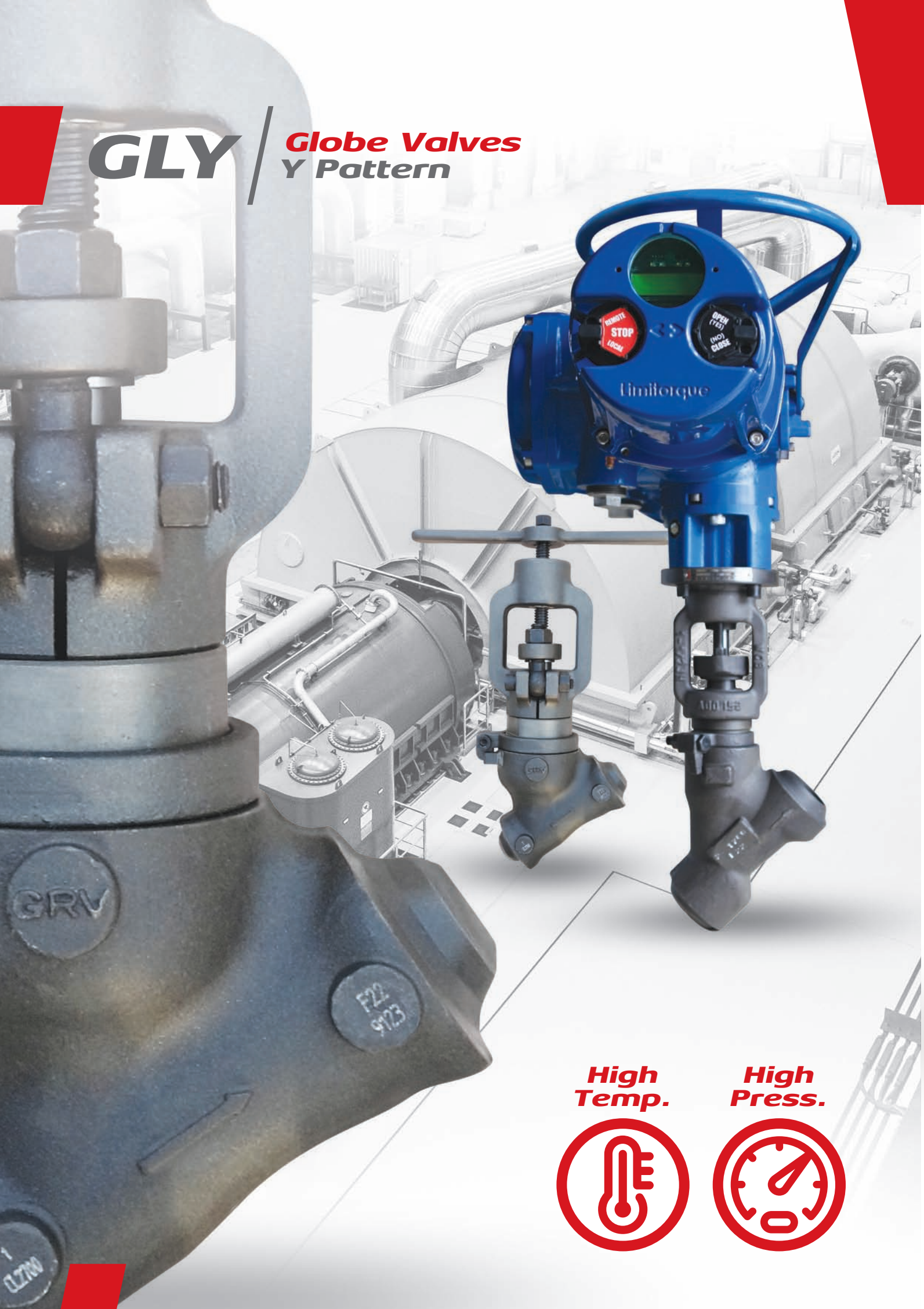
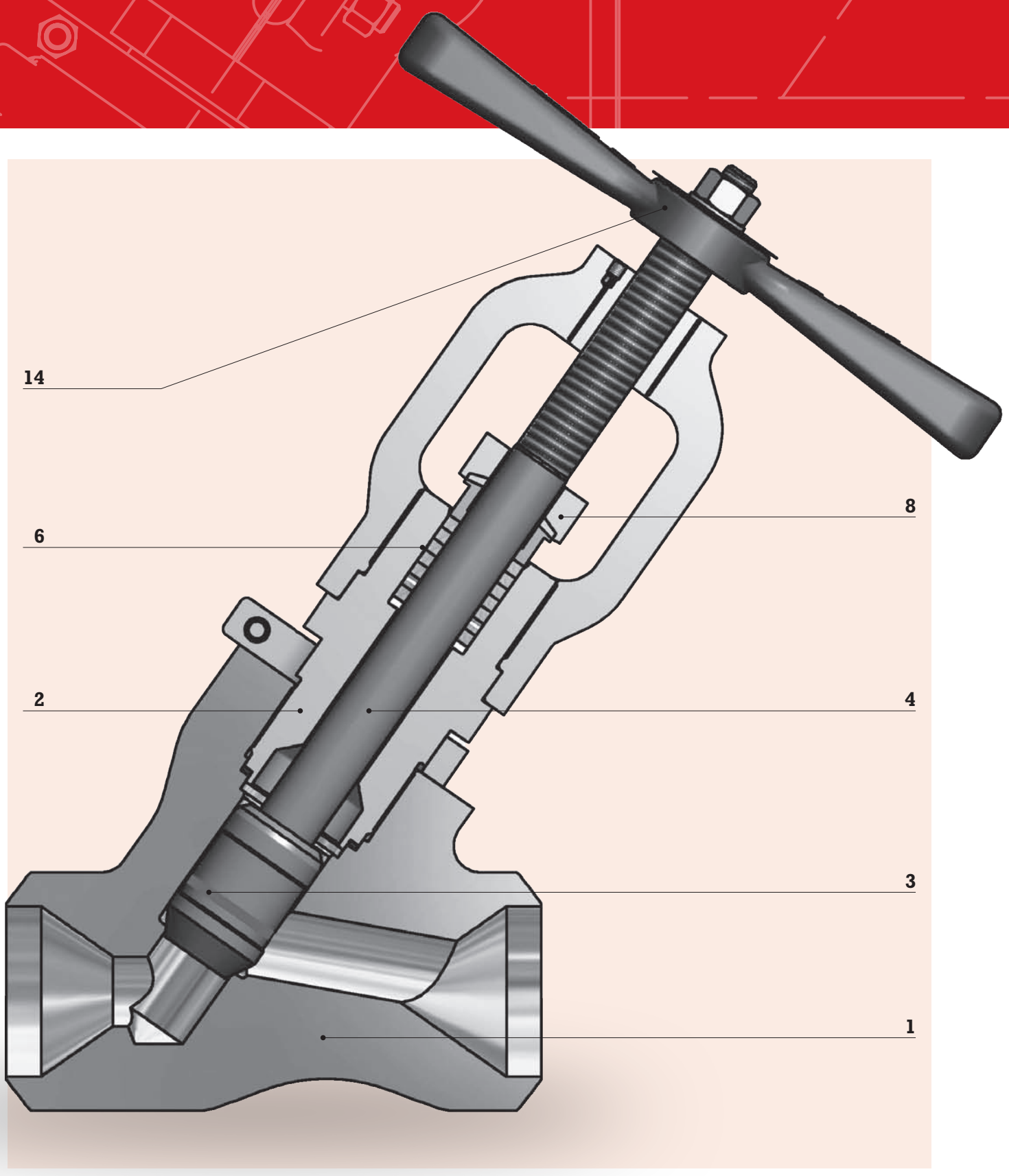
GLY | Globe Valves
Y Pattern



High Temp.

High Press.



Identification of the Valve Parts

Item	Part Name
1	Body
2	Bonnet

Item	Part Name
3	Disc
4	Stem
6	Packing

Item	Part Name
8	Gland Flange
14	Lever

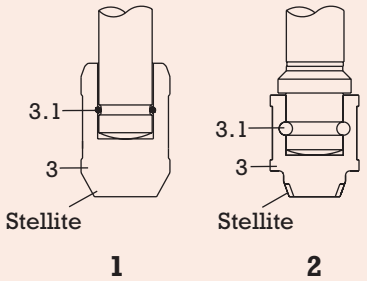
GLY | Globe Valves Y Pattern

Construction Feature

1 - Body:
- 100% forged, available in carbon steel, CrMo low alloy steel or stainless steel (F91, F92, A105, F11, F22, F316 etc.). Streamlined internal passage and inclined stem allow "soft" flow and reduce pressure drop. Passage shape minimizes turbulence, vibration, erosion and is self-draining as well.
- The integral seat is hard surfaced by means of stellite Gr.6, which is applied through a high performance automated welding program, which guarantees uniform anti-corrosion characteristics and ensures full shut off and longer life.
- The extra thickness of the deposited stellite allows several subsequent repairs of the seating surface to insure continuous shut off. Final machining of the seat surface and of other surfaces in a single operation results in a perfect alignment of all components.

2 - Bonnet:
- 100% forged and of the same material as the body.
- Threaded bonnet detachable for easy maintenance.
- Backseat is integrally machined and isolates the packing chamber from the line pressure.
- On request backseat can be supplied with stellited hard face.

3 - Disc:
- The disc surface is always overlaid with stellite Gr.6 and is axially connected with the stem, but does not rotate with it.
- The disc is pushed against the seat or pulled against the back seat with axial nonrotating movement.
- Fully guided (bottom and top) in the body to prevent vibration in any position also avoids side thrust against the stem.
- The design allows several surface repairs of the disc surface.
- According to class, size and operation of the valve, the disc is made in compliance with one of the following models (fig. 1/2).



1 2

1 - The disc connects to the stem by the connecting ring (3.1).
2 - The disc sealing surface stellite Gr.6 hardfaced, connected to the stem with the steel ball (3.1).

4 - Stem:
- Made of high temperature resistant martensitic stainless steel and high temperature austenitic stainless steel, heat treated against corrosion and to achieve best mechanical characteristics.

- The threads are of the ACME type. The surfaces are carefully machined for a longer life of the packing and yoke bushing threads.

6 - Packing:
- The smooth finish of the packing chamber is perfect. Packing (6) is made of an adequate number of preformed rings of graphite as standard, but special materials are available upon request.

8 - Gland Flange:
- Made of one piece of forged steel. Its design permits easy removal and allows ample space for repacking.

14 - Lever:
- Made of cast steel. Its shape permits perfect grip A pyramid shaped square connection provides a perfect fit on the stem. Fixed on stem by hexagon nut and locking washer.
- The lever is available on request instead of hand wheel. Impactor lever is supplied on larger size and higher rating valves.

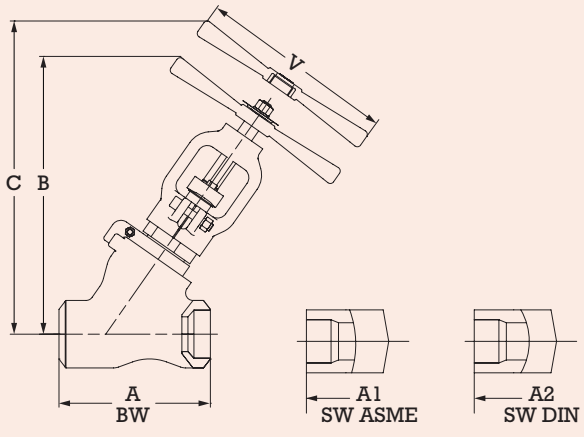
Operation Type

- **E:** Electric Actuator
- **M:** Manual Actuator
- **P:** Pneumatic Actuator.

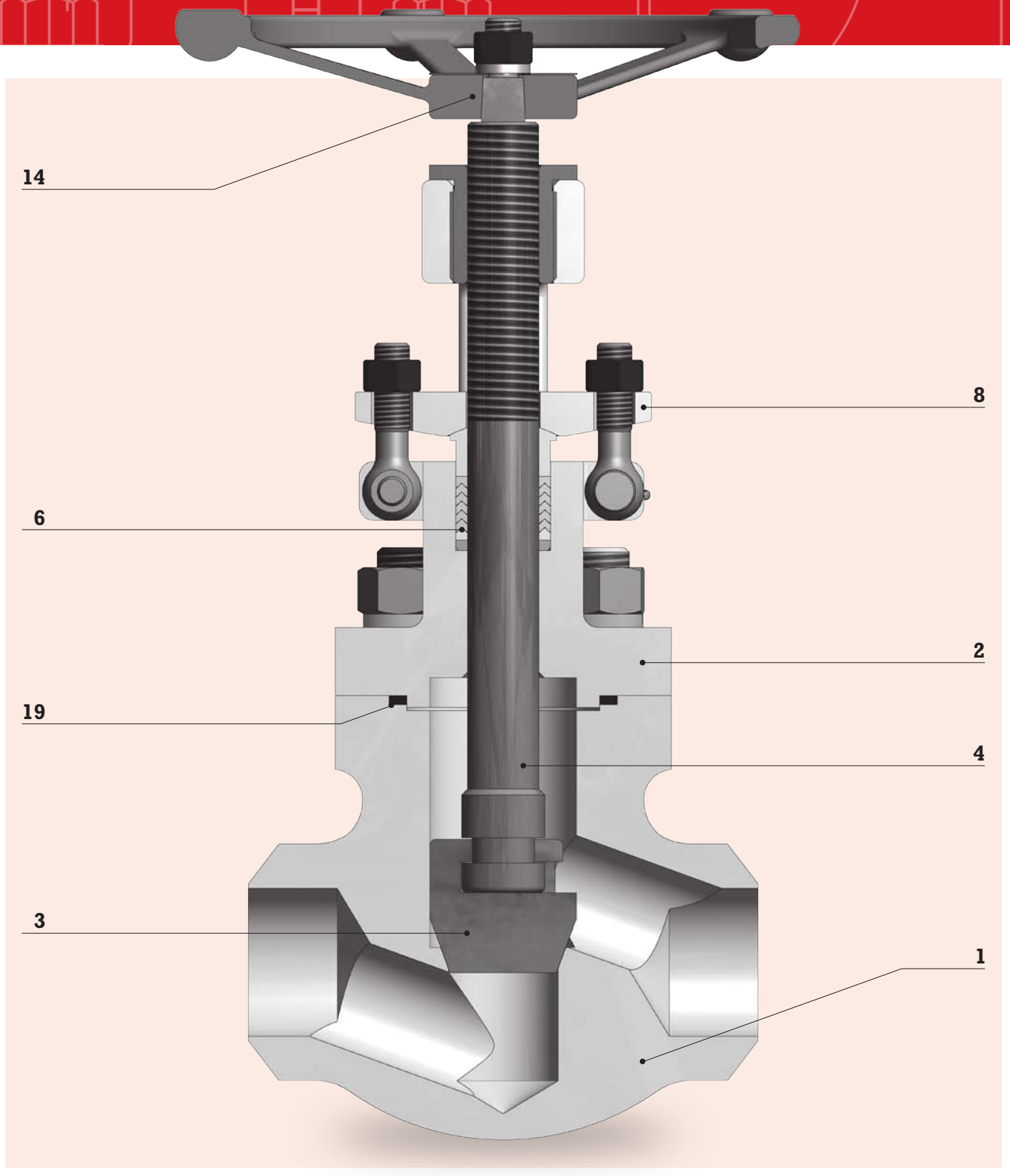
Material Schedule

Item	Component	71	11	22	31	91
1	Body	ASTM A105	ASTM A182 F11	ASTM A182 F22	ASTM A182 F316	ASTM A182 F91
2	Bonnet	ASTM A105	ASTM A182 F11	ASTM A182 F22	ASTM A182 F316	ASTM A182 F91
3	Disc	ASTM A105+STL	ASTM F182 F11+STL	ASTM A182 F22+STL	ASTM A479 316+STL	ASTM A182 F91+ STL
4	Stem	ASTM A479 410	ASTM A565 616	ASTM A565 616	ASTM A182 F316H	ASTM A453 Gr.660
5	Packing Gasket	ASTM A276 420	ASTM A276 420	ASTM A276 420	ASTM A276 316	ASTM A276 420
6	Packing	Graphite	Graphite	Graphite	Graphite	Graphite
7	Gland	ASTM A276 420	ASTM A276 420	ASTM A276 420	ASTM A182 F316	ASTM A276 420
8	Gland Flange	ASTM A105	ASTM A105	ASTM A105	ASTM A182 F316	ASTM A105
10	Gland Nut	ASTM A194 2H	ASTM A194 2H	ASTM A194 2H	ASTM A194 8M	ASTM A194 2H
12	Stem Nut	ASTM B124 C62300	ASTM B124 C62300	ASTM B124 C62300	ASTM B124 C62300	ASTM B124 C62300
13	Screw	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7	ASTM A193 B8M	ASTM A193 B7
14	Handle or handwheel	ASTM A216 WCB	ASTM A216 WCB	ASTM A216 WCB	ASTM A351 CF8	ASTM A216 WCB
16	Name Plate	304	304	304	304	304
17	Washer	Carbon Steel	Carbon Steel	Carbon Steel	Stainless Steel	Carbon Steel
18	Bolt Nut	ASTM A194 2H	ASTM A194 2H	ASTM A194 2H	ASTM A194 8M	ASTM A194 2H
19	Body-Bonnet Gasket	SS316+Graphite	SS316+Graphite	SS316+Graphite	SS316+Graphite	SS316+Graphite

Connections & Dimensions



Model		Size inches	A mm	A1 mm	A2 mm	B mm	C mm	V mm
GLY007IT/RE15	1700LB	3/4	120	120	120	325	345	300
GLY010IT/RE15	71/11/22/31/91	1	120	120	120	325	345	300
GLY015IT/RE15	GR	1 1/2	160	160	160	356	382	300
GLY020IT/RE15		2	224	224	224	480.3	514.3	400
GLY025IT/RE15		2 1/2	224	224	224	488	531	400
GLY030IT/RE15		3	-	305	305	569	624	400
GLY040IT/RE15		4	-	305	305	569	624	400
GLY007IT/RE25	2700LB	3/4	120	120	120	325	345	300
GLY010IT/RE25	71/11/22/31/91	1	120	120	120	325	345	300
GLY015IT/RE25	GR	1 1/2	160	160	160	356	380	300
GLY020IT/RE25		2	224	224	224	480.3	514.3	300
GLY025IT/RE25		2 1/2	224	305	305	488	525	400
GLY030IT/RE25		3	-	305	305	568	615	400
GLY040IT/RE25		4	-	305	305	568	615	400
GLY007IT/RE45	4500LB	3/4	160	160	160	356	381	300
GLY010IT/RE45	71/11/22/31/91	1	160	160	160	356	381	300
GLY015IT/RE45	GR	1 1/2	160	160	160	356	381	300
GLY020IT/RE45		2	224	224	224	480.3	514.3	400
GLY025IT/RE45		2 1/2	224	224	224	480.3	514.3	400
GLY030IT/RE45		3	305	-	-	557	598	400
GLY040IT/RE45		4	305	-	-	557	598	400



Identification of the Valve Parts

Item	Part Name
1	Body
2	Bonnet

Item	Part Name
3	Disc
4	Stem
6	Packing
8	Gland Flange

Item	Part Name
14	Handwheel
19	Body-Bonnet Gasket