

Severe Service Valves for Severe Industries

Why Ceramic Valves?

- Ceramic materials are 6-8 times harder than stainless steels.
- The thickness of SKYCERA'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.
- 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, near bubble-tight shutoff can be achieved.

MATERIALS

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

Relative Hardness



About Us

The company was founded in 1994 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 over 10,000 valves per year to API, ANSI, CE and ISO 9001 standards. We have committed ourselves to RCD and engineering expertise in the ceramic valve industry, utilizing the latest CAD/CAM software and manufacturing methods. Our extensive product offering means that SKYCERA® 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 "Severe Service Valves for Severe Industries".

Actuator failure. Severely worn steel, ceramic untouched.



CSB Style Ceramic Segmented Ball

CAC API Choke

SHYCE

Principles of Ceramic Valve Design

CBA Style Ceramic Ball Valve

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

CAG Ceramic API Gate







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