

THE
TOUGHEST
CONTROL
VALVE IN
THE WORLD



Made in Canada

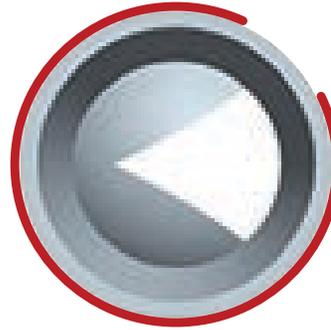
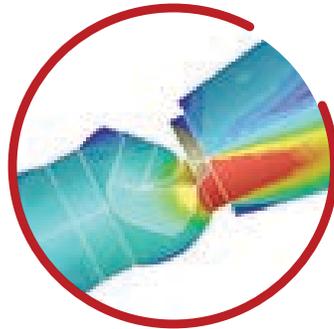
Slurryflo
valve corp.

SLURRY CONTROL VALVES

In the world of control valves, there are numerous designs that will successfully modulate the flow of clean fluids. However, if the media contains solid particulates, the scenario is more challenging. Many of these 'clean fluid' valves are not viable for slurry duty, as their angular flow paths can become eroded or plugged.

End users looking to modulate the flow of abrasive slurries must select valves with 'line-of-sight' trim geometry, (i.e. butterfly, ball or pinch valves). These designs provide minimal flow re-direction, as they modulate via an increase in the fluid velocity.

Accelerating a slurry through line-of-site valves does come with compromises, particularly when pressure drops are elevated, making them susceptible to cavitation and increased erosion. This can result in more frequent valve replacements, potential damage to downstream piping and downtime associated to repairs.

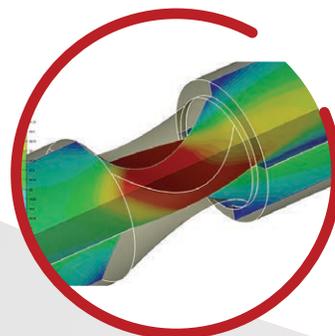
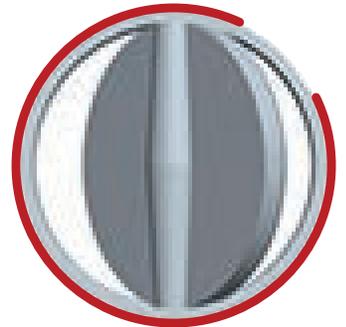
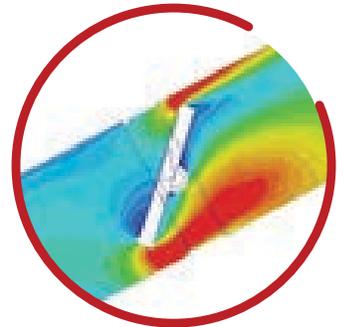


BALL VALVES

A ball valve directs abrasive flow to one side of the valve and piping, damaging both.

BUTTERFLY VALVES

The disc accelerates abrasive media onto both sides of the valve body and pipe walls.



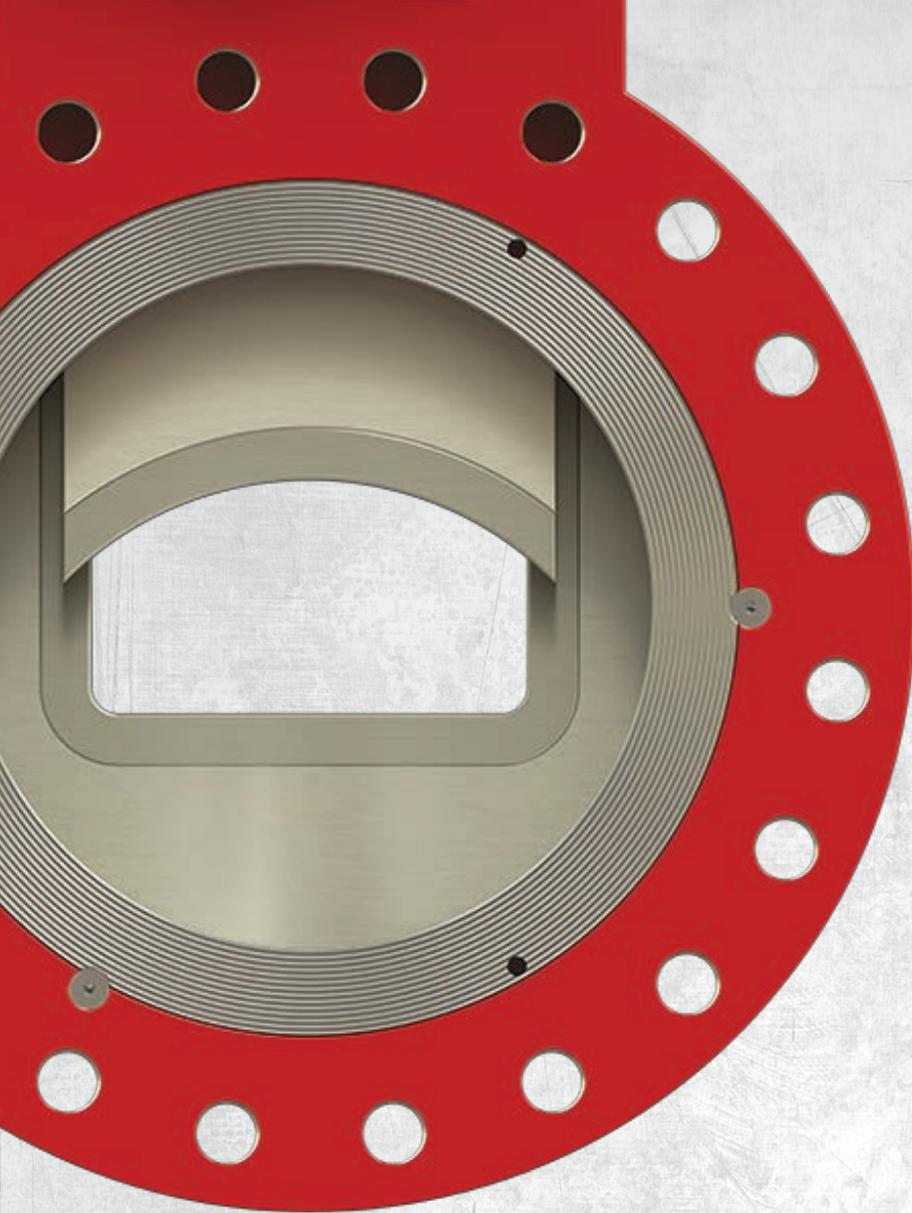
PINCH VALVES

High velocity flow wears both sides of the valve's sleeve and downstream pipe.

THE SLURRYFLO DIFFERENCE

Our patented trim design acts as a variable orifice, centering the flow within the pipe. This protects the pressure containing valve body and the integrity of the downstream piping. These valves will significantly outlast anything you have ever used.

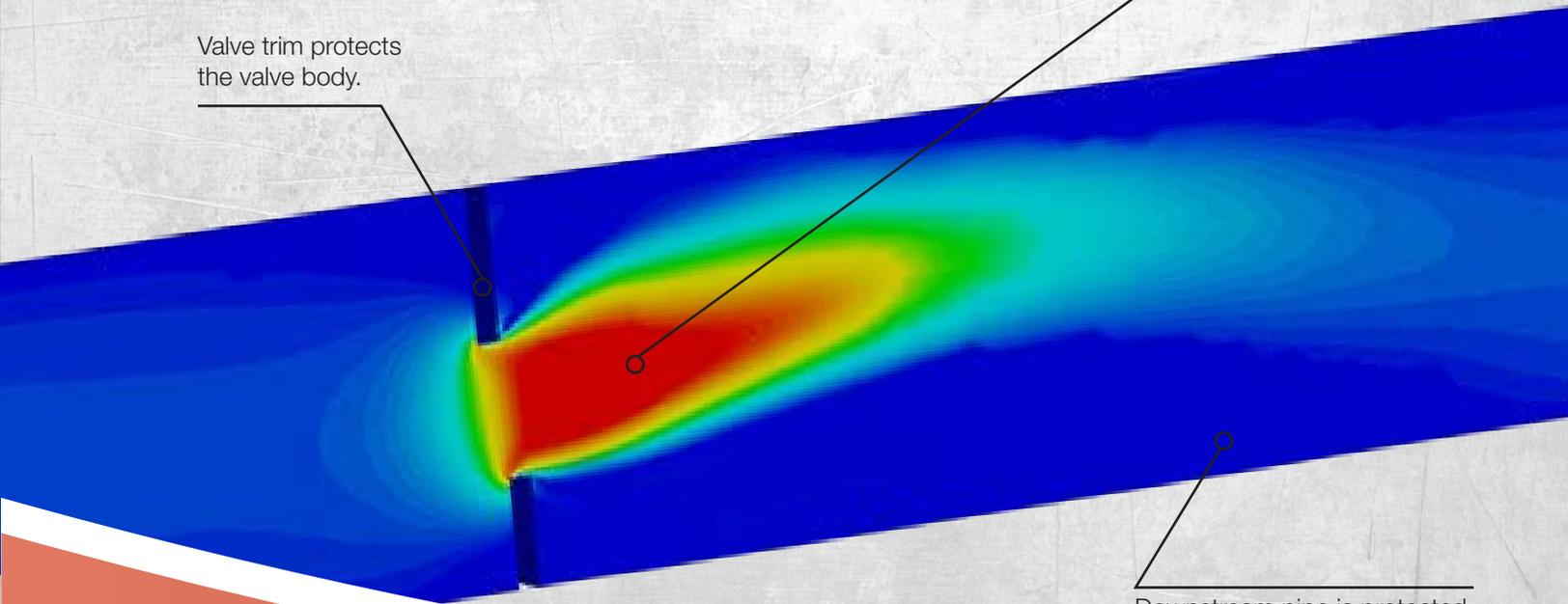
- Custom engineered
- Patented trim design
- Centralized flow
- Zero damage to valve body
- Reduced piping wear
- Extreme abrasion resistance
- Field replaceable wear components
- Reduced downtime and maintenance
- State-of-the-art 3D and CFD software
- Dozens of standard and exotic materials



Valve trim protects
the valve body.

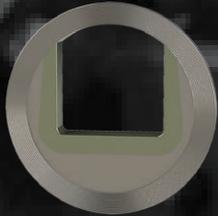
Flow is centered
within the pipe.

Downstream pipe is protected
from high velocities

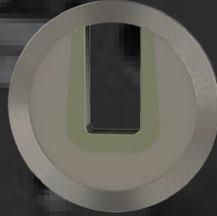


CUSTOM TRIM DESIGNS

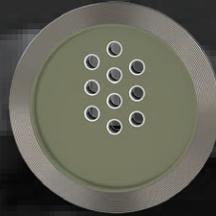
There are no 'off-the-shelf' SlurryFlo control valves; each one is manufactured with a unique seat plate design. Based on application requirements and SlurryFlo's proprietary sizing calculations, the seat plate is CNC machined to our engineers' exact specifications. SlurryFlo's design philosophy is to achieve an 'equilinear' valve characteristic; however any custom flow characteristic can be achieved. There are literally infinite trim geometry possibilities. If flow conditions change over time, SlurryFlo can retrofit the existing valve with a new/revised seat plate design. An alternate Cv and/or flow characteristic can be achieved without changing any other parts.



C1



C1
(reduced)



C2



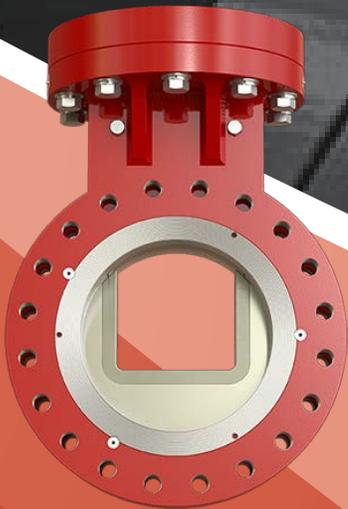
B1



Special
(Example 1)

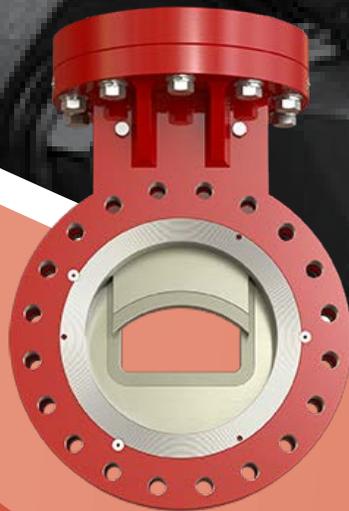


Special
(Example 2)



100% OPEN

If increased flow is temporarily required, the gate can be retracted beyond its normal throttling positions. The concave gate profile always matches the valve's bore.



MODULATING POSITION

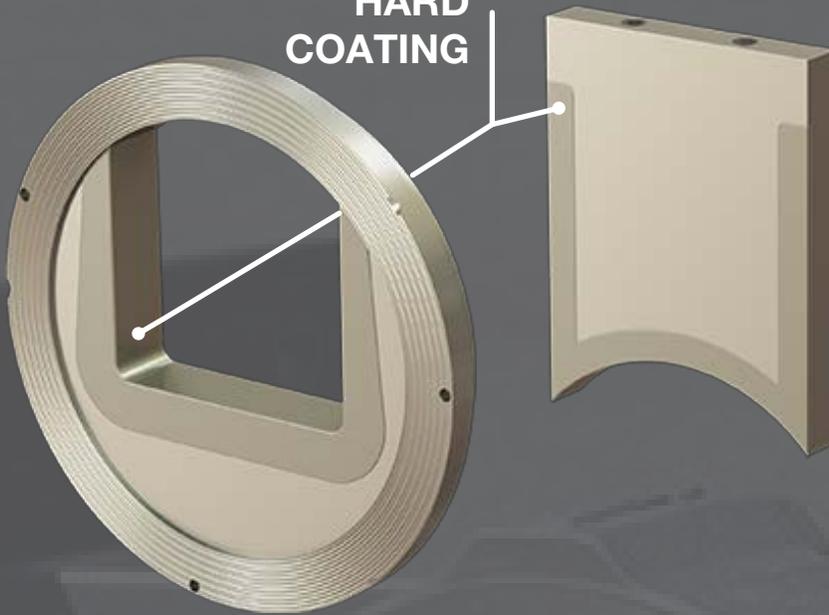
The custom seat plate works in concert with the valve's gate resulting in a centered orifice with variable control.



100% CLOSED

These are control valves, however the gate can be closed if required. The metal-to-metal seating surface provides a Class IV shutoff, blocking 99.99% of the valve's rated Cv.

**HARD
COATING**

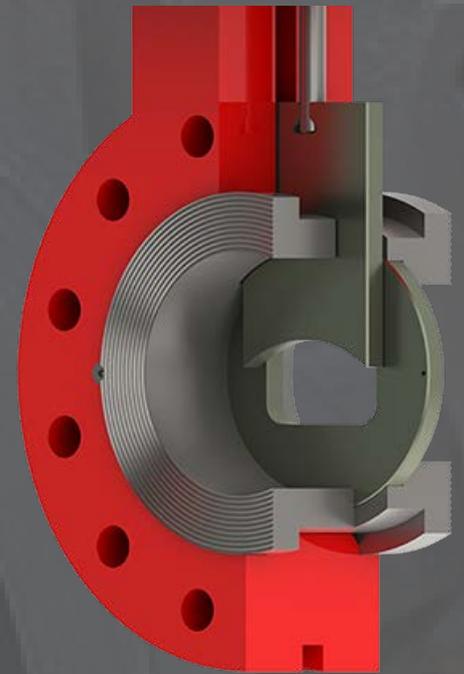


WEAR COMPONENTS (12" TO 60" VALVES)

The gate and seat plate are available in dozens of standard and exotic metallurgies. These trim components are then coated with a state-of-the-art hard overlay, such as tungsten carbide (applied via PTAW process). This provides a corrosion proof trim that resists abrasion incredibly well.

WEAR COMPONENTS (3" TO 10" VALVES)

SlurryFlo's smaller diameter control valves incorporate a unique wear technology. In place of hard coated metal parts, the gate and seat plate are made entirely of Sintered Tungsten Carbide. The end result is a valve with trim components that approach the hardness and wear resistance of diamond.



GATE



BORE LINER



SEAT PLATE



REPLACEABLE WEAR COMPONENTS

Due to SlurryFlo's patented design, only the trim components are exposed to erosive flow. Once they eventually wear out, the parts can be field replaced to reset the service life clock. Each trim replacement essentially provides a new valve at a fraction of the cost.



Mine tailings



Thickeners



Solvent flashing



Tailings underflow



Hydro-transport



Flotation



Oil sands



Filter presses



Dry bulk



Corrosive slurries



Cyclones



Exotic materials (Titanium, SuperDuplex, etc)



High pressure gas service



Process water



Hoppers

IMPECCABLE CONSTRUCTION

Each SlurryFlo control valve is custom manufactured to our engineers exact specifications.

DIAMETER RANGE

SlurryFlo control valves are available for 3 to 60 inch pipe diameters (Note: consult SlurryFlo for larger sizes).

PRESSURE CLASS

Low pressure (≤ 150 CWP), ANSI 150, ANSI 300 and ANSI 600.

VALVE BODY AND TRIM MATERIALS

As metallurgy is highly dependent on application specifications, our valves are available in dozens of standard and exotic materials (e.g. Carbon steel, 316SS, Hastelloy, SuperDuplex, Titanium, Platinum, etc). There are no limitations on materials.

AUTOMATION

Pneumatic, hydraulic, electric, electro-hydraulic and manual.

MADE IN CANADA

All SlurryFlo products are proudly engineered and manufactured in Western Canada by SlurryFlo Valve Corp. Raw materials are sourced from Canadian suppliers and we work with local support companies.



SlurryFlo Valve Corp.

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CUSTOM ENGINEERING

SlurryFlo engineers use state-of-the-art design and flow-modeling software to build and test each valve in a virtual world. They create unique control characteristics and select materials for optimal abrasion resistance. The result is a customized control valve that meets your exact application requirements.

