



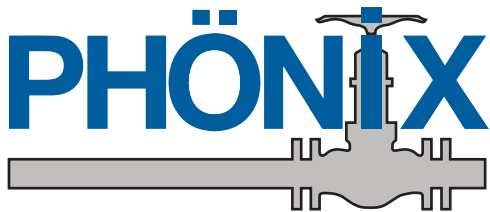
## Cast and Forged Hydrofluoric ( HF) acid valves

The World leader for the approved design and production of CAST and FORGED gate, globe and check valves in HF Alkylation process. Velan offers a comprehensive line of Phillips-approved and UOP-listed Hydrofluoric (HF) acid processing with specific benefits for every application. Fugitive emissions are a critical factor in the performance of any HF Acid valve and at Velan; we have been committed to reducing emissions beyond the industry standards, and providing the highest quality products to our customers for over 50 years. STOCKED in API 602 small forged HF – size NPS ½-2 - Pressure ASME 150-800 – Threaded , Socket weld, Flanged / STOCKED CAST HF – NPS 2”- 36”- Pressure Rating: ASME 150-300 –600# Flanged / Check Valves



## HF ALKYLATION PLUG VALVES

FluoroSeal Inc. is committed to providing the highest quality product to our HF Alkylation end users. As a result, FluoroSeal HF Alkylation Sleeved Plug Valves are designed, manufactured, and tested in strict compliance with the requirements of the UOP HF Alkylation Process Licensor specifications. To ensure that we provide the highest quality product possible, FluoroSeal Inc. conducts a 100% radiographic inspection of each valve body per the requirements of ASTM E446 (DIN EN 444 & DIN EN462). In addition, each machined valve body is subjected to a 450 psig helium gas shell test prior to assembly. After assembly, HF Alkylation valves receive a 1.5 times max cold working pressure kerosene shell test per ASME B16.34 (DIN EN 12266-1), a low pressure gas seat test, and high pressure kerosene seat test.



## BELLOW SEAL GLOBE VALVES

Model 350ec4 /5 are Euro Chlor approved for their compliance with Gest 06-318.Edition 2 design and selected materials also meet the equirements of chlorine institute pamphlet 6 service classes through vi. The unique valve design guarantees reliable and excellent rotectionagainst leaks or fugitive emissions. The stem seal requires virtually no maintenance due to leak freeweld connections on the bellows with bonnet and stem. Constant packing monitoring and e-packing is eliminated. In the unlikely event of a bellows failure the backup packing guarantees safe valve performance until the next scheduled shutdown. Special dual containment designs for complete valve leakage monitoring as well as designs for flow control applications with enhanced bellows cycle life are available.

The most common applications are:

- Dry Chlorine (Cl<sub>2</sub>) Service Temperature -40°C To 120°C / -40°F To 248°F
- Anhydrous Hydrogen Chloride (HCl)
- Anhydrous Hydrofluoric Acid (Hf)
- Phosgene (CoCl<sub>2</sub>)
- Vinyl Chloride Monomer (Vcm)
- Ethylene Dichloride (Edc)
- Isocyanites (Mdi, Tdi, Hdi, Etc.) And
- Fluids Of Similar Nature.



# **NATIONAL VALVE** Industrial & H.F. Alkylation Valves

... FOR ALL YOUR VALVE NEEDS

200-C PIEDMONT COURT DORAVILLE, GA. 30340 770-449-7088 800-529-8559 / FAX 770-449-7990 [national-valve.com](http://national-valve.com)

## CRANE

**Cast Steel:** WCB, C-5, C-12, LCB, Gate, Globe, Check

## FluoroSeal

**Plug valves:** HF ACID



**Marine:** Gate, Globe, Check

## JW NEWAY

**Cast Stainless:** 150, 300, 600, API 603-600  
**Cast Steel:** WCB, C-5, C-12, LCB, Gate, Globe, Check

## NIBCO

**Bronze:** Threaded, Gate, Globe, Check- 125#-300#  
**Cast Iron:** Threaded, Flanged, IBBM, All Iron, Gate, Globe, Check: 125-250  
**Ball Valves:** Bronze, Carbon, Stainless, Red Port, Full Port, NACE Trim  
**Butterfly:** Lugged and Wafer Style CI/DI/WCB/SS/Soft Seated



**Bellow Seal:** CS/SS/Hastelley- Bellow seal - severe service (chlorine / phosgene / hcl / ammonia / hot oil) 800 Forged Gates/Globes - 150-300 Cast Gates/Globes

## PIMA VALVE, INC.

**Marine:** Gate, Globe, Check



**Cast Stainless:** 150, 300, 600, API 603-600



**Bronze:** Threaded, Gate, Globe, Check- 125#-300#  
**Cast Iron:** Threaded, Flanged, IBBM, All Iron, Gate, Globe, Check: 125-250  
**Cast Stainless:** 150, 300, 600, API 603-600  
**Cast Steel:** WCB, C-5, C-12, LCB, Gate, Globe, Check  
**Forged Steel:** A-105, F11, F22, 316/NACE, MO/NACE, Full Stellite



**Forged Steel:** A-105, F11, F22, 316/NACE, MO/NACE, Full Stellite



**Bellow Seal:** CS/SS/Hastelley- Bellow seal - severe service 800 Forged Gates/Globes - 150-300 Cast Gates/Globes  
**Forged Steel:** A-105, F11, F22, 316/NACE, MO/NACE, Full Stellite



**Cast Iron:** Threaded, Flanged, IBBM, All Iron, Gate, Globe, Check: 125-250

## W-K-M®

**Butterfly:** Lugged and Wafer Style CI/DI/WCB/SS/Soft Seated

## VELAN

**Bellow Seal:** CS/SS/Hastelley- Bellow seal - severe service 800 Forged Gates/Globes - 150-300 Cast Gates/Globes  
**Cast Stainless:** 150, 300, 600, API 603-600  
**Forged Steel:** A-105, F11, F22, 316/NACE, MO/NACE, Full Stellite, Pressure Seal  
**Butterfly:** Lugged Style WCB/SS/Metal Seated, Flanged  
**Ball Valves:** Bronze, Carbon, Stainless, Red Port, Full Port, NACE Trim, Metal Seated  
**Cast Steel:** WCB, C-5, C-12, LCB, Gate, Globe, Check  
**Knife Gate:** 316, Bolted Bonnet, Metal To Metal, Viton