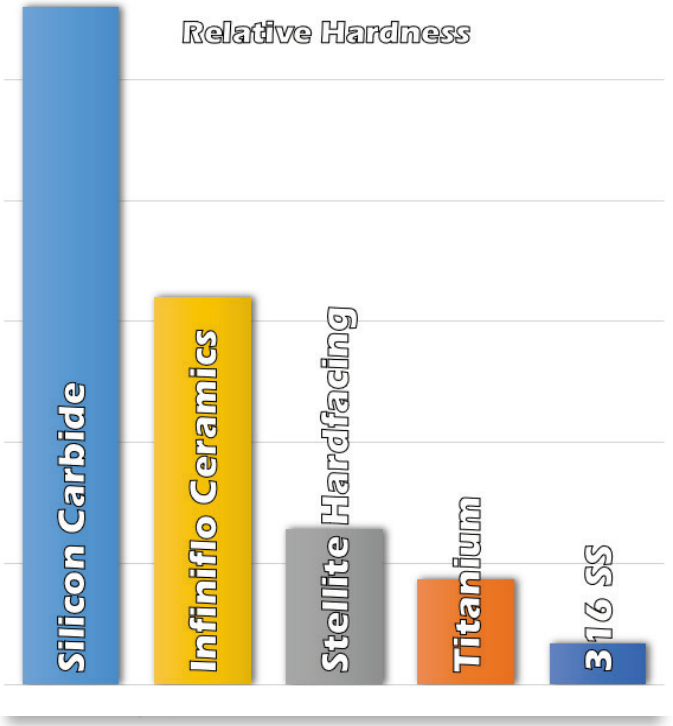
Why Ceramic Valves?

- Ceramic materials are 6-8 times harder than stainless steels.
- The thickness of FLOTITE's ceramic material is often measured in inches, typically 1/4" and thicker. Most hard coatings are measured in microns. For example, Hard Chrome coatings are typically less than one-thousandth (0.001") of an inch thick.
- Extreme hardness and high temperature capabilities give ceramics exceptional resistance to cavitation, even continuous, aggressive cavitation does not affect the material.
- With special ball and seat processing, bubble-tight shut-off can be achieved.



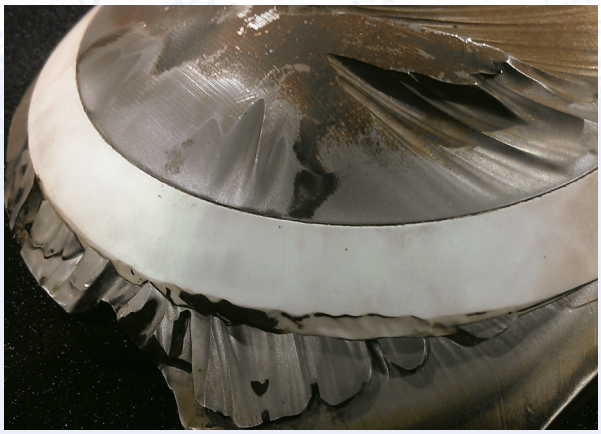
MATERIALS

- Partially Stabilized Zirconia (PSZ)
- Tetragonal Zirconia Polycrystal (TZP)
- Zirconia Toughened Aluminia (ZTA)
- Tungsten Carbide Coatings and Solid Structure (WC)

About Us

The company was founded to serve the process industry with special valves it had never seen before. Employing the brightest engineers and machinists that are able to combine metal and ceramics effectively, we are able to manufacture valves to API, ANSI, CE and ISO 9001 standards. We have committed ourselves to R&D and engineering expertise in the ceramic valve industry, utilizing the latest CAD/CAM software and manufacturing methods. Our extensive product offering means that FLOTITE is the world leader in ceramic valve technology. When you have an opportunity to use one of our valves in your severe plant application, you'll understand why we are the best at producing "Ceramic Valves – For the Toughest Process Applications.".

Actuator failure. Severely worn steel, ceramic untouched.



CRD

Ceramic Rotating Disc Valve

Self cleaning
Isolation of dry media
Aluminum manufacture
Fly Ash
Hopper Bottom valve

CBF

Ceramic Butterfly Valve

Narrow take out
Isolation of slurries

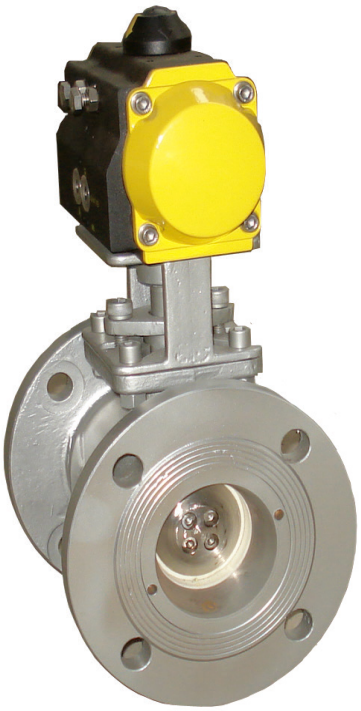
CPT

Ceramic Pneumatic Transport Valve

Allows space for particles
Isolation of dry media
Aluminum manufacture
Fly Ash

Principles of Ceramic Valve Design

1. The durability of the valve seat is crucial to the integrity of the entire valve.



CSB

Ceramic Segmented Ball Valve

Allows space for particles
Isolation of dry media

CBV

Ceramic Ball Valve

Aggressive wear and corrosion
Isolation and Control of:
Slurries
Light dry particulate

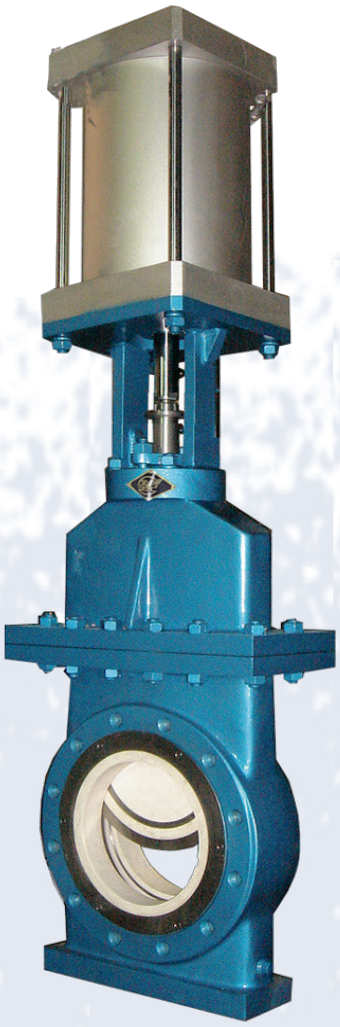
2. Minimize possible leak points by minimizing the size of irregular valve packings.

3. Retain the media in the pipeline system.

CSK

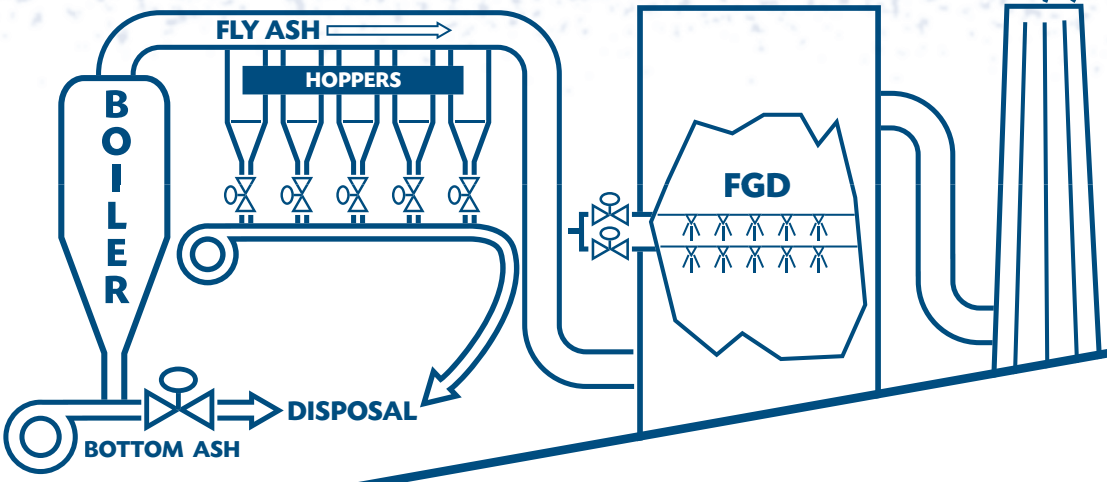
Ceramic Slurry Knife Gate

Self cleaning
Isolation of slurries
Bottom ash
FGD media
Mining tailings

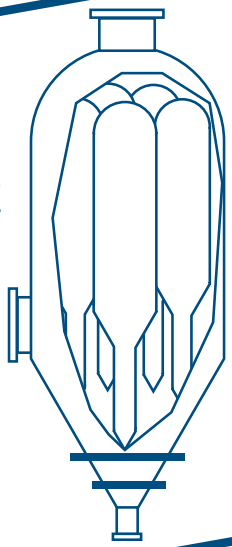


Typical Applications / Industries

Power Plants



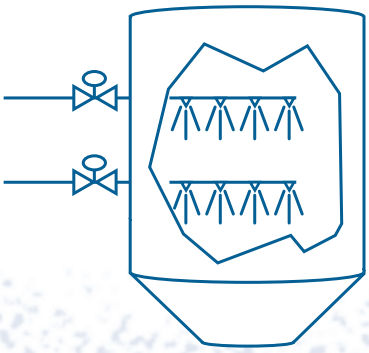
Refinery Applications



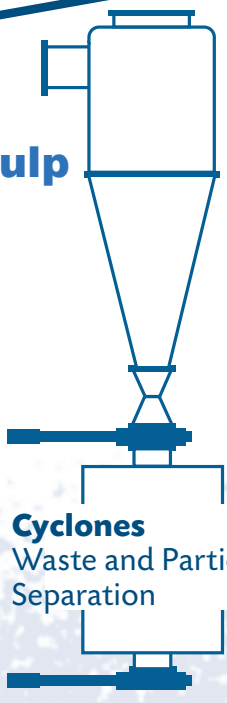
Catalyst Regenerator

Hydrocracking – FCC Unit

Chemical – Paper / Pulp

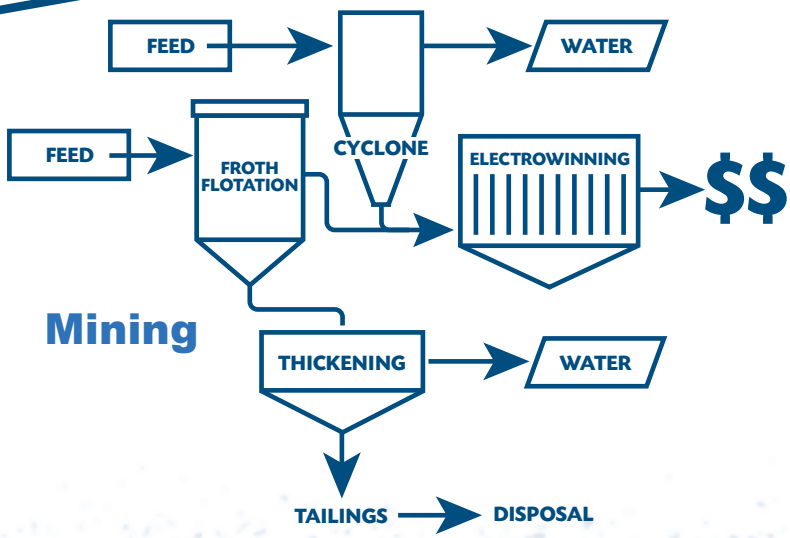


Scrubbers with Abrasive Media



Cyclones
Waste and Particle Separation

Mining



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