Vogt



HF Valves
Alkylation Service





In the late 1890s, Vogt pioneered the early development of ammonia absorption refrigeration systems that made artificial ice. This business, plus Vogt's fledgling boiler business, created an internal need for quality valves that initiated Vogt's early entry into the valve manufacturing business.

The early reputation of Vogt's quality valves and rapidly growing petroleum processing industry created an outside demand that would firmly establish Vogt in the mass production of high-quality forged steel valves.

For more than 100 years, Vogt's leadership has been evident in the production of forged steel gate, globe, angle and check valves in most popular materials, trims and bonnet configurations.

Today, Vogt valves, since 2017 part of OMB valves holding, support a worldwide network of distributors with access to the world's largest capability for manufacturing of forged steel valves from its manufacturing plants in Stafford, TX and Corsico, Italy.

VOGT HF VALVES, RELOADED...

Since 1880 we have been the name of forged steel valves: with a renewed spirit and a brand new home in Stafford, Texas, we are now ready to meet the request of the most challenging applications in the valves industry with legacy and new products:

HF Valves in Low RE Carbon, Alloy 400 and Alloy C276:

- → API602 Gate, Globe and Check valves
- → API600 Gate, Globe and Check valves
- → API602 Triple Eccentric Butterfly valves
- → Strainers

ALKYLATION PROCESS
A refining process used to enhance gasoline octane rating.
Inherent in several of these process systems is the use of hydrofluoric (HF) acid.

SPECIAL QA REQUIREMENTS
Vogt HF valves are constructed on a Certified ISO 9001 QA Program to assure that all design, materials, quality, inspection and manufacturing details are met.

SPECIAL TEST REQUIREMENTS
We test hydrofluoric acid (HF) valves with a test medium of mineral oil/ kerosene to avoid the potential for water entrapment.
Water entrapment when combined with HF acid could cause accelerated corrosion in service.

FULL PORT VALVES
Hydrofluoric acid, in high concentration, actually forms a protective film on carbon steel internal surfaces.
The use of a full port valve with its larger flow path minimizes fluid erosion of the “protective film” as the flow medium passes through the valve.

PACKING AND GASKET FILLER MATERIALS?
PTFE and flexible graphite packing have been effectively used in HF valve applications.
PTFE is usually preferred in HF valve applications where temperatures remain at or below 500°F. For temperatures above 500°F flexible graphite is suggested. Gaskets are spiral wound with filler material identical to the packing material having the same designation. Graphitic packing qualified to API624/API622.

DOUBLE PACKING CHAMBER
Some systems engineers specify a valve designed with a double packing chamber, lantern ring and grease injector–particularly where hot or cold, full-strength HF acid is the fl owing medium. The grease injector provides for a means to insert a compatible lubricant at the center of the packing chamber to assure smooth operation of the valve stem while the lubricant also augments the seal between the operating fluid and the atmosphere.
→ Available on request.

ACID-DETECTING PAINT
As an additional safety precaution some specifications require painting body/bonnet joint flange surfaces for the purpose of detecting acid leaks. This paint is usually a requirement only when traces of acid in the flow medium are present or when high acid concentration levels exist.



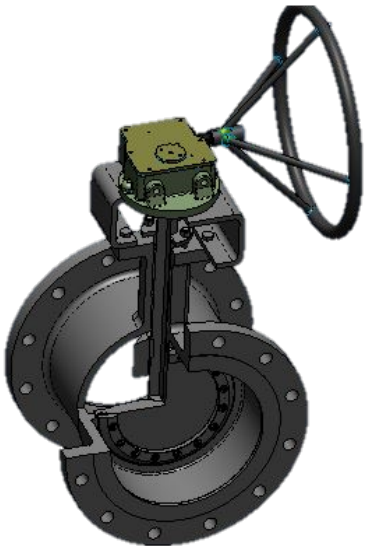
HF Valves Material Grades

VOGT	FORGED	CAST	BAR
A105-HF-N	ASTM A 105 Normalized, per ASTM A961 Sup.S62	ASTM A216 Gr WCB per ASTM A216 Supl. S16	
LF2-HF	ASTM A350 LF2 per ASTM A961 Sup. S62	ASTM A352 Gr. LCB per ASTM A961 Sup. S62	
Alloy 400	ASTM B 564 Alloy	ASTM A494 M35-1	
(Monel® 400)	UNS N04400 annealed	UNS N24135	
Alloy K500 (Monel® K-500)	-	-	Alloy UNS N05500
Alloy C276 (Hastelloy C276®)	ASTM B564 UNS N10276	ASTM A494 CW12MW	Alloy UNS N05500

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MONEL® IS A REGISTERED TRADEMARK OF SPECIAL METALS CORPORATION

API 609

Triple Offset Butterfly



Double Flanged Triple Offset Butterfly valves to API609 cat. B

KEY FEATURES:

- → Meets UOP, ExxonMobil, Valero and Marathon latest valve specifications
- → API641 Low Fugitive Emission qualified
- → Casting made in Italy
- → Fire tested design to API Standard 607
- → Gear operated

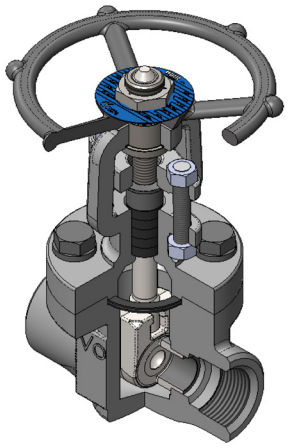
Triple / Offset / Butterfly / API609 cat B	6” and above

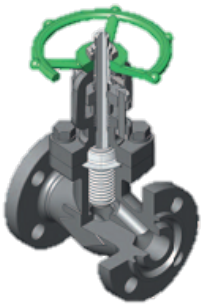
Class 150 / 300 / 600	WCB Low RE LCB LOW RE Alloy 400 Alloy C276

	CARBON STEEL SERIES	ALLOY 400 SERIES
Body	A 216 WCB / A 105 Low RE	A 494 M35-1(2) or B 564
	A 350-LF2 / A 352-LCB low RE	
Stem / Shaft	Monel® K-500(6)	Monel® K-500(6)
Stem Bushing / Gland Follower	B 164 or B 564	B 164 or B 564
External Bolting (4)	A 193 Gr. B7M	A 193 Gr. B7M
External Nuts (4)	A 194 Gr. 2HM / Gr. 7M	A 194 Gr. 2HM / Gr. 7M
Internal Pins / Keys / Bolts	UNS N05500 / Monel® K-500	UNS N05500 / Monel® K-500
Packing (3)	Flexible Graphite	Flexible Graphite
Body Seat / Disc Seal (5) and Seat Retaining Ring	A 494 M35-1(2) or B 564 or UNS N10276	A 494 M35-1(2) or B 564 or UNS N10276
Stem Bearing	UNS N10276	UNS N10276

API 602

Forged Steel Valves
GATE, GLOBE AND CHECK





Gate, Globe and Check valves to API602 and ASME B16.14. Threaded, Socket Weld or Flanged

KEY FEATURES:
- → Meets UOP, ExxonMobil, Valero and Marathon latest valve specifications
- → API624 Low Fugitive Emission qualified
- → Bonnet Gasket fully contained
- → Full Port
- → Integral Flanged body
- → CS with Low RE qualified at Steel Mill source

OPTIONS:
- → RE- Lantern Ring and Grease injection (UOP HF1)
- → WS- Welded-in Seats
- → B- Bellows Seals in Alloy C276 and Alloy 400
- → P6- Forged Flanged valves to API600 specifications

Gate / Globe / Check / Bellows Seal	1/2” to 2”
Class 150 / 300 & 800 / 600	A105-HF-N Low RE LF2 Low RE Monel® UNS N04400 Alloy C276

	CARBON STEEL SERIES	ALLOY 400 SERIES
Body	A 105 or A 350-LF2 Low RE	UNS N04400- B 564
Bonnet / Cap / Cover	A 105 or A 350-LF2 Low RE	UNS N04400- B 564
Wedge / Disc / Plug	A 494 M35-1 or B 564	A 494 M35-1 or B 564
Stem / Shaft	Alloy K-500	Alloy-500
Stem Bushing / Gland Follower	B 164 or UNS N04400- B 564	B 164 or UNS N04400- B 564
Seat Ring	A 494 M35-1 or UNS N10276 or B 127 / B 164 / B 564	A 494 M35-1 or UNS N10276 or B 127 / B 164 / B 564
Bolting	A 193 Gr. B7M	A 193 Gr. B7M
Gland Nuts	A 194 Gr. 2HM / Gr. 7M	A 194 Gr. 2HM / Gr. 7M
Gasket	Alloy UNS N04400 windings and flexible graphite filler / PTFE filler	Alloy UNS N04400 windings and flexible graphite filler / PTFE filler
Packing	Flexible Graphite to API622	Flexible Graphite to API622

API 600

Cast Steel Valves

GATE, GLOBE AND CHECK

Flanged Gate, Globe and Check valves to API600, API623 and ASME B16.14

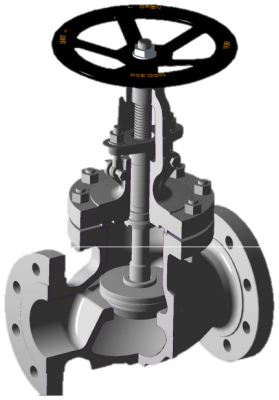
KEY FEATURES:

- → Meets UOP, ExxonMobil, Valero and Marathon latest valve specifications
- → API624 Low Fugitive Emission qualified
- → Bonnet Gasket fully contained
- → CS with Low RE qualified at Steel Mill source
- → Casting made in house at Valvosider foundry in Italy

OPTIONS:

- → RE- Lantern Ring and Grease injection (UOP HF1)
- → WS- Welded-in Seats
- → B- Bellows Seals in Alloy C276 and Alloy 400





Gate / Globe / Check / Bellows Seal	2” and above

Class 150 / 300 / 600	WCB Low RE LCB Low RE Monel® UNS N04400 Alloy C276

	CARBON STEEL SERIES	ALLOY 400 SERIES
Body	A 216 WCB / A 352-LCB low RE	A 494 M35-1
Bonnet / Cap / Cover	A 216 WCB / A 352-LCB low RE	A 494 M35-1
Wedge / Disc / Plug	A 494 M35-1(2,3) or B 564	A 494 M35-1(2,3) or B 564
Stem / Shaft	Monel® K-500(4)	Monel® K-500(4)
Stem Bushing / Gland Follower	B 164 or UNS N04400- B 564	B 164 or UNS N04400- B 564
Seat Ring	A 494 M35-1(2) or UNS N10276 or B 127 / B 164 / B 564	A 494 M35-1(2,) or UNS N10276 or B 127 / B 164 / B 564
External Bolting	A 193 Gr. B7M	A 193 Gr. B7M
External Nuts	A 194 Gr. 2HM / Gr. 7M	A 194 Gr. 2HM / Gr. 7M
Bonnet / Cap / Cover Gasket (5)	Flexible Graphite	PTFE / PFA / Monel® / Flex Graphite
Packing (6)	Flexible Graphite	Flexible Graphite

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