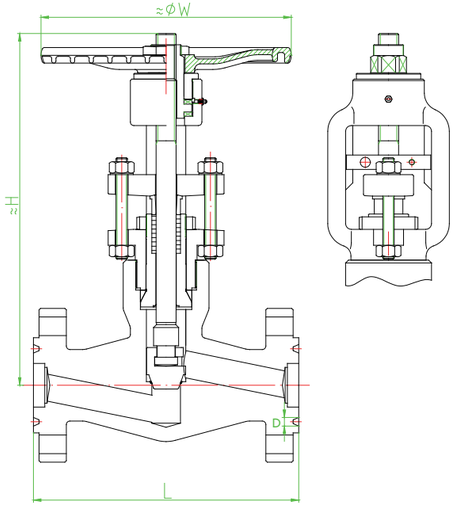
Design construction:
ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Loose disc stem assembly
Self aligning two piece packing gland
Spiral wound gasket
Integral backseat
Integral body flanges
Face to face according to ASME B16.10
Flanges according to ASME B16.5
Ratings:
- carbon steel class 150 285 psig @ 100°F
20 bar + 38°C
- carbon steel class 300 740 psig @ 100°F
51 bar + 38°C

规格NPS	(in)	1/2	3/4	1	11/4	11/2	2
公称通径DN	mm	15	20	25	32	40	50
d		13	18	24	29	36.5	46.5
L	900-1500	216	229	254	279	30.2	368
	PN16MPa	170	190	210	230	260	300
H		207	240	258	290	337	354
W		100	125	160	160	180	240
kg	B.B	7.4	12.5	16.0	17.2	23.0	29.8
	W.B	8.0	13.2	17.4	19.0	24.5	31.0

YAAO FORGE

Integral Flanged Valves- Globe Type- Bolted Bonnet- Full Port

2500 Lb.



Design construction:
ASME B16.34 - BS 5352
Full port type
Testing according to API 598
Marking MSS SP25
Outside Screw and Yoke (OS&Y)
Loose Disc Stem Assembly
Body Bonnet Gasket ring joint type
Spiral wound type gasket on request
Self aligning two piece packing gland
Integral backseat
Integral body flanges
Face to face according to ASME B16.10
Flanges according to ASME B16.5
Ratings:
- carbon steel class 2500 6170 psig @ 100°F
425 bar + 38°C

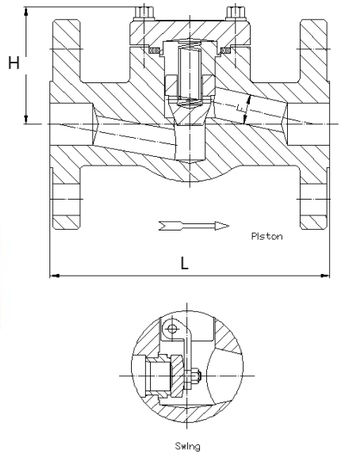
2500 LB.	DN		L	H	W	P	A	B	C	T	F	n-ϕ	kg
	inch	mm											
	1/2	15	264	333	180	42.9	65.1	89.0	133	30.5	6.4	4-23	18.0
	3/4	20	273	333	180	50.8	73.0	95.2	140	32.0	6.4	4-23	20.5
	1	25	308	333	180	60.3	82.5	107.9	159	35.0	6.4	4-26	23.0
	11/4	32	352.2	383	200	72.2	101.6	130.2	184	38.5	7.93	4-29	42.6
	11/2	40	387.2	420	200	82.6	114.0	146.0	203	44.5	7.93	4-32	45.0
	2	50	454.2	524	300	101.6	171.4	171.4	235	51.0	7.93	8-29	60.5

Integral Flanged Valves- Check Type- Bolted Bonnet- Full & Standard Port

YAAO FORGE

150Lb.-600Lb.

Design construction:
ASME B16.34 - BS 5352
Testing according to API 598
Marking MSS SP25
Spring available on request for Piston and Ball Check Valves
Spiral wound gasket
Integral body flanges
Face to face according to ASME B16.10
Flanges according to ASME B16.5
Ratings:
- carbon steel class 150 285 psig @ 100°F / 20 bar + 38°C
- carbon steel class 300 740 psig @ 100°F / 51 bar + 38°C



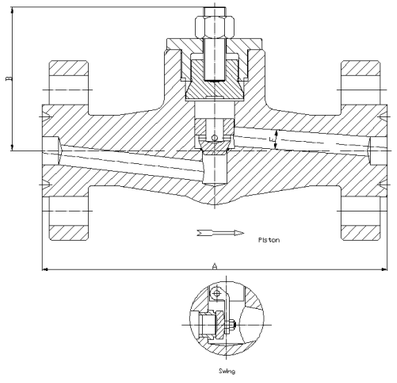
150 LB.-600LB.	NPS	(in)	1/2	3/4	1	1/4	11/2	2
	DN	mm	15	20	25	32	40	50
	D		13	18	24	29	36.5	46.5
	L	150Class	105	117	127	140	165	203
		300Class	152	178	203	216	229	267
		600Class	165	190	216	229	241	292
		PN 1.6-4.0	130	150	160	190	200	230
		PN 6.4-10.0	170	190	210	230	260	300
	H	lift/swing	61/61	78/78	84/84	103/101	118/120	130/133
	kg	150Class	3.4	4.4	8.2	8.9	12.0	14.3
		300Class	3.7	4.8	8.8	9.6	13.7	17.8
		600Class	4.0	5.8	9.5	10.4	15.6	24.5
		PN 4.0	3.5	4.6	8.5	9.2	12.8	16.1
		PN 10.0	4.3	6.1	10.0	11.4	17.0	28.7

Integral Flanged Valves- Check Type- Bolted Bonnet- Full Port

YAAO FORGE

1500 Lb.

Design construction:
ASME B16.34 - BS 5352
Full Port Type
Testing according to API 598
Marking MSS SP25
Spring available on request for Piston and Ball Check Valves
Ring joint type gasket available on request
Spiral wound gasket
Integral body flanges
Face to face according to ASME B16.10
Flanges according to ASME B16.5
Ratings:
- carbon steel class 1500 3705 psig @ 100°F / 255 bar + 38°C



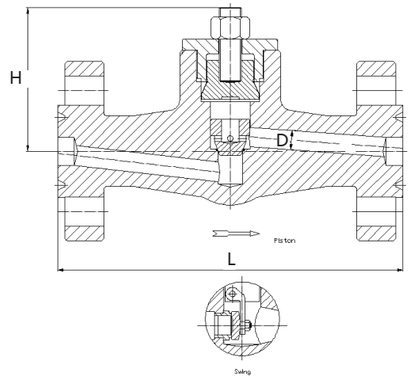
1500 LB.	FULL PORT						
	SIZE	mm	15	20	25	40	50
	A	mm	216	229	254	305	368,5
	B	mm	105	125	135	155	195
	F Piston F Ball	mm	12	14,5	19	31	40
	F Swing	mm	14	18	24	36,6	48
	Weight	kg	7,5	11,2	14,5	26,5	50

YAAO FORGE

Integral Flanged Valves Seif-Sealing Flanged Check Valve

2500 Lb.

Design construction:
ASME B16.34 - BS 5352
Full Port Type
Testing according to API 598
Marking MSS SP25
Body Bonnet Gasket ring joint type
Spiral wound type gasket on request
Spring available on request for Piston and Ball Check Valves
Integral body flanges
Face to face according to ASME B16.10
Flanges according to ASME B16.5
Ratings:
- carbon steel class 2500 6170 psig @ 100°F
425 bar + 38°C



2500 LB.

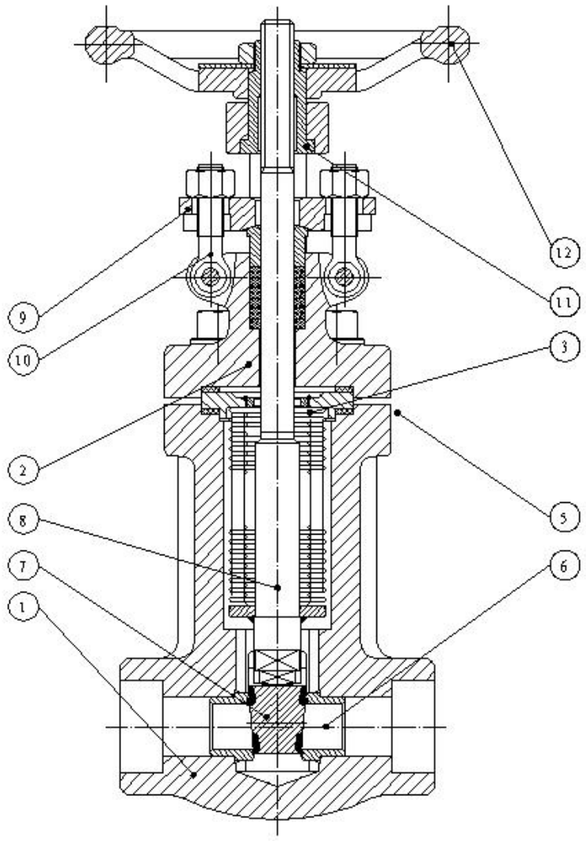
NPS	(in)	1/2	3/4	1	1₁/4	1₁/2	2
DN	mm	15	20	25	32	40	50
D		13	18	24	29	36.5	46.5
L(RF)	900;1500Class	216	229	254	279	305	368
	2000;2500Class	264	273	308	349	384	451
	PN16.0 MPa	170	190	210	230	260	300
H	900;1500Class	117.5	117.5	117.5	149	149	195
	2000;2500Class	125	125	125	166	166	210
	PN16.0 MPa	117.5	117.5	117.5	149	149	195
kg	900;1500Class	10.5	11.9	13.9	26.9	25.1	32.0
	2000;2500Class	12.6	14.9	16.5	28.0	27.6	34.5
	PN16.0 MPa	9.8	10.5	12.0	24.4	24.8	30.1

Bellows Sealed Valves

YAAO FORGE

Bellows Sealed Valves

Typical forged steel, outside screw and yoke (OS&Y), rising stem, non-rising handwheel. Full or standard port. Bolted or welded bonnet joint. Integral backseat.



1. **BODY.** The body is forged steel and designed to the basic dimensional requirements of the applicable specifications such as API 602 and ASME B16.34. The body is available in both the full or standard port design.
2. **BONNET.** The bonnet is forged steel, has an integral backseat and incorporates the stuffing box, which has dimensions per the applicable specifications such as API 602.
3. **BELLOWS.** The hydroformed bellows design is in accordance with specifications API 602, and MSS-SP-117.
4. **BONNET EXTENSION.** The bonnet extension is forged steel and of similar material as the body and bonnet and attached by a welded connection.
5. **BODY-BONNET JOINT.** Two different bonnet joint designs are available. These are either the welded or the bolted bonnet type. The bolted bonnet joint design valve uses a contained, controlled compression, spiral wound type gasket. The bonnet bolting is manufactured of alloy steel in accordance with the requirements of the applicable specifications such as API 602 and ASME B16.34.
6. **SEAT RINGS.** The seat rings are steel and make up part of the valve trim. They are pressed into the valve body and wedged into place, forming a seal with the body. The seating surfaces are ground and lapped.
7. **WEDGE.** The wedge, which is a solid design, is forged or investment cast steel and is part of the valve trim. The seating surfaces are ground and lapped.
8. **STEM.** The stem is forged steel and part of the valve trim. It contains an integral back seat shoulder, which mates with the integral backseat of the bonnet. The stem is designed to the basic dimensional requirements of the applicable specifications such as API 602.
9. **GLAND AND FLANGE.** The gland, gland flange assembly utilizes a separate, two piece design. This self aligning design allows the flange to be unevenly tightened while the gland maintains its parallel alignment with the stem and stuffing box.
10. **GLAND BOLTS AND NUTS.** The steel/stainless steel gland bolt and nut assembly is a stud, double nut arrangement. This design allows complete removal from the valve when service is required. The use of industry standard thread full length studs and nuts also allows easy replacement should these items be lost or in need of replacement.
11. **YOKE SLEEVE.** The yoke sleeve is of forged stainless steel material having a high melting point and is resistant to wear and corrosion.
12. **HANDWHEEL.** The handwheel is forged carbon steel of an open spoke design. This robust construction along with appropriate sizing allows for ease of operation.
13. **GREASE FITTING.** The grease fitting is incorporated in the bonnet for stem and yoke sleeve lubrication to ensure smooth operation.
14. **THRUST WASHER.** The thrust washer is between the bonnet and yoke sleeve to help prevent excessive wear of the yoke bushing and reduce operating torque.