

CERAMIC

INDUSTRY

The Exclusive Global Voice of Ceramic
& Glass Business and Manufacturing

2010 CERAMIC COMPONENTS DIRECTORY

Product Locator Codes

- Record your ceramic components selections using the headings and code numbers below, referring to page 2 on the enclosed order form for additional information.
- If your ceramic component is not listed, please contact Susan Sutton, editor-in-chief, at (330) 336-4098 or suttons@bnpmedia.com.
- New product headings for the 2010 edition appear with * symbol and in *italics*.

00150	Acceleration Sensor	02250	Basic	04350	Chamber Dome
00200	Acoustical Product	02300	Fireclay	04400	Chip Coil
00250	Actuator	02350	High-Alumina	04450	Chip Ferrite Bead
00300	Aggregate, Insulating	02400	Load-Bearing	04500	Chuck
00350	Air Bag Control Substrate	02450	Shape	04550	Circulator
00400	Airfoil	02500	Silica	04600	Clamp Ring
00450	Alumina Component	02550	Burner Barrel Liner	04650	Coaxial Connector
00500	Aluminum Nitride Component	*02575	<i>Burner Port</i>	04700	Coaxial Connector, Microwave
00550	Aluminum Oxide Component	02600	Bushing:		Composite:
00600	Anode	02650	Condenser	04800	Carbon-Carbon
00650	Antenna:	02700	Cup	04820	Ceramic-Ceramic
00700	Chip Dielectric	02750	Shoulder	04850	Ceramic Matrix
00750	Chip Multilayer	02800	Transformer	04900	Ceramic Matrix, Continuous Fiber
00800	Dielectric	02850	Cam Roller		Reinforced
00850	Antenna Strain Insulator	02900	Capacitor:	04950	Ceramic Matrix, Discontinuous Whisker
00900	Arch, Furnace Suspended	02950	High Energy Density		Reinforced
00950	Attenuator	03000	High-Voltage	05000	Ceramic Matrix, Whisker
01000	Automotive Component	03050	Radio Frequency		Reinforced
01050	Backwall, Suspended	03100	Carbide Component		Ceramic Matrix, Whisker
01100	Ball	03150	Carbon Component		Reinforced
01150	Ball and Seat Check Valve	03200	Cartridge	05100	Ceramic-Metal
01200	Ball and Seat Check Valve Assembly		Casting:	05150	Intermetallic
01250	Ball and Socket Bead	03300	Refractory	05200	Composite Panel
01300	Ball Valve Component	03350	Wear Resistant	05250	Computer Tape Guide
01350	Balun	03400	Catalyst	05300	Conductor
01400	Balun, Chip Multilayer	03450	Catalytic Combustor		Control Component:
01450	Bead	03500	Catalytic Converter	05400	Hydraulic
01500	Bead, Fishspine	03550	Cathode	05450	Pneumatic
01550	Bearing	03600	Cathode Assembly:	05500	Controlled Resistivity Component
01600	Bearing Component	03650	Hollow		Conveyor Tile
01650	Bell Jar	03700	Value-Added	05550	Cordierite Component
01700	Belt	03750	Cathode, Dispenser	05600	Core, Investment Casting
01750	Beryllia Component	03800	Cellular Telephone Resonator Cavity Standoff	05620	Core, Investment Casting
01800	Bioceramic, Dental		Ceramic:	05650	Cover Plate
01850	Bioceramic, Medical	03900	Armor	05700	Crucible:
01900	Blank	03925	Armor Tile	05750	Assay
01950	Bolt	03950	Castable	05800	Fused Silica
02000	Boride Component	04000	Fiber Product	05850	Quartz
02050	Boron Carbide Component	04050	High-Temperature	05900	Refractory
02100	Boron Nitride Component	04100	Machinable	05950	Crucible Liner, Disposable
	Brick:	04150	Media	06000	Crystal
02200	Acid Resisting	04200	Plate	06050	Custom Component
		04250	Preform	06100	Cutters and Knife
		04300	Cermet Component	06150	Cutting Bit

06200	Cutting Tool	08550	Sleeve	11200	Ingot	
06250	Cutting Tool Blank	08600	Splicer	11250	Ingot, Electron Beam Physical Vapor Deposition (EBPVD)	
06300	Cylinder	08650	Filter:	11300	Injection Molding	
06350	Cylinder Liner Preform	08700	Ceramic Reticulated Foam	11350	Injection Molding Compound, Zirconia	
06400	Cylindrical Component, Custom	08750	Dielectric	Insulation:		
06450	DC-DC Converter	08800	Fixture, Graphite	*11440	Custom	
06500	Dead-Burned Refractory Component	08850	Floor Brick, Kiln	11450	Furnace	
06550	Delay Line, Chip Multilayer	08900	Flue Liner	11500	Microporous	
06600	Dental Component	08950	Fluid Meter Component	*11510	Thermal	
	Design Tools:	09000	Forming Die	11550	Insulator:	
06620	Impedence Library	09050	Forming Die, Aluminum	11600	Band Heater	
06630	S-Parameter Software	09100	Forsterite Component	11650	Integrated Passive Component	
06640	Simulation Software	09150	Foundry Specialties	11700	Internal Core	
06650	Dewatering Foil	09200	Fuel Cell Component	11750	Ion Chamber Envelope	
06700	Die	09250	Fuel Pump Roller	11800	Isolator	
06750	Dielectric		Furnace:	Kiln:		
06800	Dielectric Resonator	09350	Collar	11900	Furniture	
06850	Diesel Engine Exhaust Valve	09400	Component	11950	Shelf	
06900	Diffusion Furnace Component	09450	Disc	12000	Support Beam	
06950	Diode	09500	Pipe Hanger	12050	Tile	
07000	Diode Switch	09550	Roll	12100	Labware:	
07050	Directional Coupler	09600	Fused Cast Refractory Component	12150	Chemical Resistant	
07100	Directional Coupler, Chip Multilayer	09650	Fused Silica Brick	12200	Fused Quartz	
	Disc:	09700	Fused Silica Component	12250	Lamp Base	
07150	Valve	09750	Fused Silica Tool	12300	Lapping Plate	
07200	Discriminator	09800	Gas Distribution Plate	12350	Laser Cavity Reflector	
07250	Divider, Chip Multilayer	09850	Gas Turbine Combustor Liner	12400	Laser Component	
07300	Door Gasket	09900	Gas Turbine Combustor Shroud	12450	Laser Wave Guide	
07350	Door Seal	09950	Gating Component	12500	Lift Pin	
07400	Door Seal	10000	Gauge	12550	Lighting Component	
07450	Dummy Semiconductor Wafer	10050	Gauge Block	12600	Light-Reflecting Component	
07500	Duplexer	10055	Glass:	12650	Lining:	
07550	Electric Fuel Pump Component	10060	Borosilicate	12700	Abrasion-Resistant	
07600	Electrical Insulation	10065	Rod	12750	Furnace	
07650	Electrical Porcelain Insulator	10070	Technical	12800	Protective	
07700	Electroconductive Component	10100	Glass-Ceramic Component	12850	Liquid Level Sensor Component	
07750	Electrode	10150	Graphite Component	12900	Low-Temperature Cofired Ceramic (LTCC) Component	
07800	Electrode Collar	10200	Grinding Media	12950	Low-Voltage Component	
07850	Electrodischarged Machinable (EDM) Component	10250	Halogen Light Contact System	13000	Machinable Ceramic	
07900	Electronic Circuitry Substrate	10300	Hearth Plate	13050	Machinable Glass Ceramic	
07950	EMI Filter	10350	Heat Exchanger	13100	Magnesia Partially Stabilized Zirconia Component	
08000	End Effector	10400	Heat Shielding Component	13150	Magnesite Component	
08050	Engine Component	10450	Heat Sink	13200	Magnet:	
08100	Epitaxial System	10500	Heat Treating Furnace Fan	13250	Hard	
08150	Erosion Sleeve	10550	Heating Element	13300	Rare Earth	
08200	Evaporation Boat	10600	High-Temperature Ceramics	13350	Samarium Cobalt	
08250	Exhaust Gas Damper Seat	10650	High-Temperature Fixturing Component	13400	Soft	
08300	Fastener	10700	High-Temperature Tubing	13450	Mechanical Pump Seal	
08350	Ferrite & Ferromagnetic	10750	High-Voltage Component	13500	Medical Component	
08400	Ferrite Core	10800	Hollow Pair Lead-In	13550	Membrane	
	Fiber Optic:	10850	Honeycomb	13600	Metal Forming Roll	
08500	Ferrule	10900	Hybrid Circuit	13650	Metal Matrix Composite	
		10950	IC Package	13700	Meter Bearing	
		11000	Ignition Component			
		11050	Inductor:			
		11100	Choke			
		11150	Industrial Component			

13750	Mica Component	16400	Pressure Transducer Component	18850	Rod:
13800	Microchip Capacitor			18870	Quartz
13850	Microchip Capacitor, High-Frequency	16450	Process Crucible	18900	Roller
13900	Microporous Insulation	16500	Proppant	18950	Sagger
13950	Microwave Absorber	16550	Proppant, Sintered Bauxite	19000	Sample Holder
14000	Microwave Component	16600	Puck, Ring and Assembly	19050	Sand Blast Nozzle Liner
14050	Mill Lining Brick	16650	Pump Component	19070	Sapphire Components
14100	Monofilament Sleeving	16700	Pyroelectric	19100	Screen Tile
14150	Monofilament Wrap	16750	Pyrometric Cone	19150	Seal
14200	Monolithic Component	16800	Pyrometric Device	19200	Seal, Ceramic-to-Metal
14250	Muffle, Refractory	16805	Quartz and Quartzware:	19250	Seal Face
14300	Mullite Component	16810	Beaker	19300	Seal Ring, Rotating
14350	Nitride Component	16815	Flask	19350	Sealing Plates Graphite
14400	Noise Suppression Component	16820	Labware	19400	Seat
14450	Nozzle	16825	Petrie Dish	19450	Semiconductor
14500	Nozzle Assembly	16830	Rod		Semiconductor Wafer:
14550	Nozzle Component	16835	Sheet	19550	Carrier
14600	Nuclear Waste Container	16840	Test Tube	19600	Contact Pin
14650	Nut	16845	Tube	19650	End Effector
14700	Open-Celled Foam Component	16850	Radio Frequency/Microwave Window	19700	Handler Arm
14720	Optical Components	16900	Radome	19750	Polishing Block
14750	Orifice	16950	Rare Earth Magnet	19800	Wafer Rack
14800	Orthodontic Bracket	17000	Rectifier	19850	Sensor:
14850	Orthodontic Component	17050	Rectifier Housing	19900	Piezoelectric
14900	Oxide Product	17100	Recuperator	19950	Ultrasonic
14950	Paper Processing Element	17150	Refractories:	20000	Sensors/Sensor Module, Pyroelectric Infrared
15000	Particulate Composite	17200	Alumina	20050	Setter
15050	Pellet	17250	Basic	20100	Setter, Ware
15100	Perlite Brick and Block Insulation	17300	Cordierite	20150	Shaft
15150	Photovoltaic Casting Crucible	17350	Forehearth	*20160	<i>Sheet, Flexible Ceramic</i>
15200	Piezoelectric:	17400	Glass House	20200	Shelf
15250	Actuator	17450	Glass Plant	20250	Shelf, Kiln
*15275	<i>Energy Harvesting</i>	17500	High-Alumina	20300	Sialon
15300	Knock Sensor	17550	Honeycomb	20350	Silicide Component
15350	Sound Component	17600	Insulating		Silicon Carbide:
15400	Pinion	17650	Insulating Firebrick	20450	Component
	Pipe:	17700	Mullite	20500	Foam Shape
15500	Ceramic-Lined	17750	Preformed	20550	Specialty Shape
15550	Insulation	17800	Reinforcement	20600	Silicon Nitride Component
15600	Microtunneling	17850	Silica	20650	Single Crystal Lead Magnesium Niobate/Leat Titanate (PMN-PT)
15650	Slip-Lining	17900	Silicon Carbide		
15700	Wrap	17950	Zircon	20700	Sled
15750	Piston	18000	Zirconia	20750	Sleeve
15800	Pitch-Bonded Refractory Component	18050	Refractory Shape	20800	Solar Cell
15850	Pivot	18100	Reinforcement:	20850	Solar Cell, Silicon
15900	Plate:	18150	Fiber	20900	Solid Oxide Fuel Cell Component
15950	Element	18200	Particulate/Platelet		
16000	Pusher	18250	Whisker	20950	Spacer
16050	Plunger	18300	Resistor Carrier for Electronic Assemblies	21000	Spark Plug
16100	Porous Ceramic		Resistor:	21050	Spark Plug Boot Insulator
16150	Porous Plate & Tube	18400	Solid-State	21100	Spark Shield
16200	Post	18450	Thick-Film	21150	Sphere, Ceramic
16250	Pouring Cup	18500	Resonator:	21200	Sputtering Target
16300	Power Supply	18550	Coaxial		Standoff Insulator:
16350	Power Tube	18600	Puck	21300	Heavy-Duty
		18650	Ring	21350	Light-Duty
		18700	Riser Tube	21400	Steatite Component
		18750	Rocket Launch System Insulation	21450	Stone, Baking
		18800	Rocket Thrust Chamber	21500	Strainer Core
					Substrate:

21600 Alumina
 21650 Aluminum Nitride
 21700 Boron Carbide
 21750 Silicon Carbide
 *21770 *Zirconia*
 21800 Superconductor, Microwave
 21850 Superconductor Device
 21900 Superconductor Wire
 21950 Super-Duty Refractory Brick
 22000 Super Tweeter Driver
 22050 Susceptor
 22100 Suspension Insulator
 22150 Suspension Insulator,
 Heavy-Duty
 22200 Tank Block
 22250 Tank Lining, Ceramic
 22300 Tape
 22350 Tape, Insulating
 22400 Tar-Bonded Refractory
 Component
 22450 Target
 22460 **Terminal:**
 22470 Ceramic
Textile:
 22550 Feed Dog
 22600 Guide
 22650 Presser Feet
 22700 Thermal Barrier
 22750 Thermal Core
 22800 Thermal Insulation
 *22820 *Thermal Management
 System*
 22850 Thermal Protection
 Component
 22900 **Thermistor:**
 22950 NTC
 23000 PTC
 23025 Thermocouple Block
 23050 Thermocouple Protection
 Tube
 23100 Thick Film Heater
 23150 Thread Guide
 23200 Tile
 23250 Tile Setter
 23300 Titanium Diboride
 Component
 23350 Tongue-and-Groove Shape
 23400 Tool, Hot Glass
 23450 **Transducer:**
 23500 Piezoelectric
 23550 Ultrasonic
 23600 Transfer Ladle
 23650 Transformer
 23700 Trap
 23750 **Tube:**
 23800 Lamp
 23850 Plasma
 *23860 Porous
 23900 Power
 23950 Pyrometer Protection
 23970 Quartz
 24000 Radiant

24050 Refractory
 24100 Tile Setter
 24150 Tube Mill Roll
 24200 Tube Seal
 24250 Tube Sheet Boiler Ferrule
Tubing:
 24350 Nuclear
 24400 Thin-Wall
 24450 Tundish
 24500 Tungsten Carbide
 Component
 24550 Ultrasonic Component
 24600 Vacuum Chuck
Valve:
 24620 Chemical
 24630 Medical
 24650 Valve Seat
 24700 Valve Shim
 24750 Valve Stem
 24950 Varistor
 25000 Vermiculite Brick and Block
 Insulation
 25050 Wafer, Diffusion Source;
 Boron Nitride
 25100 Ware Tray
 25150 Washer
 25200 Water Filtration Component
 25250 Wear Pad
 25300 Wear Plate
 25350 Wear-Resistant Component
 25400 Weld Location Pin
 25450 Wire Nut
 25500 Xenon Light Switching
 Spark Gap
 25550 Yttria-Stabilized Zirconia
 Component
 25600 Yttrium Oxide Component
 25650 YTZP Blank
 25700 Zirconia Component
 25750 Zirconia Oxide Component
 25800 Zirconia-Toughened
 Alumina Component

PROFESSIONAL SERVICES CATEGORIES

25900 Advanced Ceramics
 25950 Aluminum Oxide Machining
 26000 Assembly
 26050 Assembly, Clean-Room
 26100 Bonding
 26150 Boron Nitride Machining
 26200 Brazing
 26250 Calibration
 26300 Cleaning/Surface
 Preparation
CNC:
 26400 Milling
 26450 Swiss Screw Machining
 26500 Turning
 26550 Coating
 26565 Coating Services
 26600 Consultants

26650 Contractual
 26700 Curing
 26750 Design
 26800 Die Cutting
 26850 Education
 26900 Engineering, Custom
 Fabrication
 26950 Environmental
 27000 Feasibility Studies
 27050 Fixturing
 27100 Formulation Development,
 Ceramic Coatings
 27120 Glassblowing, Technical
 27150 Grindability Testing
Grinding:
 27200 Centerless
 27250 Custom
 27300 Cylindrical
 27350 Fine
 27400 Heat Treating
 27450 Honing
 27500 Honing, Flat
 27550 Injection Molding
 27600 Inspection
 27650 Laboratory Testing
 27700 **Lapping:**
 27750 Flat
 27800 Production
 27850 Lapping and Polishing
 27900 **Lasering:**
 27950 Laser Cutting
 28000 Laser Drilling
 28050 Laser Engraving
 28100 Laser Machining
 28150 Laser Marking
 28200 Laser Micromachining
 28250 Laser Scribing
 28300 Laser Welding
 28350 Lead/Cadmium Testing
 28400 Legal, Patent & Trademark
 28450 Machining
 28500 Market Research
 28550 Masking
 28600 Materials Analysis
 28650 Metallization
 28700 ***28730 Packaging, Ceramic**
 28750 Plasma Surface Treatment
 28800 Plating
 28850 Prototyping
 28860 Quartz Engineering, Custom
 28870 Quartz Fabrication, Custom
 28900 Rapid Prototyping
 28950 Recycling
 29000 Research and Development
 29050 Roller Repair
 29100 Scoring
 29150 Sealing
 29200 Sealing, Ceramic-to-Metal
 29250 Silicon Carbide Machining
 29300 Silicon Nitride Machining
 29350 Stamping
 29400 Standards for Materials

29450	Tape Casting
29500	Technology Transfer & Licensing
29550	Testing
29600	Tooling
29650	Tube Grinding
29700	Tube Polishing
29750	Tumble Coating
29800	Ultrasonic Machining
29850	Warehouse
29900	Water/Wastewater Analysis
29950	Wearproofing
30000	Wearproofing, Tungsten Carbide
30050	Website