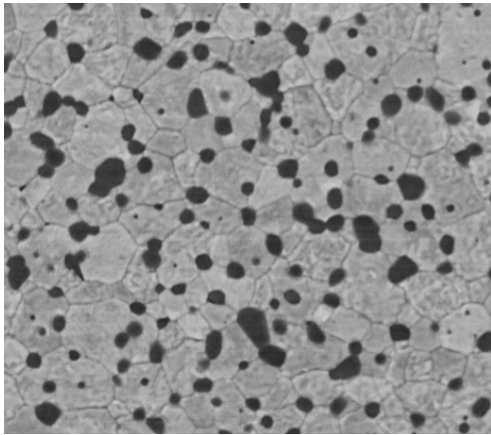


KATZ

Alumina Toughened Zirconia (ATZ)



Microstructure

Typical uses

- Dental implants
- Medical analysis equipment
- Sliding-wear resistant parts
- Pump parts
- Valves

Material properties

- Alumina toughened zirconia (ATZ)
- High-strength zirconia
- No aging (low temperature degradation)
- Good properties against thermal sock
- High quality polished finish

Main Parameters

Parameters	Unit	KATZ
Sintered density	g/cm ³	5.50
Hardness	GPa	14
Young modulus	GPa	260
Thermal shock resistance ¹	ΔT(°C)	470
Bending strength ² (after HIP)	MPa	1.850
Fracture toughness ³	MPa·√m	4.5

(1) Water immersion test

(2) Three-point bending

(3) SENVB method