Where Can Advanced Ceramics Be Found?

NEARLY EVERYWHERE...

AND HERE, TOO.

HERE!

CeramTec
THE CERAMIC EXPERTS
WHETHER AT HOME, IN THE OFFICE, IN INDUSTRIAL MANUFACTURING, IN HOSPITALS OR ON THE ROAD:

We are surrounded by products made from technical ceramics that deliver peak performance – and we usually don’t even realize it.

They are used where other materials reach their limits: under enormous stress, in extreme temperatures, under current – and even in the human body. They provide reliable solutions in all types of industrial production and high-tech applications. Technical ceramics get us safely and comfortably to where we are going and provide us with clean energy using more efficient technologies. We communicate digitally on smaller devices and benefit from improved quality of life.

Take a look at our brochure and discover all the places you can find advanced ceramics.
IN ENVIRONMENTAL APPLICATIONS

- Filters for water treatment
- Antifriction bearings for wind turbines
- Pipelines and components for transporting abrasive bulk materials such as coal dust
- Insulation rings for thermal decoupling in solar systems
- Substrates and heat sinks for power electronics in photovoltaic systems and wind power stations
- Bearings and bushings in drives for photovoltaic systems
- Wire drawing cones for the production of power lines, cells for rolling flat wires in photovoltaic systems
- Piezo-ceramics for energy harvesting
- Fuel cell components
- Ceramic mill linings for processing raw materials for glass
-ceramic for precision raw materials for glass
- Seal rings, bearing bushes and shells in pumps for hydroelectric power plants
- Plasma chambers for coating solar cells
- Tensiometer cells for soil analysis
- Plasma-ceramic sensor elements in biogas plants
- Fuel cell components
- Burner nozzles for flue gas desulfurization
- Cutting materials and tool systems for machining wind turbine components
- CeramTec: The Ceramic Experts
Evaporation elements in ambient air evaporators

Catalyst carriers for the production of plastics

Grinding discs in fully automatic coffee machines for grinding coffee beans

Seal rings for bottle caps as well as plates and doctor rings for printing PET bottles

Mills for spices, cocoa; mill linings and grinding balls for food processing

Seal rings for bottle caps as well as plates and doctor rings for printing PET bottles

Perforated plates, cutters and knives for cutting and shredding meat

Cam discs for switching from coffee to hot milk or water

Filters for water treatment

Diaphragm cells for chrome plating

Piezo-ceramic gas igniters

Coil bodies, base bodies, resistor cores and circuit boards in electronic and electrical home appliances

CeramCool heat-sinks for LED lighting systems

Cam discs for switching from coffee to hot milk or water

Mills for spices, cocoa; mill linings and grinding balls for food processing

Perforated plates, cutters and knives for cutting and shredding meat

Casings, thermostats and thermocouples for ranges and ovens

Catalyst carriers for the production of plastics

Evaporation elements in ambient air evaporators
Surge arresters for telecommunications systems

Ceramaseal vacuum-tight products for telecommunications systems

Resistor caps, fuse bodies, coil bodies and ceramic circuit boards for electronic circuits in PCs, cell phones, monitors and printers

CeramCool heat-sinks for LED lighting systems

Rolls, cleaner cones and dewatering blades for paper manufacturing

Wafer plates for the production of semiconductors

CeramCool heat-sinks for mainframe systems

IN THE OFFICE
IN EVERYDAY LIFE

- Plates for coloring contact lenses
- Accelerators in ball mills for the production of cosmetics
- Piezo-ceramics as perfume atomizers
- Thread guides, eyelets, and friction discs for textile production
- Catalyst carriers for the production of vitamin C
- BIOLOX® hip replacement elements
- Translucent components for braces
- BIOLOX® knee replacement elements
- Resistor cores, fuse bodies, coil bodies, and ceramic circuit boards in consumer electronics such as notebooks, cell phones, and MP3 players
- Piezo-ceramics for plaque removal
- Substrates for circuits in hearing aids and pacemakers

BIOLOX® hip replacement elements
BIOLOX® knee replacement elements
Resistor cores, fuse bodies, coil bodies, and ceramic circuit boards in consumer electronics such as notebooks, cell phones, and MP3 players
Piezo-ceramics for plaque removal
Substrates for circuits in hearing aids and pacemakers
IN EVERYDAY LIFE

Plate for coloring contact lenses
Accelerators in ball mills for the production of cosmetics
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Piezo-ceramics for plaque removal
Substrates for circuits in hearing aids and pacemakers
IN INDUSTRIAL MANUFACTURING

Gas nozzles, centering standard molds, welding rollers in welding applications and nozzles for laser processes.

Ceramic screws and bolts.

Seal rings, bearings, bearing shells, isolating rings and valves in mechanical engineering and robotics.

Integrated membranes for measurement and control technology in temperature and pressure sensors.

Substrates as circuit carriers for electronic machine control.

Cutting materials and tool systems for machining cast iron, hardened steels and hard-to-machine materials.

Thermally and dimensionally stable guide elements and moving components for precision measuring machines.

Wire drawing components for wire and cable production.

Ceramic screws and bolts.

Components for bending and forming metal as well as punching standards and positioning jaws for sheet metal.

Piezo-ceramic sensor elements in equipment and mechanical engineering.

Piezo ceramics for ultrasonic cleaning and ultrasonic welding.

Piezo ceramics – also with liquid cooling – for high-electronic power devices, e.g. in UV-LED systems for drying paints.
Ceramic wear linings for transporting abrasive bulk materials

SPK cutting materials and tool systems for machining cast iron, hardened steel and hard-to-machine materials

Sliding blocks for heat treatment plants

Metal matrix composite (MMC) preforms for material reinforcement and lightweight construction

Concrete wear linings for transporting abrasive bulk materials

Gas nozzles, centering standard molds, welding rollers in welding applications and nozzles for laser processes

Components for bending and forming metal as well as punching standards and positioning jaws for metalworking

Protection tubes for temperature measurement

Tubes, slide valves and nozzles for guiding molten masses

Cores for the production of cavities in casting components

Tubes, slide valves and nozzles for guiding molten masses

IN METAL PROCESSING AND MACHINING
Side plates in fuel pumps

Preforms for material reinforcement and light-weight construction in engines

Cores for piston casting

Valve plates in common rail injection systems

Crysta® Ceramic Bearing Rollers

Ceramic tapes for hybrids in control elements and lambda sensors

Insulation components in lambda sensors

Coil bodies, fuse bodies, resistor cores, and substrates in auto motive electronics

Bearing bushings in exhaust gas control valves

ON THE ROAD

Axial bearings/seal rings in coolant pumps

Circuit boards in oil pressure sensors for measuring oil level and pressure

Welding nozzles and centering pins for MAG welding in car body construction

CeramCool heat-sinks for LED lighting systems

Circuit boards in oil pressure sensors for measuring oil level and pressure

ON THE ROAD

Cyrol® Ceramic Bearing Rollers

Piezo-ceramic elements as signal transmitters and receivers in distance sensors and signal transmitters in knock sensors

Risers for aluminium casting of alloy rims

Insulation rings in brake calipers

Cam discs in ABS modulators