



PASTE & THICKENED TAILINGS FLOW CONTROL

HOPPER / MIXER OUTLET **SOLUTIONS**



PROEFILL
CONTROL VALVE

Every point of the delivery process, covered.



ABOUT PROEGER FLOW SOLUTIONS

Since 2011 we have focused on solutions for specialised areas of the mining/minerals and upstream oil & gas sectors.

Over the journey we became more focused in mining activities where our main expertise lies providing genuine solutions with proven results.

In 2017 we remodelled the business focusing on opportunities globally and became an Australian exporter whereby we design and manufacturer our own range of severe service flow control products using the knowledge we have gained working with our customers targeting known application challenges identified within the Paste/Backfill and Tailings sectors offering our customers solutions for every point of the flow loop.

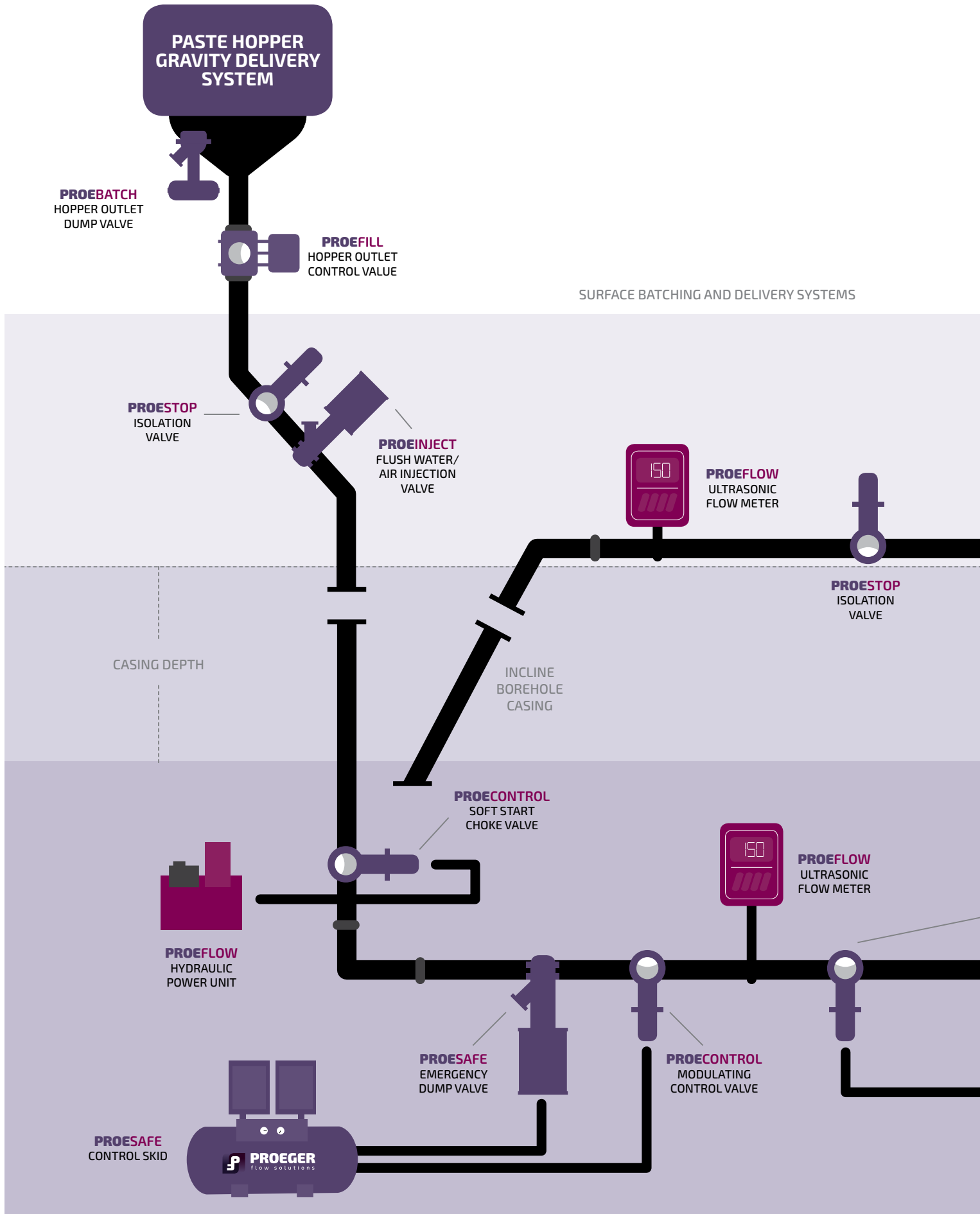
Proeger Flow Solutions is now positioned as an industry leader of everything flow control related within the Paste/Backfill and Tailings arena.



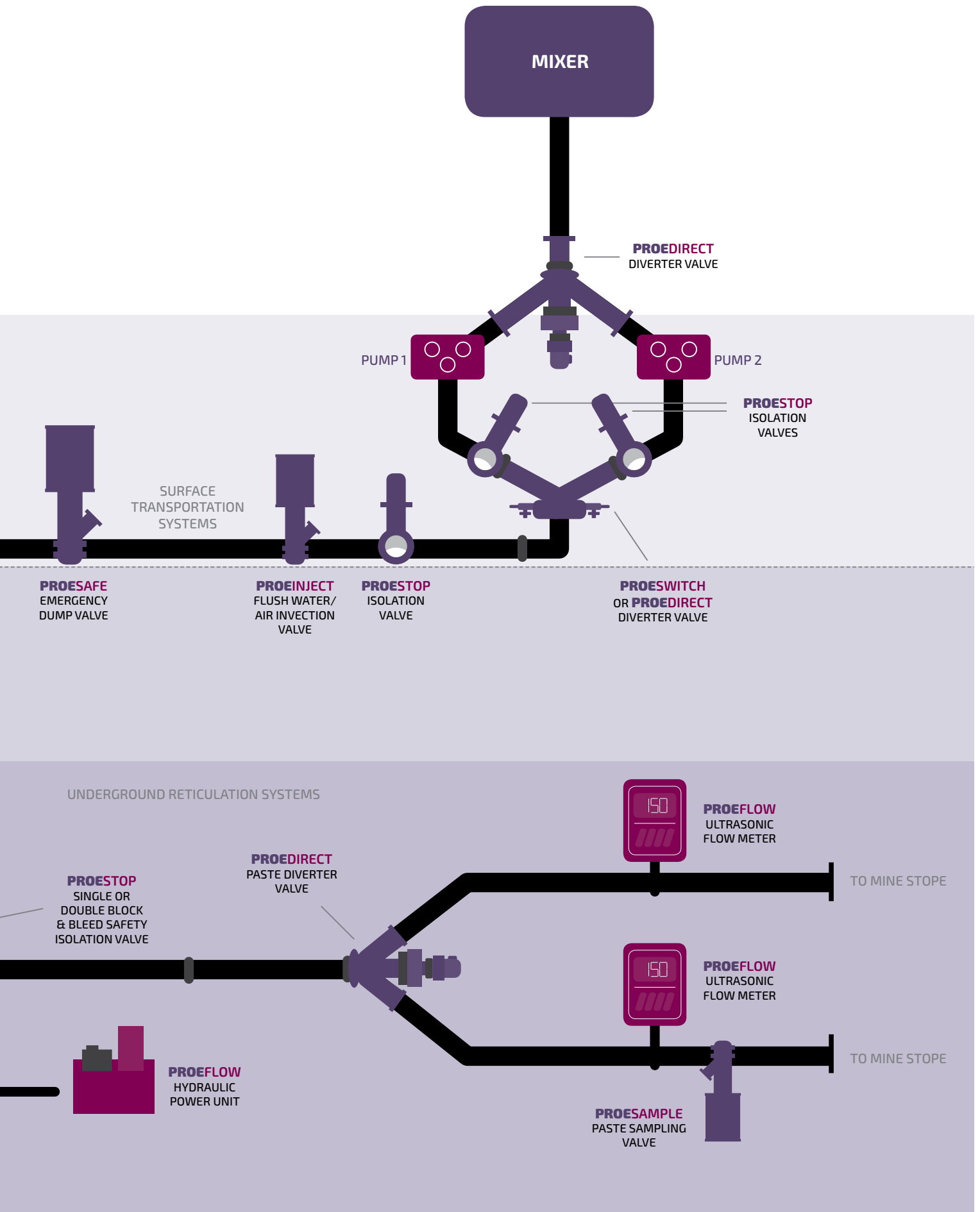
WHY PROEFILL?

When you want absolute confidence in your gravity fed hopper or mixer outlet control valve for precise modulating control and low wear characteristics..... or simply to avoid being sucked closed under the full vacuum drawn as the paste falls down the bore hole you can rely on **PROEFILL** to save the day.

GRAVITY FEED SYSTEM



HIGH PRESSURE PUMPED SYSTEM



APPLICATION

The Hopper / Mixer Outlet Control Valve's primary purpose is for the controlled release of cemented paste or hydraulic fill out of the batching plant hopper in gravity feed systems so that initial velocity into the bore hole is controlled as the level in the hopper varies. Controlling the free fall velocity as head pressures vary reduces fluctuations in the poorly filled bore holes and / or early separation of solids and liquid.

It's this separation and air pockets of unfilled pipe where solidification can start and in turn ultimately lead to time consuming and expensive blockages to clear.

It's for that reason why it is important to manage the velocity of the paste out of the batching hopper. What is also unique in a gravity feed system is that the resultant rapid increase in velocity as the paste falls down the bore hole; generates a large vacuum that other valve types struggle to hold control against adding to the difficulties of early stage paste management in gravity feed systems.

KEY FEATURES

- Patented double arched self-supporting design with a full vacuum rated tube.
- Designed for Abrasive, Scaling, Aggressive and Plugging Slurries / Pastes.
- Reduced port tubes sized specifically to the maximum flow rate to minimise premature tube wear
- Zero cavities for paste or cement to impact.
- Quick and easy in line tube change when required.
- In-built tube wear sensor wire & MONSYS Monitor Box for early tube wear monitoring.
- Low long cost of ownership and high plant up time compared to alternate valve solutions.

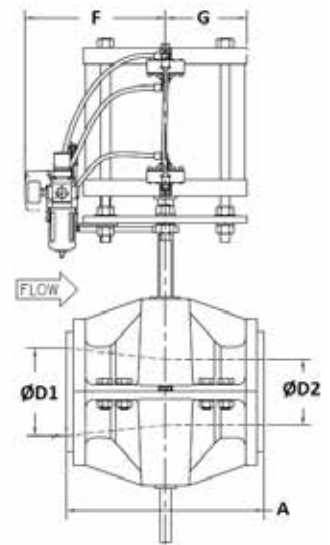
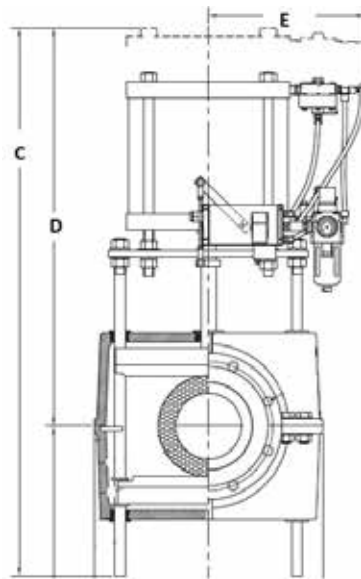
SPECIFICATIONS

ITEM / DESCRIPTION	DESCRIPTION
Body Design	2 Piece Cast Ductile Iron
Valve Hardware	316SS Pull Rods, Pinch Bars & Bolting
Flow Characteristic	Uni-directional - Equal Percentage
Design Specification	ANSI B16.34
Tube Material	Natural Rubber – C/w Wear Sensor Wire

SIZE RANGE & PERFORMANCE



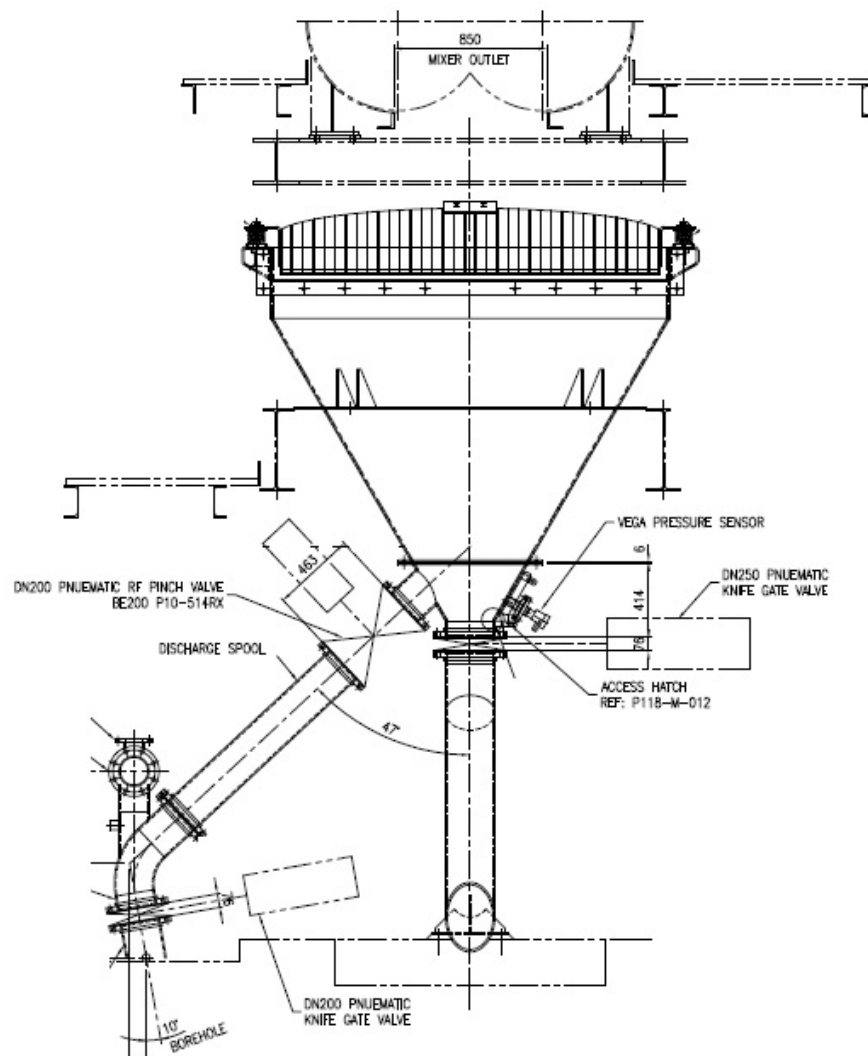
Size & Pressure Range	Description
Typical Size Range	100x50, 100x65, 100x80, 125x80, 125x100, 150x80, 150x100, 150x125, 200x150
Working Pressure (max)	10, 20 & 35 Bar Designs
Connection Types	ANSI RF
Flow Rate (min / max).	30m ³ / hr up to 300m ³ / hr



DIMENSIONS

Valve Size Ø	Bar	Port Size		Dimensions (mm)							Weight Kgs
		ØD1	ØD2	A	B	C	D	E	F	G	
100 x 80	10	100	80	229	330	793	590	282	263	108	68
125 x 80	10	125	80	254	414	971	718	297	288	135	143
125x100	10	125	100	254	414	971	718	297	288	135	143
150 x 80	10	150	80	267	414	1015	750	323	307	162	178
150x100	10	150	100	267	414	1015	750	323	307	162	178
150x125	10	150	125	267	414	1015	750	323	307	162	178
200x150	10	200	150	457	530	1278	931	361	326	187	286

TYPICAL INSTALLATION



PROEFILL

This was the very first paste valve solution we entered the market with in 2011 and it has stood the test of time being the valve of choice for several OEM paste plant designers and constructors.



CONTROL VALVE PERFORMANCE

Because of their unique design characteristics, RF Control Valves are recommended when:

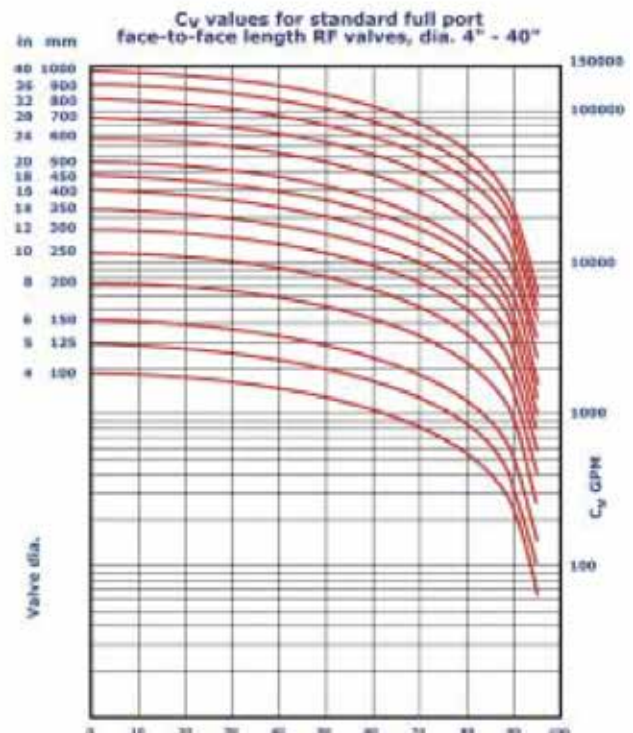
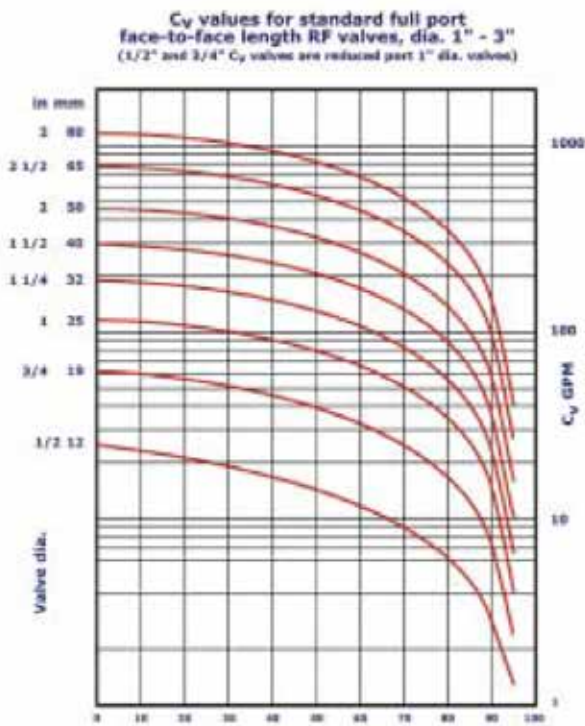
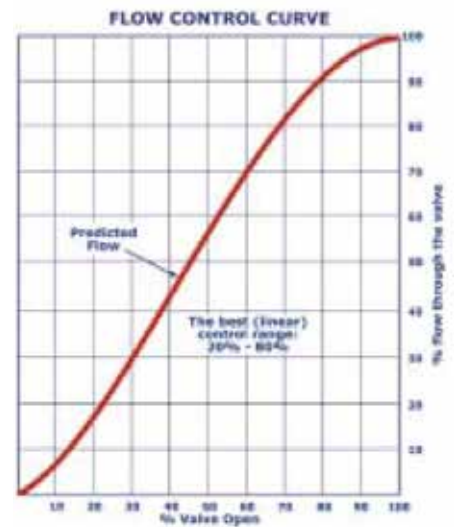
- Abrasion and corrosion result in high maintenance,
- turbulent flow causes valves or pipes to wear,
- scaling causes valves to seize, and
- fibers or other materials have a tendency to plug the valves.



The inherently high Cv values of **PROEFILL** Control Valves ensure superior cost-vs.-capacity ratios. Control performance is also enhanced, as each valve is uniquely characterized to flow requirements with either full- or reduced-port designs, thus reducing the turbulence and cavitation found in other valve designs.

The self-cleaning, flexing elastomer action loosens deposits (Fig. 2, opp. page) and eliminates most problems associated with sticking, overshoot, and conventional control valve irregularities.

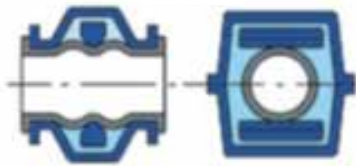
When zero-leakage shut-off is a must, **PROEFILL** Control Valves® outperform most others, even against abrasive and scaling-prone slurries and liquids.



UNIQUE VALVE FEATURES

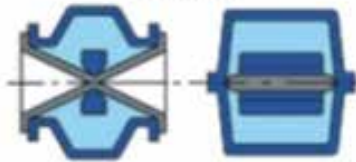
PATENTED NO-STRETCH TUBE FOLDS

OPEN



- Patented tube arches flex, not stretch, during valve closure, relieving stress on the elastomer unsurpassed resistance to severe process environments

CLOSED



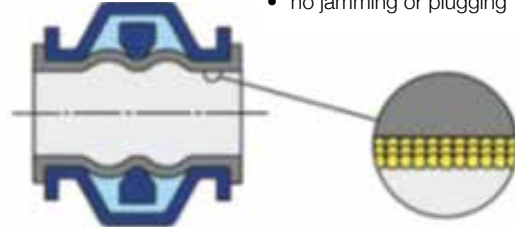
- Ensures zero-leakage shut-off long and higher cycle time over conventional metal or elastomer valve products

Figure 1

TROUBLE-FREE OPERATION

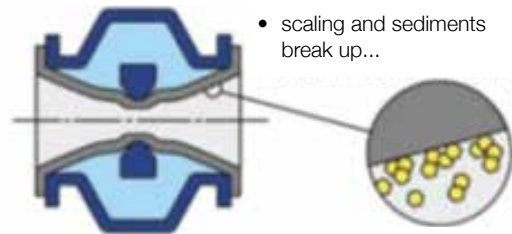
VALVE OPEN

- no jamming or plugging



VALVE OPENS/CLOSES

- scaling and sediments break up...



... and flush through during Open/Close cycle

Figure 2

SMART VALVE™ MONITORING SYSTEM

MONSYS CONTROL BOX

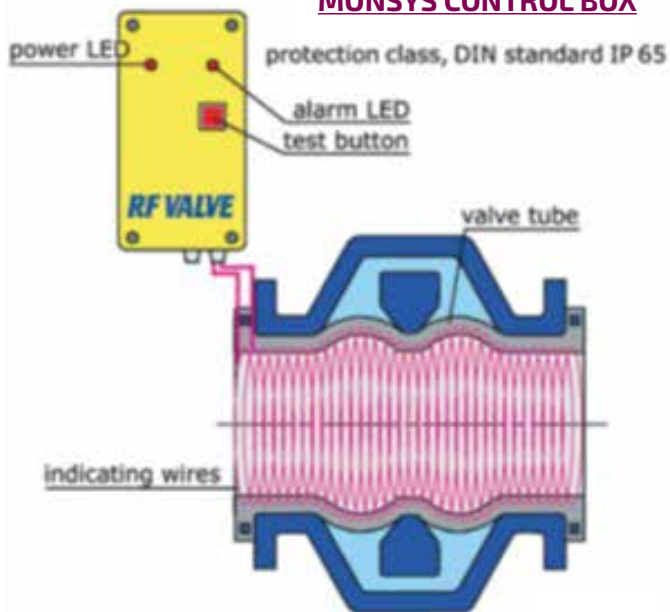


Figure 3

QUICK & SIMPLE TUBE CHANGE

- remove valve's lower half
- replace elastomer tube

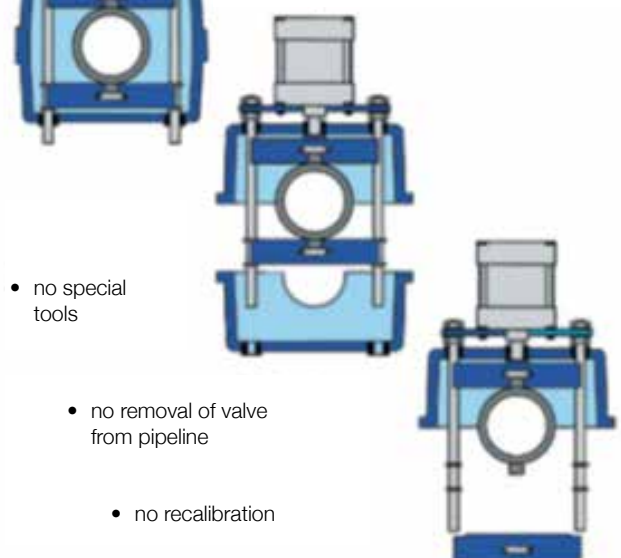
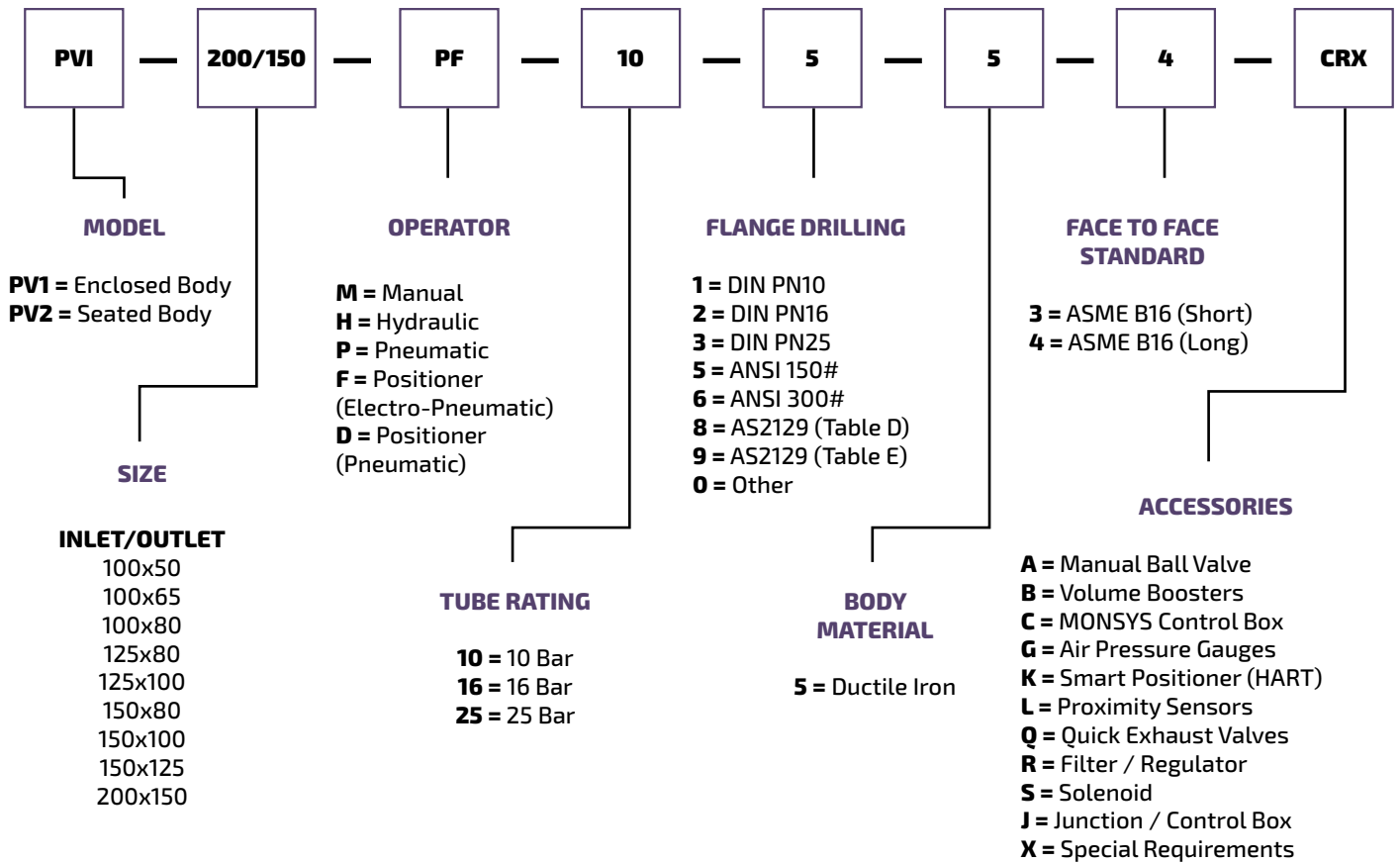
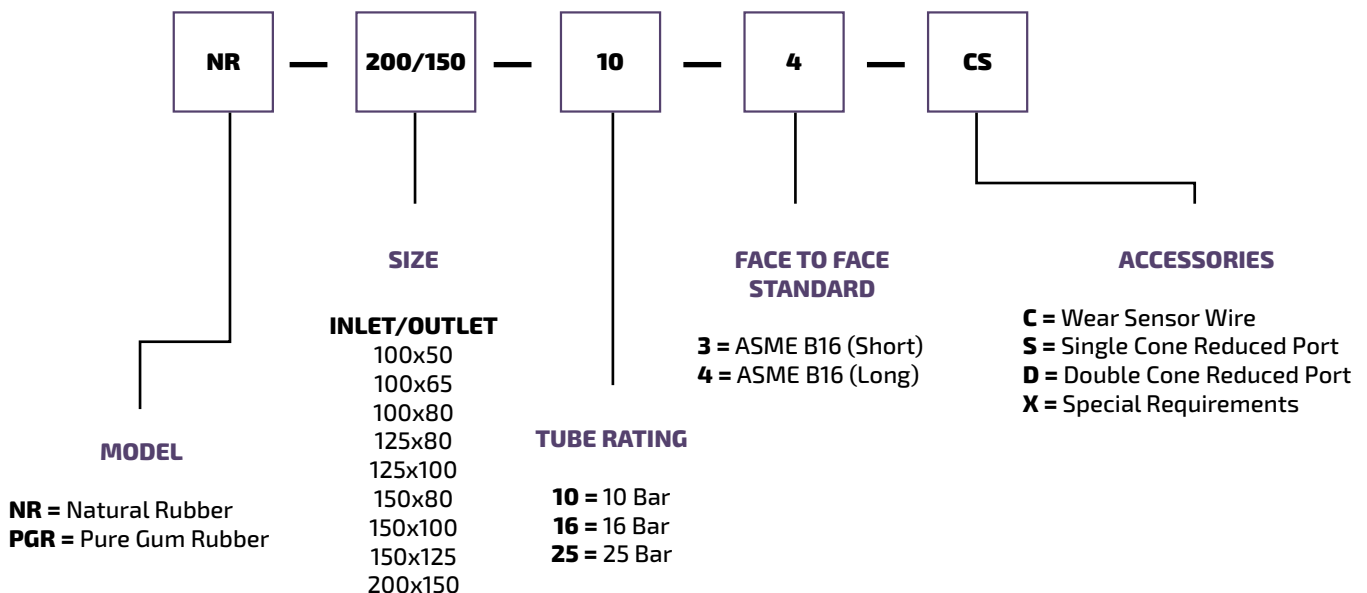


Figure 4

MODEL SELECTION



TUBE MODEL SELECTION





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