

CORPORATE PROFILE

Frisch Engineered Products' Corporate Mission is to provide every customer with **reliable valves** for the **best price without compromising quality**. Our **corporate commitment** is to maintain a worldwide reputation of **distinction in the fabricated valve market**. Our **seasoned personnel, insightful and innovative management systems**, and a **tightly controlled quality assurance** program ensure timely delivery of the technologically advanced valves our customers can depend on.

Frisch's team is comprised of leaders in engineering, marketing, finance, and manufacturing. Since 1988 our products for **severe service applications** have been meeting the **most rigorous requirements** of world leaders in industry and government.

Frisch manufactures a complete range of valves for low pressure, high temperature, erosive and corrosive services. We also provide comprehensive packages for actuation and control. Each package is custom engineered to specific customer requirements. We are capable of supplying valves for services to **50 psi @ 3,000°F**.

The Frisch Team has serviced the following industries:

Coal Gasification
Carbon Black
Metals Refining and Smelting
Oil Refining
Petro Chemical
Power Generation
Pulp and Paper
Steel Mills
Sulphuric Acid Plants
Waste Incineration and Management
Waste Water Treatment

The plants above use our products in the following areas:

- Bag Houses
- Catalytic Cracking Units
- CO Boilers
- Control or Isolation of Flue Gases
- Control and Isolation of Process Gases
- Dust Collection Systems
- Fume Collection & Incineration
- Reactor Inlet and Outlet
- Sulphur Burning Furnaces
- Sulphur Recovery
- Turbo Expander Isolation and Control
- Waste Gas Recovery Systems
- Waste Heat Boilers

Contact Frisch for assistance to solve **all your severe service** fluid control and shutoff problems.

PRODUCTS

Frisch valves and dampers include a wide variety of types and sizes of **butterfly, angle, diverter, guillotine, gate, and refractory lined** designs. Valve seats and seals of creative design configurations progress from swing-through for **precise low pressure flow** control to machined hard faced seats for **very tight shutoff** to FCI 70.2 Class V.

Sizes: 2' to 144" for the products listed to the right.

Pressure Classes to ANSI 1500

Services temperatures from -400°F to 3000°F.

We manufacture the following products:

Butterfly Valves

Rubber Seated, Metal Seated, Swing Through

Guillotine Dampers

Round, Rectangular, Zero Leak, Refractory Lined

Slide Gate Valves

Parallel, Wedge Type, Refractory Lined

Multi Blade Dampers

Parallel or Opposed Blade, Refractory Lined

Angle Valves

Metal Seated, Refractory Lined

Diverter & Mixing Valves

Y or T Configurations, 2, 3, or 4 Way

FRISCH FIGURE NUMBER SYSTEM

VALVE TYPE	DESIGN PRESSURE	BODY END STYLE	BODY MATERIAL	TRIM AREA
Eg.: 20	010	- RF	-AA	-AE

Butterfly Valve, designed for 10 PSI @ 800°F, with Raised Face Flanged Ends, Body is Carbon Steel, and Trim is 304 Stainless Steel

FRISCH VALVE TYPE

- 20 - Butterfly
- 25 - Refractory Lined Butterfly
- 30 - Plug/Jug
- 35 - Refractory Lined Plug/Jug
- 40 - Guillotine
- 45 - Refractory Lined Guillotine
- 50 - Louvred
- 55 - Refractory Lined Louvre
- 60 - Gate
- 65 - Refractory Lined Gate
- 70 - Check
- 75 - Refractory Lined Check
- 80 - Diverter-T
- 85 - Refractory Lined Diverter-T
- 90 - Diverter-Y
- 95 - Refractory Lined Diverter-Y

DESIGN PRESSURE

001 - 1 PSI
to
999 - 999 PSI

BODY END STYLE

BW - Butt Weld
FF - Flat Face Flange
RF - Raised Face Flange
RT - Ring Type Joint Flange
WF - Wafer Flange

BODY MATERIAL

AA - A36/44W Carbon Steel
AB - A516GR70 Carbon Steel
AC - A387GR11 Chrome Moly
AD - A387GR22 Chrome Moly
AE - A240T304 Stainless
AF - A240T304 H Stainless
AG - A240T316 Stainless
AH - A240T316 L Stainless
ZZ - Other - Specify

TRIM MATERIAL

Same Code as Body Material

CORPORATE OFFICE

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FRISCH

ENGINEERED PRODUCTS INC.

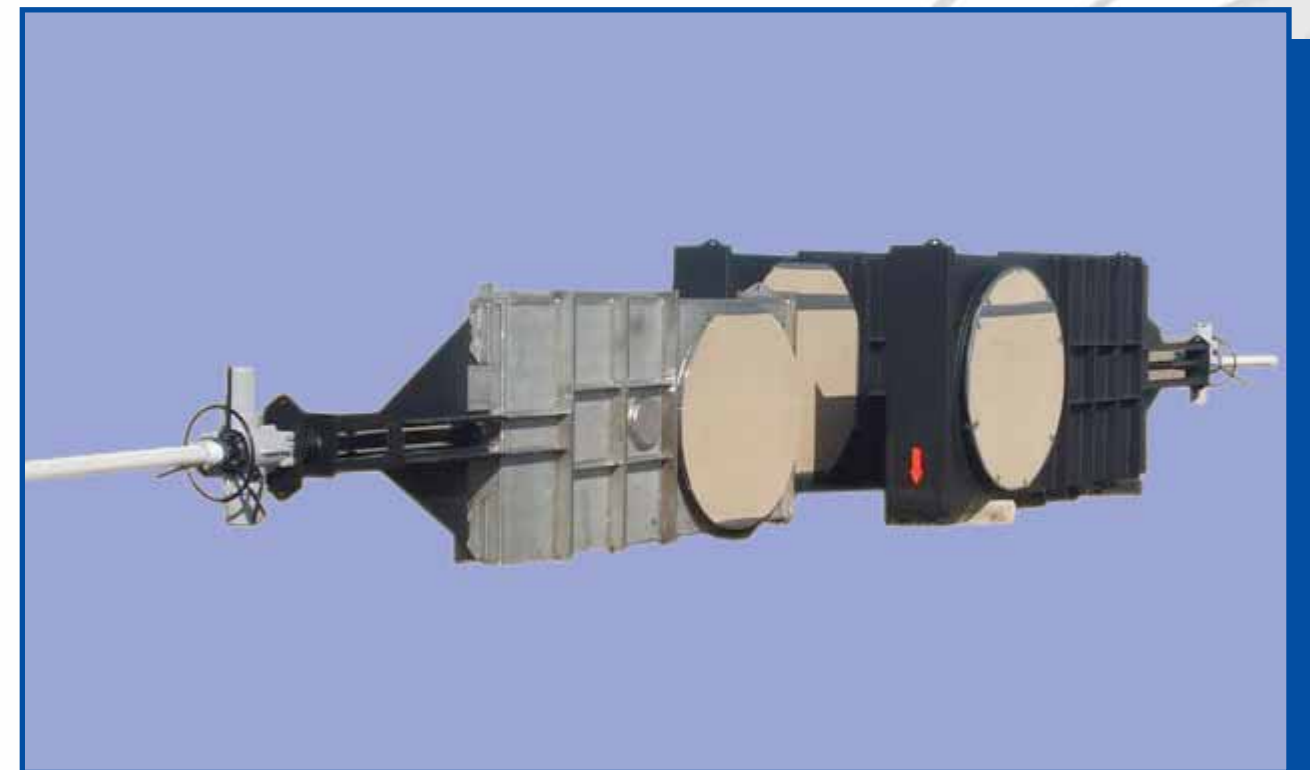
PO Box 1570

382 16TH Street West, Battleford, SK CANADA S0M 0E0

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Gate Valves



Double Block & Bleed Zero Leak Gate Valves

www.frischvalves.com

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GATE VALVES



42" & 60" Gate Valves



54" Rolling Slide Gate Valve for blower inlet isolation 7.6 PSIG @ 600°F



54" Double Block & Bleed Gate Valve



60" Double Disc Gate Valve



135" x 70" Guillotine Gate

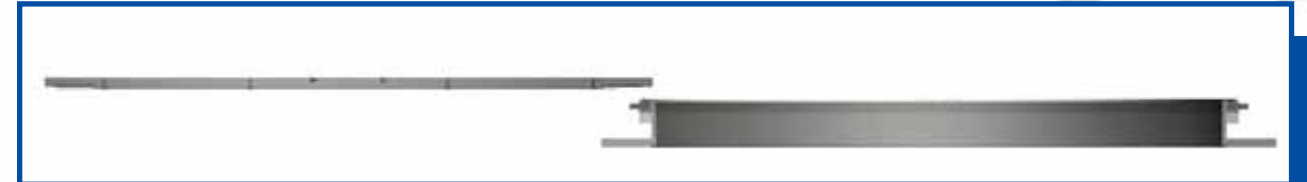


66" Zero Leakage Gate Valve (2)

www.frischvalves.com

DESIGN OPTIONS

SEATS



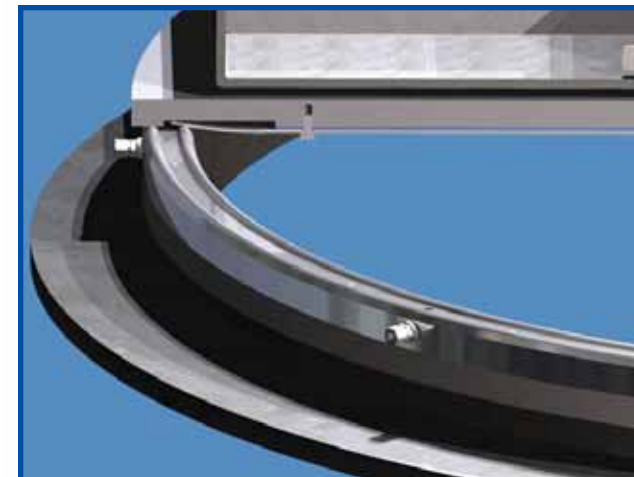
Gate Full Open



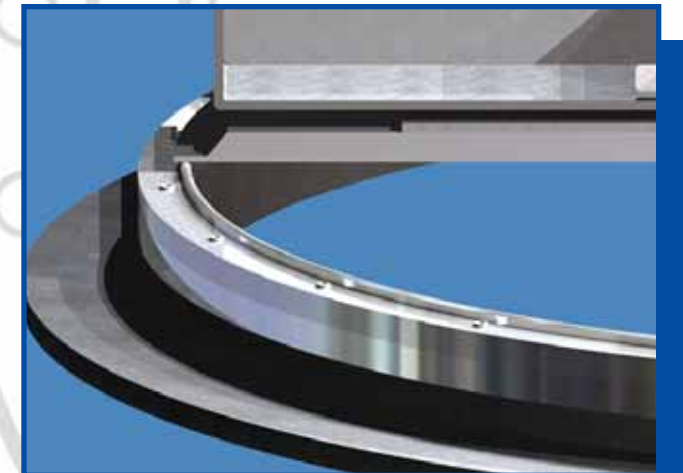
Positioned to Close (1st Stage)



Gate Fully Closed (2nd Stage)



Double Block & Bleed Seat



Single Seat

FEATURES

Two Stage Guided Opening and Closing

1st stage: The gate moves across the throat to the seating wedges

2nd Stage: The wedges force the gate on to the seat as it reaches the full closed position

- Gate assembly is on rollers
- Rounded seat profile
- Customized design and fabrication

BENEFITS

- Minimizes galling, associated with these operations in regular slide valves or guillotine dampers, helping to maintain the tight seal
- Ensures smooth travel of gate from full open to full closed position and vice versa
- Allows a single point metal to metal contact between gate and seat ensuring very tight seal
- Meets the exact requirements of each client

www.frischvalves.com