

CAST GATE VALVES





DESIGN TO API 600

Cast with uniform metal sections, smooth flowing contours and generous radius fillets to prevent stress concentrations. Designed for structural stability, mechanical strength and safe weldability. Precision machined.

ONE-PIECE DESIGN BONNET

Cast steel O S & Y type. The one piece design aligns stem accurately, eliminating excessive weight and unnecessary working parts. All bonnets are equipped with a stainless steel bushing which serves as a guide for stem and provides backseating when valve is wide open under pressure. Precision machined.

SOLID WEDGE/SPLIT WEDGE

The low centre stem-wedge contact reduces the torque considerably. Operation is easy and the wedge does not stick when valve is closed hot and allowed to cool. The split wedge design compensates for minor misalignments of seals due to pipe stresses and makes the valve tight on both seating faces over a wide range of pressures. Established long cycle life.

EFFICIENT WEDGE GUIDING

Long, smooth ribs are lined up with seat rings and wedge. Seating faces do not contact each other until the valve is virtually closed.

T-head wedge-stem connection with an unusual low point contact reduces torque and prevents lateral stresses on the stem.

CA 15/STELLITE FACED LEAK PROOF SEATS FOR LONG SERVICE

Hardfaced with CA 15/Stellite ensures long seat life. Hard seat concept is advantageous since seat faces are exposed to live fluid in open condition. This results in on-line impingement on seat faces. Stellite facing reduces on-line seat wear.

STEM

Heat treated 13% Cr stainless steel, with precision square thread. A heavy, T-head holds wedge at full contact for uniform pull of the wedge in operation. Self adjusting radial backseating shoulder engages with the backseat in the bonnet. Ground mirror like finish assures long life of packing which drastically reduces friction and ensures no leakage.

STRONGER, LEAK-PROOF, BODY-BONNET JOINT, FULLY ENCASED GASKET

The design of the gasketed joint is critical. Its compression is better controlled in a fully enclosed cavity. Also, the possibility of unwinding of the SS spiral metal is eliminated.

STUFFING BOX

In all valves the stuffing box is deep, has high quality finish and holds high pressure or temperature packing rings ensuring tightness and long packing life. Asbestos free graphoil packing is available.

FLANGE FACING

Flanges of class 150 and 300 valves have a 1/16" raised face and serrated finish.

Materials of Construction

		WCB	CF8	CF8M
1	BODY	WCB	CF8	CF8M
2	BONNET	WCB	CF8	CF8M
3	WEDGE	CA 15 / WCB+13% Cr	CF8	CF8M
4	SEAT	CA 15 / STELLITE-6	CF8	CF8M
5	STEM	SS410	SS304	SS316
6	STEM NUT	GUN METAL	SS304	SS316
7	BACKSEAT	SS410	SS304	SS316
8	GLAND	WCB	CF8	CF8M
9	PACKINGS	GRAPHITED ASBESTOS	P.T.F.E.	P.T.F.E.
10	BOLTS	A 193-B7	B8	B8M
11	NUTS	A 194-2H	A 194-8	A 194-8M
12	HANDWHEEL	CI	CI	CI

Also available in Zero Leak Version.

Test Pressures

TEST	Pr .	150	300	TESTING MEDIUM
SHELL	psig	450	1125	KEROSENE or WATER
	BAR	30	77	
BACKSEAT	psig	325	835	
	BAR	22	57	
SEAT LEAK	psig	325	825	WATER
	BAR	22	57	

SEAT LEAK Air Test provided on request.

Dimensions

ASA 150 # [inches]							
BORE DIA	F to F	F DIA	F THIC	P.C.D.	RFD	N of H	H DIA
1	5	4 1/4	7/16	3 1/8	2	4	5/8
1 1/2	6 1/2	5	9/16	3 7/8	2 7/8	4	5/8
2	7	6	5/8	4 3/4	3 5/8	4	3/4
2 1/2	7 1/2	7	11/16	5 1/2	4 1/8	4	3/4
3	8	7 1/2	3/4	6	5	4	3/4
4	9	9	15/16	7 1/2	6 3/16	8	3/4
5	10	10	15/16	8 1/2	7 5/16	8	7/8
6	10 1/2	11	1	9 1/2	8 1/2	8	7/8
8	11 1/2	13 1/2	1 1/8	11 3/4	10 5/8	8	7/8

The specifications and data in this leaflet are as accurate as possible. Improvements and modifications from time to time may necessitate change in design and dimensions.