

Engineered Products For Severe Service Applications

Ultra-Cold Temperature

Abrasion Resistance



High Temperature

Corrosion Resistance

High Pressure

About Hi-Tek

Hi-Tek offers a wide range of engineered and severe service products for your critical operations. Our engineering team develops specifications to deal specifically with difficult service conditions from control applications to corrosion, ultra-low/high temperature, high pressure and abrasion. Our long history of supplying quality products into industry, demonstrates our commitment. It is our intent to deliver a full range of quality and reliable valve solutions for all types of valve problems. We strive to be your “one-stop-shop” valve and automation source.

HI-TEK Sentinel Series

SG-HT-2020

Control Valve

Engineered Valves for Severe Service
Applications where Precise Control is Critical.

Segmented V-Type Control Valve

Segmented/V-Ball to 24"/ANSI 600

Special Features:

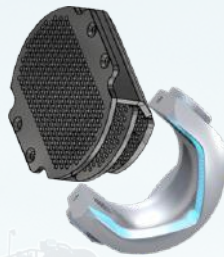
- ISA S75.04 face-to-face
- Rugged Uni-body Construction Available in Flanged or Wafer 150, 300, & 600 Lbs
- Metal or Soft Seated

Focus Industry:

- The pulp and paper industry uses this valve not as a control valve, but in fibrous paper stock applications because there are no areas where buildup can occur inside an enclosed cavity.
- Both clean and dirty fluids may pass through this valve without interruption.



Strong Shearability



Cavitation Control



Spline Connection



Globe Control Valve

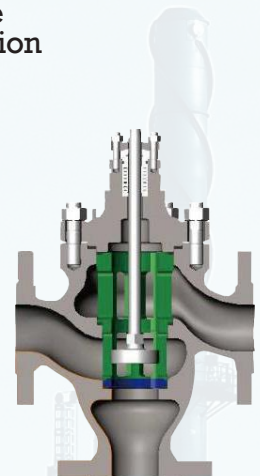
Sizes: 1"-14"
ANSI Class: 150 to 1500

Special Features:

- Noise and cavitation control
- Metal or Soft Seated

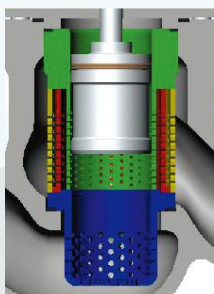
Focus Industry:

- The natural gas industry uses the noise control capability of the globe control valve in high pressure applications where high pressure letdown may result in noise. The multi-stage trim reduces trim noise to an acceptable environmental level.

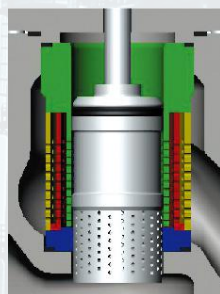


3-Way

Noise Reducing Trims



Multi-hole and Multistage Plating Trim of Noise reduction (seat of noise reduction)



Multistage noise reduction (perforated plug)



Standard
-4°F to 446°F



High temperature
-49°F to 446°F



Extended Bonnet
-320°F to -49°F



Metal Bellows Sealing Bonnet
-76°F to 986°F



Ceramic Series



Engineered Ceramics for the Toughest Abrasion and Corrosion Applications. No Compromises—Particulate Service Valves by Design Alumina, Zirconia, and Silicon Carbide. Ceramic Ball Valve ½"–8" ANSI 150 & 300 Class.

Special Feature: Full Ceramic Lining

- The Infiniflo Ceramic Ball Valve offers a full ceramic lining. The near-universal corrosion resistance of industrial ceramics mean that this valve can be used in VERY corrosive applications—even hydrofluoric acid—utilizing silicon carbide linings.

Focus Industry:

- The paper industry uses Infiniflo ceramic in bleach plants because the bleach is both corrosive and the salt materials are abrasive in service when temperature fluctuates causing solids precipitation. The ceramic materials extreme hardness resists the abrasive attack.

Actuator failure caused this ball to be caught in the partially open position and remain there for an extended period of time. As you can see, the metal areas of the valve were attacked quite aggressively but the ceramic remains in pristine condition.



Ceramic Gate Valves to 24" ANSI 150 Class

Special Feature: Round Packing

In particulate service, round packings are commonly more reliable because they do not “pull” material through the packing with each valve open/close cycle.

Focus Industry:

The mining industry uses our Infiniflo ceramic series valves for high abrasive applications in mine tailings/ rejects. The ceramic materials are 6-8 times harder than stainless steel and will last many times the life of elastomer or hard metal seats. It's common to take a valve out after YEARS of service and find no discernible wear.

Hi-TEK SuperCool Cryogenics

Product Description

- Seat and stem packing have special materials to handle the extreme temperatures as low as -350°F
- Extended bonnet protects packing and the operator (whether human or mechanical)



Cryogenic



Special Features:

- Available Cryo Bonnet Tall Stems
- One Piece High Strength Stems
- Encapsulated body seals prevent “cold flow”

Focus Industry:

- The specialty gases industries use these valves for LNG service to -260F and Nitrogen to -320F to enable the gases to be transported more efficiently in a compressed state at super-cool temperatures.
- Low temperature services with temperatures below freezing down to -350°F
- Chilling & Freezing Applications Food Industry
- Biotechnology & Medical Industry
- Aerospace Industry
- Alloy Treatment Service
- Petrochemical Industry



Gases including:

- Oxygen
- Nitrogen
- Hydrogen
- LNG
- Fluorine
- Helium
- Methane
- Petrochemical

Hi-TEK SuperAlloys

For **EXTREME CORROSION**
where ordinary metal just don't last.

Product Description:

- Floating and Trunnion Ball Valves
- Metal/Elastomer seated to 48"/ANSI 2500
- Gate/Globe/Check up to 60"/ANSI 2500
- Double and Triple Offset Butterfly to 100"/ANSI 600

Special Feature:

- Extreme corrosion alloys: Hastelloy, Inconel, Nickel Alloys, Chromium, Zirconium, Copper, Iron Super Alloys

Focus Industry:

The chemical industry uses Hi-Tek's Super Alloy series for extreme corrosive environments.



Zirconium Gate Valve

Titanium Knife Gate Valve

Inconel Butterfly Valve

Nickel Alloy Gate Valve

Hastelloy Ball Valve



Metal Seated Ball Valves

Designed for Extreme temperatures as high as 1200°F, Extreme Pressure and your toughest Application Challenges.

Product Description:

Hardened Seats for Abrasion Resistance and High Temperature.

Engineered Valves for Severe Service Reliability

- Abrasive or Corrosive Chemicals
- High Temperature Pressure & Steam
- Hydraulic Services
- Slurry Services
- Cryo Applications
- Asphalt Services
- Gas & Oil Services
- Liquid Sulfur
- Steam Services

Size Range:

¼"–12"

Threaded Weld and Flange Designs

Special Feature:

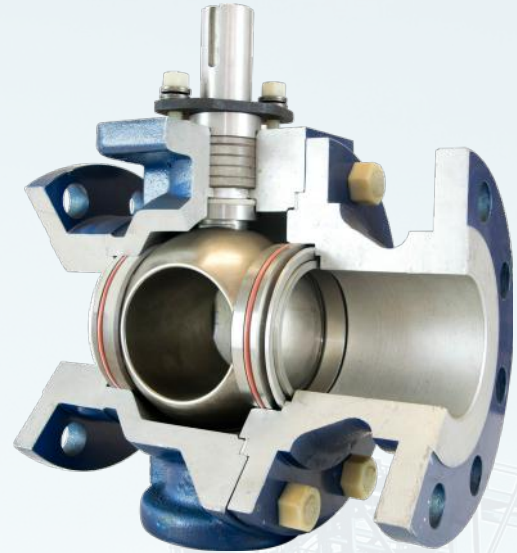
- Scale Scraper Seats

Flo-Tite's scraper seat is ideal for most difficult applications where build-up of damaging fluid deposit may occur on the ball face. Overtime, this occurrence to the critical smooth ball surface will cause the ball to become rough and dull rendering the valve inoperative. This problem is most common in pulp making recovery in white, black & green liquors.

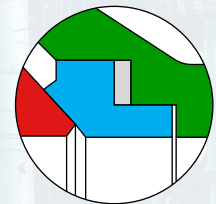
Flo-Tite works with customers to design valves tailored to their specific needs. Knowledge of applications, materials and design allows our engineers to find solutions to problems quickly and effectively. Chem-Tek: Anti-scaling compound infused into the interior wetted surfaces of the valve.

Focus industry:

- Pulp and Paper Manufacturing – This industry uses our scraper seats in liquor applications. Quite often, green, and at times, white liquors can scale in the process.



Scraper Seat Design



Red - Ball
Blue - Seat
Green - Body

Modulating Control Ball Valves

Custom Design Your Flo-Options



Design Features

- Higher Flow Capacities
- Excellent Repeatability
- Bubble-Tight Shut-Off
- Precise Flow Control
- Non-Clogging Flow-Streams for General And Slurry Applications
- Compact Control Package
- High Pressure Drop Capability Available with Special Order.

Available in most all types of ball valves, Size Range: ¼"–12"

Product Description:

- Lined Ball Valves to 6" in DI and SS bodies
- Ball Check to 4" in DI and SS bodies
- Fully Lined Wafer and Lug Butterfiles in DI and SS bodies to 24"
- Valve Body Design: ASME B16.42 & EN12516-3
- Face-to-Face: ASME B16.10
- Actuator Mounting Pad: ISO-5211
- ISO 15848-1 compliant & tested low fugitive emission design



PFA Lined



Ball Check



Ball Valve



Butterfly Valve

Special Features:**Focus Industry:**

- | | | | |
|---------------|------------------|------------------|---------------------------|
| Fertilizers | Pulp and Paper | Food Processing | Paint and Pigments |
| Desalination | Textile Industry | Semi-Conductors | Pharmaceutical Industry |
| Bio-Technical | Petro-Chemical | Mining and Steel | Chemical Process Industry |

Trans-Flo Series

Extremely Versatile Designs for flow diversion or mixing.

- Flo-Tite offers a wide selection of multi-port ball valves designed to simplify piping systems, eliminating the need for two or more standard valves. The valve has either one or two pc ball/stem with a trunnion type Ball Support. T, L, or LL Flow Plans.

Applications:

- Oil and Gas
- Lact Skids
- Heat Exchange Applications
- Water Services

Models Available:

- MPF15 - ANSI 150 LB Flanged Ends
- MPF30 - ANSI 300 LB Flanged Ends
- MPF60 - ANSI 600 LB Flanged Ends
- MPT30 - ANSI 300 PSI Threaded Ends
- MPC15 - ANSI 150 Tri-Clamp Ends
- MPF154 - ANSI 150 LB Flanged 4-Way Valves

Size Range:

- 1/2"-14"





High Performance Double and Triple Offset Butterfly Valves

Product Description:

- Max-Seal HP Series of Double Offset High Performance Valves Provide long lasting tight shut-off capability's with excellent flow characteristics and long service life.

Size Range:

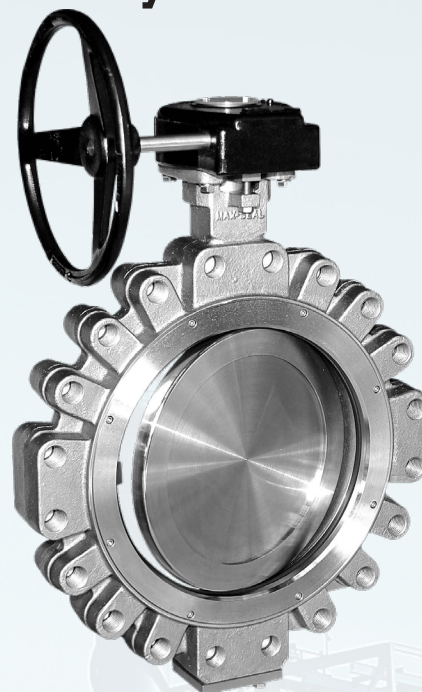
- 2"-48"
- ANSI 150 & 300 Class
- Wafer & Lug Types
- Soft and metal seats
- Fire-safe design

Focus Industry:

- Hi-Tek Series of Triple Offset high performance butterfly valves.
- The Hi-Tek Series Specializes in a wide selection of exotic alloys.



Triple Offset



Double Offset

Size Range:

- 3"-80"
- Wafer, Lug, Flanged & Butt Weld
- 150-300-600-900 ANSI Pressure Class

Performance Series

- Resilient seated Butterfly Valves built for Heavy Duty Applications
- Ductile Iron Resilient seated valve
- Wafer • Lug • Flanged End

Size Range:

- 2"-60"



Large Diameter Pipeline Valves Built for Demanding Applications

Product Description:

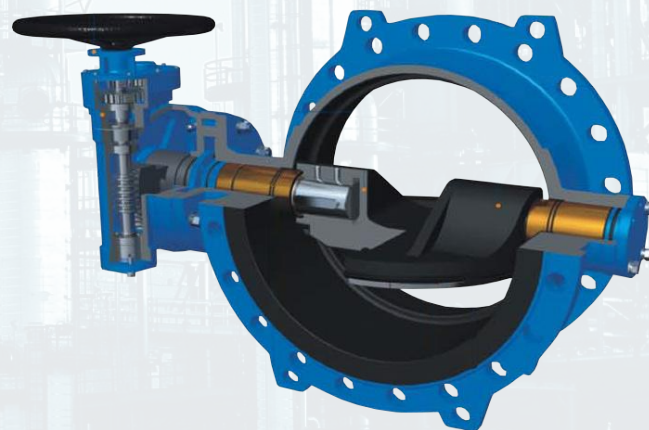
- Double Eccentric Designs
- Ductile Iron Body
- Disc-316SS, Bronze, Duplex, and Nylon Coated
- Dead End Service

Size:

- Extended Range up to 120"

Applications

- Water
- Sewage
- Sea Water
- Desalinization
- Low Corrosive Fluid
- CE Certified
- WRAS
- ISO 14001
- NSF
- API 609



Typical Services



Chemical Processing

Corrosive Chlorine Manufacture
Abrasive slurries for scrubbers
Abrasive Powder transport



Pulp & Paper Industries

Corrosive and abrasive Bleach
Abrasive scrap collectors
Corrosive Waste/Acid Recovery



Mining

Corrosive acids
Abrasive mine tailings
Cyclone Separators
Large diameter flush valves



Power Generation

Corrosive Desalination
Corrosive and Abrasive Desulfurization
Abrasive Ash handling

Transflo



Media Containment Fugitive Emissions



Air-Con Actuators Rack & Pinon



Automator Spring-Diaphragm



Kompact Series



Your One-Stop-Shop for a Full Range of Valve Applications.

- Floating Ball Valves–Metal/Elastomer seated to 14"/ANSI 600
- Trunnions–Metal/Elastomer seated to 42"/ANSI 2500
- V-port Control options to 12"/ANSI 300
- Low cost, precise control
- High Pressure Metal Seat to Class 900

Automation Capabilities

- Smart positioners with HART/Fieldbus/Profibus Communication
- Pneumatic Actuators to 1,565,800 in-lbs
- Corrosive Service
- Pro-Torq Electric Actuators to 177,000 in-lbs
- Automator Series Control spring/diaphragm to 12,680 in-lbs
- Power Stroke Scotch Yoke to 2,215,000 in-lbs

Here's what our typical stock looks like:

- Over 85,000 Ball Valves up to 12" and 6000 PSI
- Over 700 Double/Triple offsets to 30" in ANSI 150/300
- 200 Trunnion Ball Valves from 2"-12" to ANSI 600
- 20,000 Repair Kits for Actuators and Valves
- Over 1700 resilient seated butterflies up to 24"
- In excess of 2,000 Pneumatic and Electric Actuators
- 115 Sentinel Series Control Valves from 2" to 16" to ANSI 300
- 400 SuperAlloy Valves
- 3,500 V-Balls for Control Valves
- Thousands of Automation related Accessories including Solenoids, Switches, and Controllers.

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