



Ultimate Craft Cast Advanced Industry

GATE VALVE OVERVIEW

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ABOUT US

KFTE VALVE is an ISO 9001 & CE certified company specializing in manufacturing industrial valves including ball valves, gate valves, globe valves, check valves, plug valves and butterfly valves in carbon steel, stainless steel, duplex stainless and alloy materials. Our products conform to the latest industry standards in accordance to ANSI, ASME and API.

KFTE today has over 400,000 square feet of manufacturing facilities. Through its conviction to provide only the finest quality products and services to match the need of our customers, KFTE has now established itself as a serious player in the valve business.

KFTE VALVE has sold worldwide in North America, Europe, South America, South Asia, Africa and the Middle East. We consider product quality and customer satisfaction as our highest priority. We look forward to new customer relationships by providing value, quality, customer service, honesty, integrity and the commitment to maintain product consistency with each and every order.



INTRODUCTION

KFTE cast gate valves are offered by default with flexible gate, renewable seat, rising stem and non-rising hand wheel. It plays the role of pipe opening and closing ultimately through the rotation of the hand wheel to drive the lifting of gate.

Bolted bonnet, pressure bonnet, bellow seal bonnet, high/low temperature extended bonnet and ISO 15848 fugitive emission designed valves are available upon different request of services.

Forged body can also be provided upon special request.

Design of Disc

Cast steel gate valve are made with flexible wedge by default, solid wedge will be provided only upon request.

Design of Seat

Renewable seat and non-renewable seat are optional, the default for WCB body is seal welded seat, and body overlay seat against other valve body material.

Design of Body -Bonnet Connection

Bolted bonnet is normally applied on CL150~CL900, body seal is defaulted by gasket and RTJ ring. Pressure seal bonnet is applied on CL1500~CL2500 with pressure seal ring for body seal.

Design of Packing

Gate Valves are provided with KFTE API 622 Low Emission Packing, by default, to meet API 600 design standards. KFTE has developed low fugitive emission graphite packing that meets API 622 2nd Edition. KFTE Gate Valves have been tested per API 624 2014 and meets requirements of <100 ppm.

Design of Backseat

Renewable back seat is applied on all carbon steel and low alloy steel valve, however, body back seat is only applied for stainless steel valve.

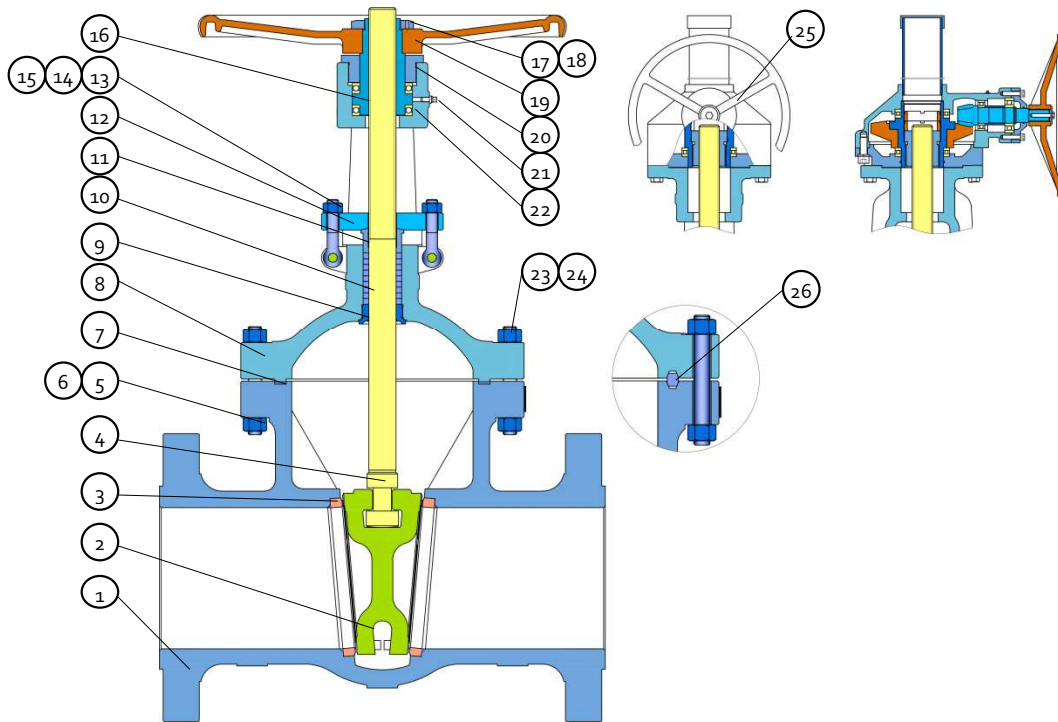
Design of Actuation

Hand wheel and gear box are normally designed for cast gate valve based on different size and pressure rating; Electric, pneumatic or Chain wheel operation can be provided upon request.



GATE VALVE

OVERVIEW (Bolted Bonnet)



Part List

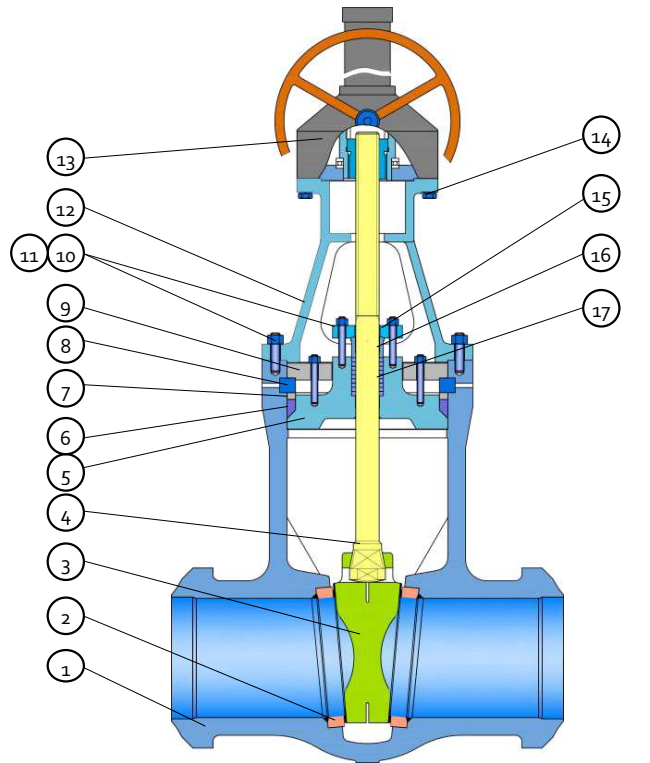
1 Body	7 Gasket	13 Eye Bolt	19 Handwheel	25 Gear
2 Wedge	8 Bonnet	14 Nut	20 Bearing Nut	26 Octagonal Ring
3 Seat	9 Backseat	15 Pin	21 Lubricating Nipple	
4 Stem	10 Packing	16 Stem Nut	22 Bearing	
5 Stud	11 Gland	17 Handwheel Nut	23 Stud	
6 Nut	12 Gland Flange	18 Screw	24 Nut	

Standards

Design & Manufacture	API 600, ASME B16.34, MSS SP-144	
Face-to-face	ASME B16.10	
End Dimension	ASME B16.5 (RF, RTJ), ASME B16.47 (RF, RTJ) ASME B16.25 (BW)	
Test & Inspection	API 598	
Typical Materials	Body, Bonnet, Disc	(Casting): A216 WCB, A351 CF3, CF8, CF3M, CF8M, A995 4A, 5A, A352 LCB, LCC, LC2 (Forging): A105, A350 LF2, LF3, LF5, A182 F304, F304L, F316, F316L, F51, F53, F5, F11, F22, F91, Monel, Inconel, Hastelloy
	Stem	A182 F6a, F304, F304L, F316, F316L, F51, F53, F55 Monel, Inconel, Hastelloy

GATE VALVE

OVERVIEW (Pressure Seal Bonnet)



Part List

1 Body	5 Bonnet	9 Push Plate	13 Gear
2 Seat	6 Seal ring	10 Stud	14 Bolt
3 Wedge	7 Push ring	11 Nut	15 Gland flange
4 Stem	8 Split ring	12 Yoke	16 Gland

Standards

Design & Manufacture ASME B16.34, MSS SP-144

Face-to-face ASME B16.10

End Dimension ASME B16.5(RF, RTJ)
ASME B16.47(RF, RTJ)
ASME B16.25 (BW)

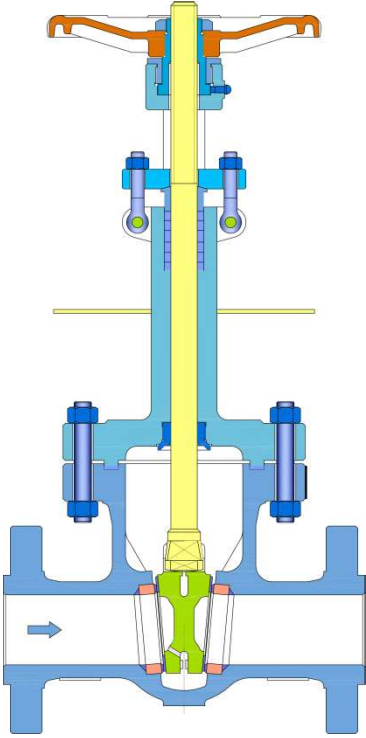
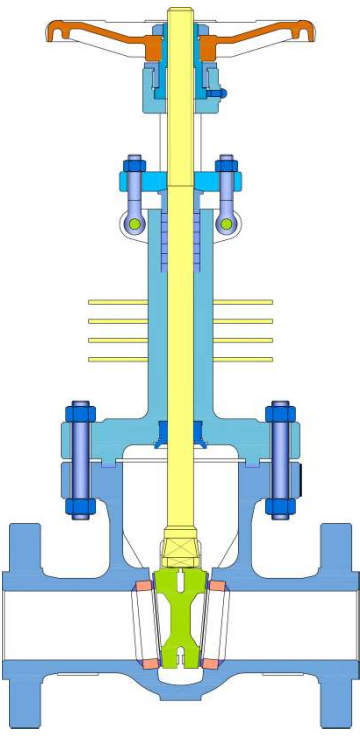
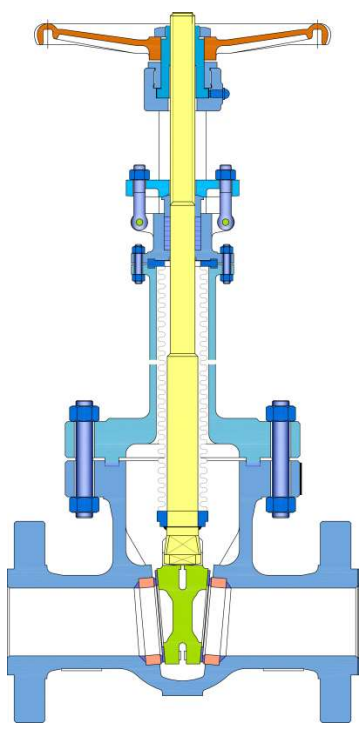
Test & Inspection API 598, ASME B16.34

Typical Materials

Body,	(Casting) A216 WCB, A351 CF3, CF8, CF3M, CF8M, A995 4A, 5A, A352 LCB, LCC, LC
Bonnet, Disc	(Forging) A105, A350 LF2, LF3, LF5, A182 F304, F304L, F316, F316L, F51, F53, F5, F11, F22, F91, Monel, Inconel, Hastelloy
Stem	A182 F6a, F304, F304L, F316, F316L, F51, F53, F55 Monel, Inconel, Hastelloy

GATE VALVE

OVERVIEW (Special Type Cast Steel Gate Valve)

		
<p>Low Temperature Extension</p>	<p>High Temperature Extension</p>	<p>Bellow Seal Extension</p>
<p>Structure characteristics:</p> <ol style="list-style-type: none"> 1. The bonnet are extended for low temperature service, the packing position are raised to avoid the freeze of packing which will affect packing sealing performance; 2. The gate valve shall have relief hole on upstream direction while the pressure may remain in the cavity; 3. Low temperature cold isolation can be an option to prevent cold heat exchange. 	<p>Structure characteristics:</p> <ol style="list-style-type: none"> 1. The high temperature extended structure is mainly to prevent scald operator during operation. 2. The cooling fin can be selected to help heat radiation. 	<p>Structure characteristics:</p> <ol style="list-style-type: none"> 1. Bellow seal extension has the bellow inside of the cavity, the effective compression of the bellows must be greater than the opening stroke of the valve; 2. Bellow seal structure can effectively reduce the leakage of valve stem, the primary seal is for bellows and secondary seal as a filler.