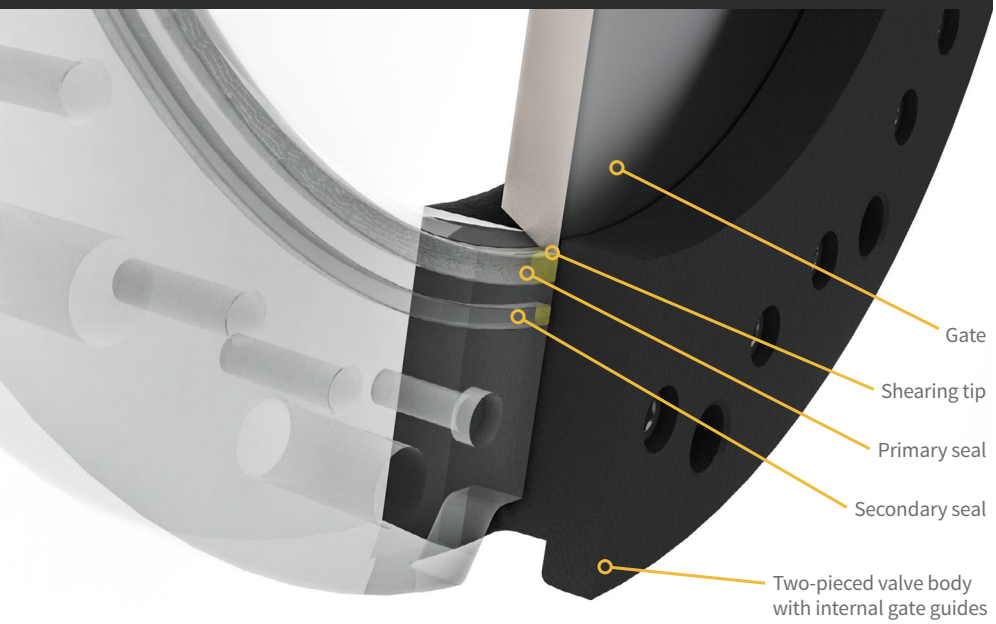
SEVERE SERVICE KNIFE GATE VALVES

Cutting Edge Technology for Paste Backfill Applications

DSS Severe Service Knife Gate Valves represent the cutting edge in paste backfill valve technology because of our unmatched ability to isolate and control solids in suspension.

Ranging from Class 150 (PN 20) to Class 1500 (PN 250), our valves thrive at mining facilities around the world.



DSS Valves Guided Shear Gate Design

Problems We've Solved in Paste Backfill Applications

PROBLEM: Pipe turbulence and erosion.

SOLUTION: DSS Valves make zero-leakage bidirectional SSKGVs that can isolate from full vacuum to ASME Class 1500/PN 250 (3750 psig/250 barg).

PROBLEM: Paste backfill is detrimental to valve life, causing plants to shut down regularly for replacements.

SOLUTION: DSS Valves are equipped with replaceable parts that enable a lengthy service life and the lowest cost of ownership.

PROBLEM: Velocity changes and turbulence can lead to the liquid and solid component of paste separating.

SOLUTION: DSS Valves have a wide bore which keeps the paste flowing in a homogeneous manner.

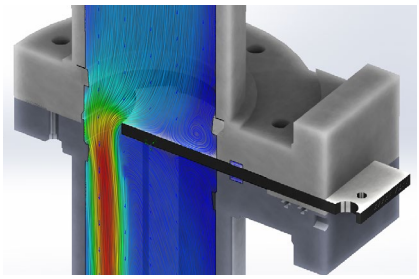
PROBLEM: Paste backfill can solidify and cause valves to seize.

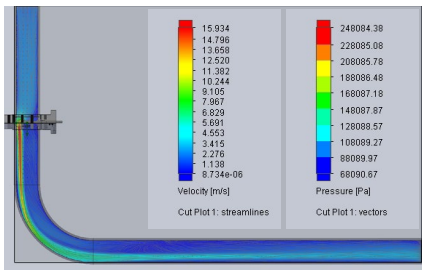
SOLUTIONS:

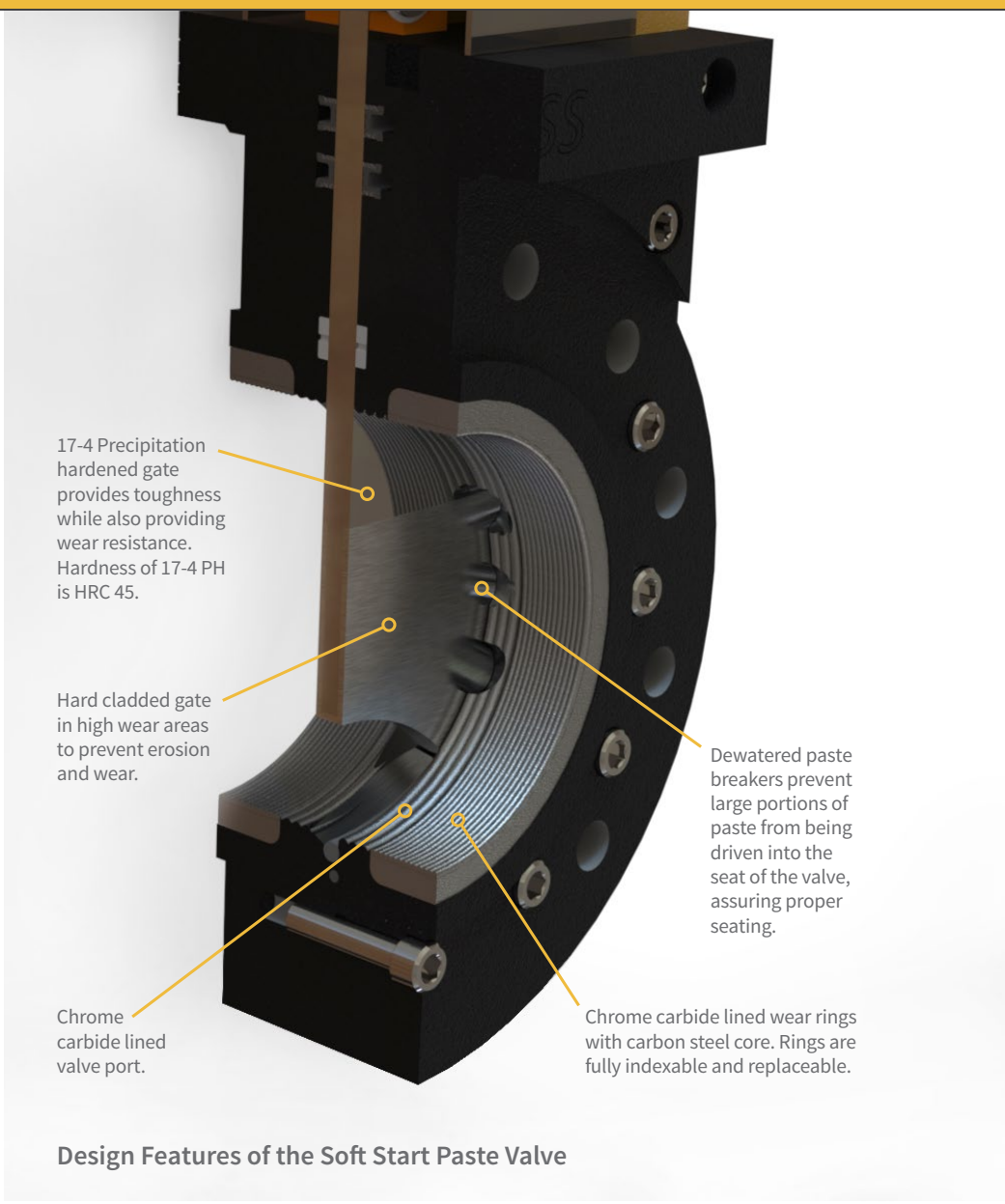
- DSS Valves use a Guided Shear Gate design and shearing tip enabling them to cut through paste and the solids within it.
- Gaps and dead spaces have been removed in the valve design and flushout ports have been included to remove any excess material responsible for potential blockages and valve seizures.

Introducing the Soft Start Paste Valve

Our Soft Start Paste Valve has a modified gate that permits a reduced amount of material to flow through. By slowing the flow velocity and amount of paste in the pipeline until it is completely filled during start-up, the Soft Start Paste Valve removes the chance for catastrophic impact caused when paste descends vertically and reaches elbows, valves, or other instruments in the pipeline.







Design Features of the Soft Start Paste Valve

DSS Valves—Your Solution for Paste Backfill Applications

DSS Valves is a streamlined team of engineering and manufacturing professionals dedicated to creating premier Severe Service Knife Gate Valves (SSKGVs) for Paste Backfill Applications.

As this unique and challenging industry continues to evolve, so do the corresponding regulations and specifications in place to ensure worker safety and environmental concerns. The most critical paste backfill applications require Severe Service Valves able to withstand these tough conditions.

Our products are known for their ability to handle differential pressure scenarios, corrosive materials, extreme temperatures and detrimental solids. We provide prompt delivery, honest customer service and a technologically advanced product made in North America, delivered throughout the world.

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