

Fine Ceramics

Fine Ceramic Components

Since its founding, Kyocera's track record in fine ceramics has been unmatched. We utilize our extensive resources in research, development and production to select the optimal raw materials and manufacturing methods for each application. Breakthroughs and improvements in a wide range of industries are facilitated by the unique qualities of Kyocera's fine ceramics.



Industrial Machinery

Fine ceramics have physical and chemical properties that are superior to metals and plastics. Kyocera utilizes that superiority to support continued technological advancement in the world's most vital industries.



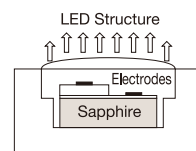
Ultra-High Vacuum Applications

Kyocera components developed through ceramic-to-metal bonding technologies bring high reliability to ultra-high vacuum applications in a wide range of high-tech manufacturing and scientific research fields.



Sapphire Substrates for LEDs

Substrates of highly reliable single-crystal sapphire are used to form the gallium nitride layer necessary for the production of LEDs.



Semiconductor Processing and LCD Manufacturing Equipment

Kyocera creates fine ceramics without equal through continuous material development. We use fine ceramics to produce structural components of extreme precision, heat resistance, and chemical stability — enhancing the wafer-fabrication process, enabling higher circuit densities and improving the production of LCDs.



Ferrite Components

Kyocera's ferrite materials and high-precision forming technologies support the miniaturization of electronics by facilitating smaller, better-performing inductors.



Automotive Components

Kyocera supplies a wide range of products for automotive applications that require extreme reliability. Our products support the rapid advancement of in-vehicle electronics, making cars smarter, safer, cleaner and more comfortable.

Ceramic Glow Plugs

Our glow plugs are widely used in start-and-stop systems that require rapid heating, excellent durability at high temperatures, and reliability over extended duty cycles.



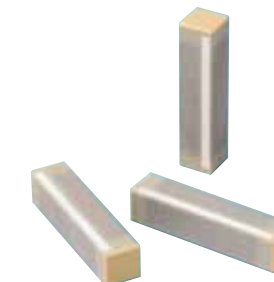
Oxygen-Sensor Heaters

Our sensor heaters reach operating temperature just seconds after a cold engine starts, ensuring cleaner exhaust by allowing emissions sensors to function almost immediately.



Piezoelectric Stacks for Fuel Injectors

These components enable ultra-quick response and precise control of fuel delivery to make diesel engine vehicles cleaner than ever.



Camera Modules

High reliability and excellent optical sensing help enhance vehicle safety and convenience.



Fine Ceramics used in Solid Oxide Fuel Cells (SOFCs)

A fuel cell causes hydrogen in utility gas to react with oxygen in the air, generating electricity and a heat source for hot water. Kyocera has applied its fine ceramic materials and manufacturing technologies to create an innovative cell stack for the fuel cell core, creating a next-generation power system that offers significant improvements in efficiency, durability and carbon emissions.

