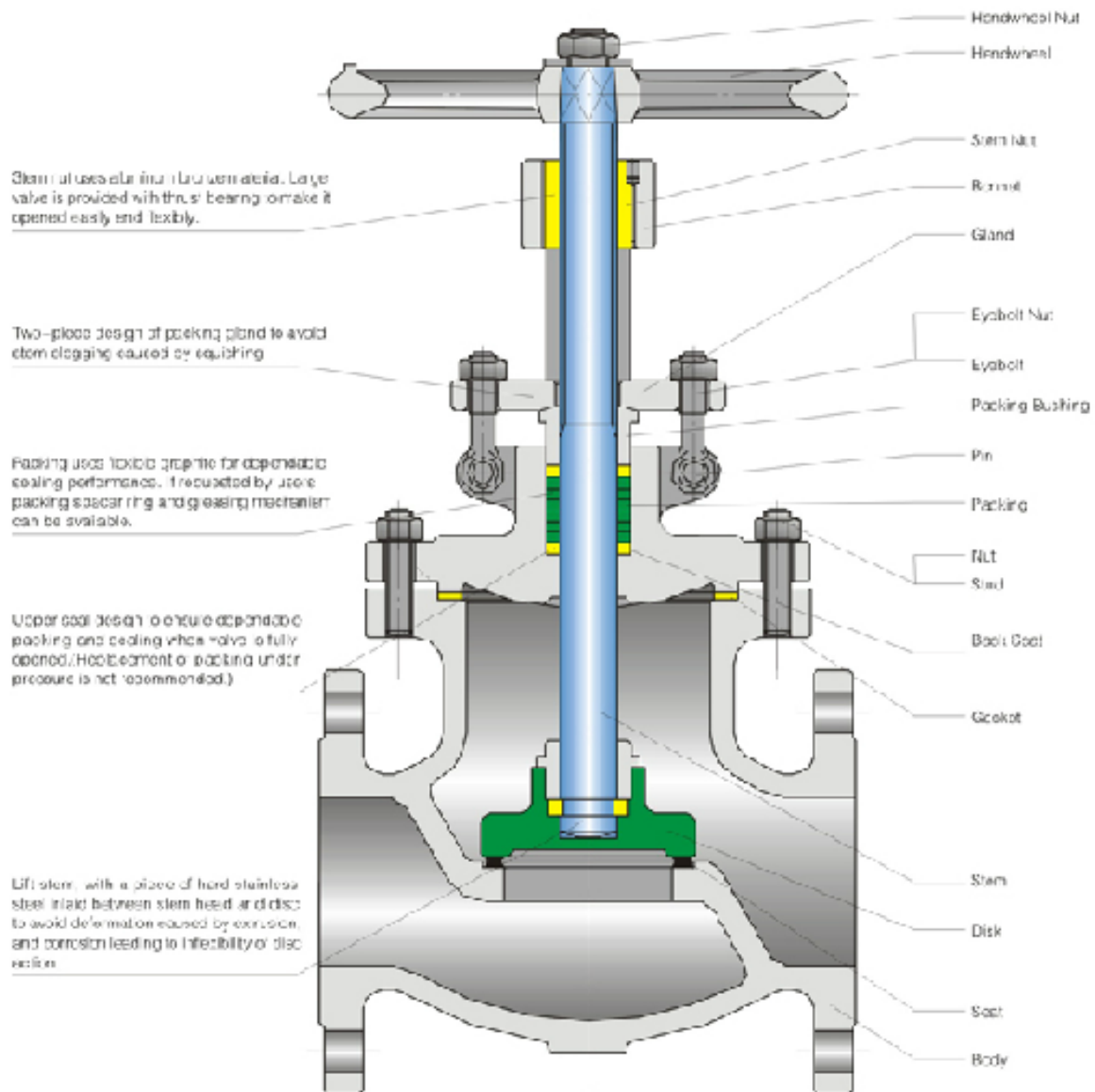


## Design of Cast Steel Globe Valve With Rising Stem(OS & Y)



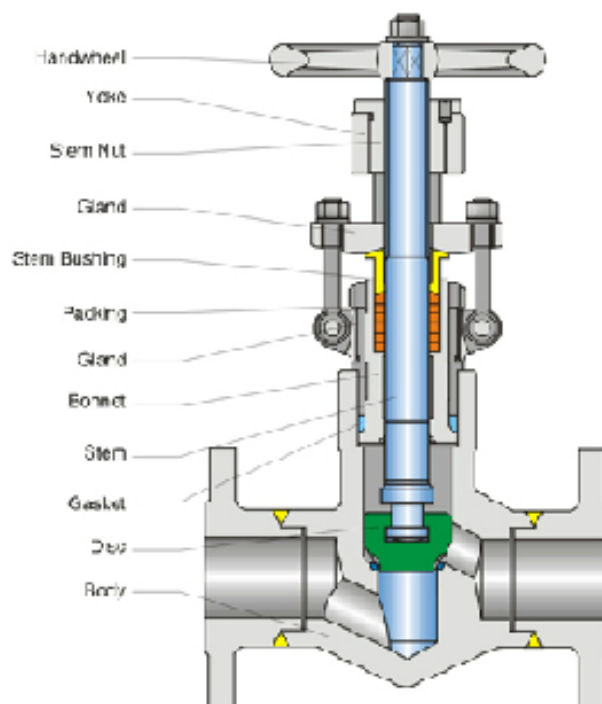
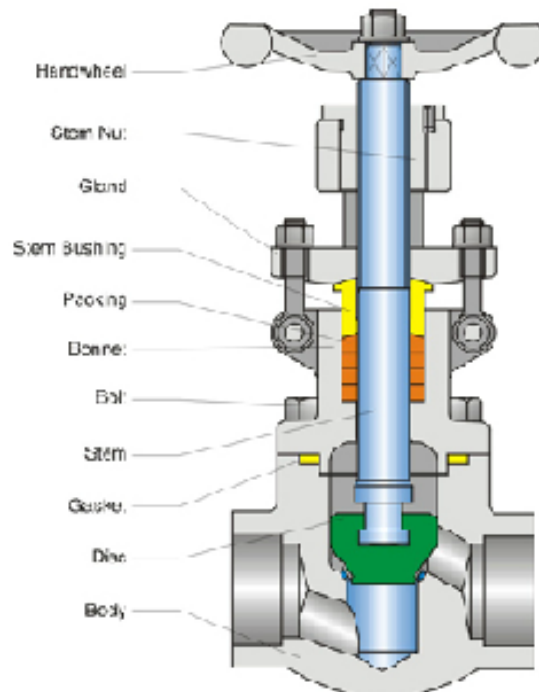
### Materials List for BS1873 Cast Steel Globe Valve With Rising Stem(OSS™)

No.	Part Name	Carbon Steel	Stainless Steel	Alloy Steel	Low Temperature Steel
1	Body	A216 GR WCB	A351 GR CF8	A217 GR WC6	A352 GR LCB
2	Seat	A105	-	A182 GR F304	A182 GR F304
3	Disc	A216 GR WCB	A351 GR CF8	A217 GR WC6	A352 GR LCB
4	Stem	A270 TYPE 410	A270 TYPE 304	A182 GR F22	A270 TYPE 304
5	Stud	A193 GR B7	A193 GR B8	A193 GR B7	A193 GR B8
6	Nut	A194 GR 2H	A194 GR B8	A194 GR 4	A194 GR B8
7	Back Seat	A182 GR F6a	A182 GR F304	A182 GR F304	A182 GR F304
8	Gasket	Graphite +SS304			
9	Packing	Graphite			
10	Pin	A194 GR B11	A270 TYPE 304	A270 TYPE 410	A270 TYPE 304
11	Packing Bushing	A182 GR F6a	A182 GR F304	A182 GR F6a	A182 GR F304
12	Eye-bulb	A193 GR B7	A193 GR B8	A193 GR B7	A193 GR B8
13	EYE-BULB NUT	A194 GR 2H	A193 GR B8	A193 GR 4	A193 GR B8
14	Gland	A216 GR WCB	A351 GR CF8	A216 GR WCB	A352 GR LCB
15	Bracket	A216 GR WCB	A351 GR CF8	A216 GR WCB	A352 GR LCB
16	Stem Nut	B148 UNS C95800	B148 UNS C65800	B148 UNS C25800	B148 UNS C95800
17	Hardware	A197	A197	A197	A197
18	Hardware Nut	A198 GR 1020	A182 GR F304	A198 GR 1020	A198 GR F304

### Technical Specification

Design Standard		BS1873, ASME B16.34				
Pressure-Temperature Rating		ASME B16.34				
Face-to-face		ASME B16.10				
Flange Ends		ASME B16.5				
Butt-welding Ends		ASME B16.25				
Inspection & Test		API598				
Nominal Pressure(Class)		150	300	600	900	1500
Test Pressure (MPa)	Shell Test	2.94	7.67	16.24	24.32	39.30
	High Pressure Seal Test	2.16	5.62	7.51	11.20	23.08
	Low Pressure Seal Test	0.6				
Applicable Temperature		-196°C ~ 550°C (Different raw material for different working temperature)				
Applicable Medium		Water, oil, gas and other non-toxicity medium (Different raw material for different medium)				

## Design of Forged Steel Globe Valve



# Forged Steel Globe Valve

<http://www.cnjoch.com>

## Material List for Main Parts

No.	Part Name	ASTM			
		Carbon Steel		Stainless Steel	Alloy Steel
1	Body	A105	LF2L53	A162 F304	A162F11/F22
2	Lined	A182-F6a	A182H6a	A182 F304	A182-F6a
3	Stem	A276-410	A276-11C	A276-304	A276-410
4	Gasket	Graphite-F304			
5	Sealing Ring	Graphite			
6	Yoke	A216-WCB	A216-WCB	A351-CF8	A216-WCB
7	Bonnet	A105	A350 LF2/LFC	A162 F304	A162 F11/F22
8	Gland	A216-WCB	A216-WCB	A351-CF8	A216-WCB
9	Coil	A193 B7	A320 L7	A193 B8	A193 B7
10	Packing	Graphite			
11	Stem Packing	A276-410	A276-11C	A276-304	A276-410
12	Gland	A216-WCB	A216-WCB	A351-CF8	A216-WCB
13	Eye Bolt	A193 B7	A320 L7	A193 B8	A193 B7
14	Stem Nut	A276-410			
15	Handwheel	A197 or A197-32510			

## Performance Specification

Nominal Pressure		Class						
		150	300	600	900	300	1500	2500
Test Pressure (MPa)	Shell Test	2.94	7.07	15.92	26.45	22.90	58.30	95.80
	High Pressure Seat Test	2.16	5.30	11.23	14.95	16.85	38.78	46.81
	Low Pressure Seat Test	0.6						
Applicable Temperature		< 425°C						
Applicable Medium		Water, oil & gas						