



Severe Service Valves

Technical Specifications

Property	Units	SK Ceramic Alumina	SK Ceramic Zirconia
Application		Most Parts	Ball
Chemical Composition			
Al ₂ O ₃	(%)	86	
ZrO ₂	(%)	13	94.72
Y	(%)	0.8	
Y ₂ O ₃	(%)		5.13
SiO ₂	(%)		0.016
Fe ₂ O ₃	(%)		0.0076
TiO ₂	(%)		0.004
Na ₂ O	(%)		0.009
Cl	(%)		0.045
Mechanical Properties			
Density	(g/cc)	3.9	5.96
HV Hardness	(Kg/mm ²)	1129	1232
Compressive Strength	(N)		3290
Fracture Toughness	(MPa/m)		5.03
Impact Toughness	(KJ/m ²)	13.5	
Flexural Strength	(MPa)	290	
Thermal Shock Resistance	(C)	200	250

Severe Service Valves for Severe Industries

SK Valve USA

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