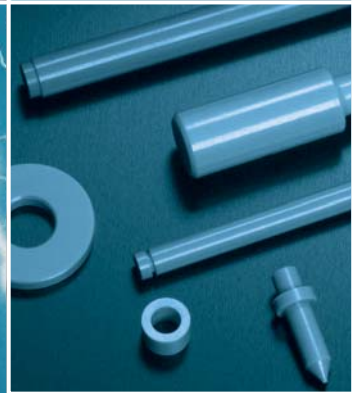
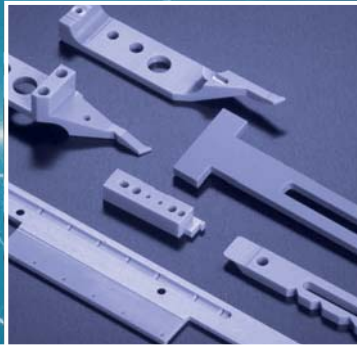
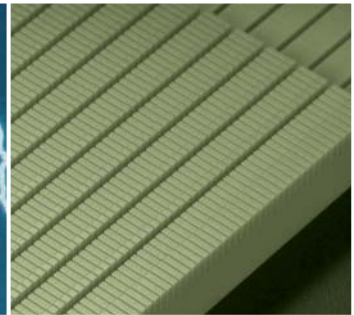


COORSTEK
Amazing Solutions.®



ESD-SAFE CERAMICS

PROTECT YOUR DEVICES FROM ELECTROSTATIC DISCHARGE WITH OUR ESD-SAFE CERAMICS

Leaders in Technical Ceramics

The largest technical ceramics manufacturer in North America, CoorsTek provides innovative ESD-Safe ceramic components for technology leaders across the globe.

ESD-Safe From the Ground Up!

Developed specifically to protect sensitive microelectronic components from Electrostatic Discharge (ESD), CoorsTek StatSafe™ and CeraStat® ESD-Safe Ceramics help prevent the accumulation of static electricity. These static-dissipative products are ideal for use in semiconductor, data storage, aerospace, and electronics industries. Typical applications include:

- End effectors
- ESD sensitive component handling
- Data storage components
- Data storage manufacturing tools

Superior Quality

Our signature OpX™ quality and manufacturing excellence system combines best-practice methods including lean manufacturing, six-sigma, and ISO-certification to ensure high-quality products, on-time delivery, and exceptional service.

Technical Ceramics

Our specialized StatSafe™ alumina and silicon carbide and our CeraStat® zirconia combine excellent static-dissipation characteristics with the superior mechanical properties of advanced ceramics:

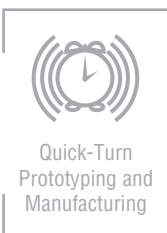
- Tailorable volume resistivity
- Superior surface finish
- High stiffness
- Excellent wear and corrosion resistance
- Low thermal expansion
- Dimensional stability

Design Services and Manufacturing Capabilities

CoorsTek engineers will help you select the best material and design configuration for your application. We offer a variety of forming processes including injection molding, dry pressing, isostatic forming, and extrusion to ensure high-quality, low-cost manufacturing.

Immediate Service

Call our ESD-Safe Ceramics Experts today at 303-277-4137 or e-mail esdsafe@coorstek.com.



ESD-Safe Material Properties		Static Dissipative Ceramics				
		Alumina	Zirconia	Silicon Carbide		
Property	Units	StatSafe™ ADC Al ₂ O ₃	CeraStat® ZZ	StatSafe™ SC-DS Direct Sintered SiC	PureSiC™ HR CVD SiC	PureSiC™ LR CVD SiC
Color	–	Black	Yellow/Green	Black	Black	Black
Volume Resistivity	ohm • cm	10 ⁶ - 10 ⁷	10 ⁴ - 10 ¹¹	10 ⁵ - 10 ⁹	10 ⁶ - 10 ⁷	0.01 - 0.1
Density	gm/cc	3.85	6	3.15	3.21	3.21
Modulus of Elasticity	GPa	370	192	410	462	434
Flexural Strength	MPa	300	1000	480	468	517
Thermal Conductivity	W/m °K	25	5	150	115	115
CTE	ppm/ °C	8	9.5	4.4	4.6	4.6

Note: The chart is intended to illustrate typical properties. Engineering data is representative. Property values vary somewhat with method of manufacture, size, and shape of part. This data is not to be construed as absolute and does not constitute a warranty for which we assume legal responsibility.

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