

CERAMIC

INDUSTRY

The Exclusive Global Voice of Ceramic
& Glass Business and Manufacturing

2012 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 2012 edition appear with * symbol and in *italics*.

00150	Acceleration Sensor	02450	Shape	04700	Coaxial Connector, Microwave
00200	Acoustical Product	02500	Silica		Composite:
00250	Actuator	02550	Burner Barrel Liner	04800	Carbon-Carbon
00300	Aggregate, Insulating	02575	Burner Port	04820	Ceramic-Ceramic
00350	Air Bag Control Substrate	02600	Bushing:	04850	Ceramic Matrix
00400	Airfoil	02650	Condenser	04900	Ceramic Matrix, Continuous Fiber Reinforced
00450	Alumina Component	02700	Cup		
00500	Aluminum Nitride Component	02750	Shoulder	04950	Ceramic Matrix, Discontinuous Whisker Reinforced
00550	Aluminum Oxide Component	02800	Transformer		
00600	Anode	02850	Cam Roller	05000	Ceramic Matrix, Whisker Reinforced
00650	Antenna:	02900	Capacitor:	05100	Ceramic-Metal
00700	Chip Dielectric	02950	High Energy Density	05150	Intermetallic
00750	Chip Multilayer	03000	High-Voltage	05200	Composite Panel
00800	Dielectric	03050	Radio Frequency	05250	Computer Tape Guide
00850	Antenna Strain Insulator	03100	Carbide Component	05300	Conductor
00900	Arch, Furnace Suspended	03150	Carbon Component		Control Component:
00950	Attenuator	03200	Cartridge	05400	Hydraulic
01000	Automotive Component		Casting:	05450	Pneumatic
01050	Backwall, Suspended	03300	Refractory	05500	Controlled Resistivity Component
01100	Ball	03350	Wear Resistant	05550	Conveyor Tile
01150	Ball and Seat Check Valve	03400	Catalyst	05600	Cordierite Component
01200	Ball and Seat Check Valve Assembly	03450	Catalytic Combustor	05620	Core, Investment Casting
01250	Ball and Socket Bead	03500	Catalytic Converter	05650	Cover Plate
01300	Ball Valve Component	03550	Cathode	05700	Crucible:
01350	Balun	03600	Cathode Assembly:	05750	Assay
01400	Balun, Chip Multilayer	03650	Hollow	05800	Fused Silica
01450	Bead	03700	Value-Added	05850	Quartz
01500	Bead, Fishspine	03750	Cathode, Dispenser	05900	Refractory
01550	Bearing	03800	Cellular Telephone Resonator Cavity Standoff	05950	Crucible Liner, Disposable
01600	Bearing Component		Ceramic:	06000	Crystal
01650	Bell Jar	03900	Armor	06050	Custom Component
01700	Belt	03925	Armor Tile	06100	Cutters and Knife
01750	Beryllia Component	03950	Castable	06150	Cutting Bit
01800	Bioceramic, Dental	04000	Fiber Product	06200	Cutting Tool
01850	Bioceramic, Medical	04050	High-Temperature	06250	Cutting Tool Blank
01900	Blank	04100	Machinable	06300	Cylinder
01950	Bolt	04150	Media	06350	Cylinder Liner Preform
02000	Boride Component	04200	Plate	06400	Cylindrical Component, Custom
02050	Boron Carbide Component	04250	Preform	06450	DC-DC Converter
02100	Boron Nitride Component	04300	Cermet Component	06500	Dead-Burned Refractory Component
	Brick:	04350	Chamber Dome		
02200	Acid Resisting	04400	Chip Coil	06550	Delay Line, Chip Multilayer
02250	Basic	04450	Chip Ferrite Bead	06600	Dental Component
02300	Fireclay	04500	Chuck		
02350	High-Alumina	04550	Circulator		
02400	Load-Bearing	04600	Clamp Ring		
		04650	Coaxial Connector		

	Design Tools:	09150 Foundry Specialties	11510 Thermal
06620	Impedence Library	09175 Fuel Cell:	11550 Insulator:
06630	S-Parameter Software	09200 Component	11600 Band Heater
06640	Simulation Software	09225 Insulation	11650 Integrated Passive
06650	Dewatering Foil	09250 Fuel Pump Roller	Component
06700	Die	Furnace:	11700 Internal Core
06750	Dielectric	09350 Collar	11750 Ion Chamber Envelope
06800	Dielectric Resonator	09400 Component	11800 Isolator
06850	Diesel Engine Exhaust Valve	09450 Disc	Kiln:
06900	Diffusion Furnace Component	09500 Pipe Hanger	11900 Furniture
06950	Diode	09550 Roll	11950 Shelf
07000	Diode Switch	09600 Fused Cast Refractory Component	12000 Support Beam
07050	Directional Coupler	09650 Fused Silica Brick	12050 Tile
07100	Directional Coupler, Chip Multilayer	09700 Fused Silica Component	12100 Labware:
07150	Disc:	09750 Fused Silica Tool	12150 Chemical Resistant
07200	Valve	09800 Gas Distribution Plate	12200 Fused Quartz
07250	Discriminator	09850 Gas Turbine Combustor Liner	12250 Lamp Base
07300	Divider, Chip Multilayer	09900 Gas Turbine Combustor Shroud	12300 Lapping Plate
07350	Door Gasket	09950 Gating Component	12350 Laser Cavity Reflector
07400	Door Seal	10000 Gauge	12400 Laser Component
07450	Dummy Semiconductor Wafer	10050 Gauge Block	12450 Laser Wave Guide
07500	Duplexer	10055 Glass:	12500 Lift Pin
07550	Electric Fuel Pump Component	10060 Borosilicate	12550 Lighting Component
07600	Electrical Insulation	10065 Rod	12600 Light-Reflecting Component
07650	Electrical Porcelain Insulator	10070 Technical	12650 Lining:
07700	Electroconductive Component	10100 Glass-Ceramic Component	12700 Abrasion-Resistant
07750	Electrode	10150 Graphite Component	12750 Furnace
07800	Electrode Collar	10200 Grinding Media	12800 Protective
07850	Electrodischarged Machinable (EDM) Component	10250 Halogen Light Contact System	12850 Liquid Level Sensor Component
07900	Electronic Circuitry Substrate	10300 Hearth Plate	12900 Low-Temperature Cofired Ceramic (LTCC) Component
07950	EMI Filter	10350 Heat Exchanger	12950 Low-Voltage Component
08000	End Effector	10400 Heat Shielding Component	13000 Machinable Ceramic
08050	Engine Component	10450 Heat Sink	13050 Machinable Glass Ceramic
08100	Epitaxial System	10500 Heat Treating Furnace Fan	13100 Magnesia Partially Stabilized Zirconia Component
08150	Erosion Sleeve	10550 Heating Element	13150 Magnesite Component
08200	Evaporation Boat	10600 High-Temperature Ceramics	13200 Magnet:
08250	Exhaust Gas Damper Seat	10650 High-Temperature Fixturing Component	13250 Hard
08300	Fastener	10700 High-Temperature Tubing	13300 Rare Earth
08350	Ferrite & Ferromagnetic	10750 High-Voltage Component	13350 Samarium Cobalt
08400	Ferrite Core	10800 Hollow Pair Lead-In	13400 Soft
	Fiber Optic:	10850 Honeycomb	13450 Mechanical Pump Seal
08500	Ferrule	10900 Hybrid Circuit	13500 Medical Component
08550	Sleeve	10950 IC Package	13550 Membrane
08600	Splicer	11000 Ignition Component	13600 Metal Forming Roll
08650	Filter:	11050 Inductor:	13650 Metal Matrix Composite
08700	Ceramic Reticulated Foam	11100 Choke	13700 Meter Bearing
08750	Dielectric	11150 Industrial Component	13750 Mica Component
08800	Fixture, Graphite	11200 Ingot	13800 Microchip Capacitor
08850	Floor Brick, Kiln	11250 Ingot, Electron Beam Physical Vapor Deposition (EBPVD)	13850 Microchip Capacitor, High-Frequency
08900	Flue Liner	11300 Injection Molding	13900 Microporous Insulation
08950	Fluid Meter Component	11350 Injection Molding Compound, Zirconia	13950 Microwave Absorber
09000	Forming Die	Insulation:	14000 Microwave Component
09050	Forming Die, Aluminum	11440 Custom	14050 Mill Lining Brick
09100	Forsterite Component	11450 Furnace	14100 Monofilament Sleeving
		11500 Microporous	14150 Monofilament Wrap
			14200 Monolithic Component
			14250 Muffle, Refractory

14300	Mullite Component	16825	Petrie Dish	19550	Semiconductor Wafer:
14350	Nitride Component	16830	Rod	19600	Carrier
14400	Noise Suppression Component	16835	Sheet	19650	Contact Pin
14450	Nozzle	16840	Test Tube	19700	End Effector
14500	Nozzle Assembly	16845	Tube	19750	Handler Arm
14550	Nozzle Component	16850	Radio Frequency/Microwave Window	19800	Polishing Block
14600	Nuclear Waste Container	16900	Radome	19850	Wafer Rack
14650	Nut	16950	Rare Earth Magnet	19900	Sensor:
14700	Open-Celled Foam Component	17000	Rectifier	19950	Piezoelectric
14720	Optical Components	17050	Rectifier Housing	20000	Ultrasonic
14750	Orifice	17100	Recuperator	20050	Sensors/Sensor Module, Pyroelectric Infrared
14800	Orthodontic Bracket	17150	Refractories:	20100	Setter
14850	Orthodontic Component	17200	Alumina	20150	Setter, Ware
14900	Oxide Product	17250	Basic	20160	Shaft
14950	Paper Processing Element	17300	Cordierite	20200	Sheet, Flexible Ceramic
15000	Particulate Composite	17350	Forehearth	20250	Shelf
15050	Pellet	17400	Glass House	20300	Shelf, Kiln
15100	Perlite Brick and Block Insulation	17450	Glass Plant	20350	Sialon
15150	Photovoltaic Casting Crucible	17500	High-Alumina	20450	Silicide Component
15200	Piezoelectric:	17550	Honeycomb	20500	Silicon Carbide:
15250	Actuator	17600	Insulating	20550	Component
15275	Energy Harvesting	17650	Insulating Firebrick	20600	Foam Shape
15300	Knock Sensor	17700	Mullite	20650	Specialty Shape
15350	Sound Component	17750	Preformed	20700	Silicon Nitride Component
15400	Pinion	17800	Reinforcement	20750	Single Crystal Lead
15500	Pipe:	17850	Silica	20800	Magnesium Niobate/Leat Titanate (PMN-PT)
15550	Ceramic-Lined	17900	Silicon Carbide	20850	Sled
15600	Insulation	17950	Zircon	20900	Sleeve
15650	Microtunneling	18000	Zirconia	20950	Solar Cell
15700	Slip-Lining	18050	Refractory Shape	21000	Solar Cell, Silicon
15750	Wrap	18100	Reinforcement:	21050	Solid Oxide Fuel Cell Component
15800	Piston	18150	Fiber	21100	Spacer
15850	Pitch-Bonded Refractory Component	18200	Particulate/Platelet	21150	Spark Plug
15900	Pivot	18250	Whisker	21200	Spark Plug Boot Insulator
15950	Plate:	18300	Resistor Carrier for Electronic Assemblies	21300	Spark Shield
16000	Element	18400	Resistor:	21400	Sphere, Ceramic
16050	Pusher	18450	Solid-State	21500	Sputtering Target
16100	Plunger	18500	Thick-Film	21600	Standoff Insulator:
16150	Porous Ceramic	18550	Resonator:	21700	Heavy-Duty
16200	Porous Plate & Tube	18600	Coaxial	21750	Light-Duty
16250	Post	18650	Puck	21800	Steatite Component
16300	Pouring Cup	18700	Ring	21850	Stone, Baking
16350	Power Supply	18750	Riser Tube	21900	Strainer Core
16400	Power Tube	18800	Rocket Launch System Insulation	22000	Substrate:
16450	Pressure Transducer Component	18850	Rocket Thrust Chamber	22050	Alumina
16500	Process Crucible	18870	Rod:	22100	Aluminum Nitride
16550	Proppant	18900	Quartz	22150	Boron Carbide
16600	Proppant, Sintered Bauxite	18950	Roller	22200	Silicon Carbide
16650	Puck, Ring and Assembly	19000	Sagger	22250	Zirconia
16700	Pump Component	19050	Sample Holder	22300	Superconductor, Microwave
16750	Pyroelectric	19070	Sand Blast Nozzle Liner	22350	Superconductor Device
16800	Pyrometric Cone	19100	Sapphire Components	22400	Superconductor Wire
16850	Pyrometric Device	19150	Screen Tile	22450	Super-Duty Refractory Brick
16880	Quartz and Quartzware:	19200	Seal	22500	Super Tweeter Driver
16900	Beaker	19250	Seal, Ceramic-to-Metal	22550	Susceptor
16915	Flask	19300	Seal Face	22600	Suspension Insulator
16930	Labware	19350	Seal Ring, Rotating	22650	Suspension Insulator, Heavy-Duty
16945		19400	Sealing Plates Graphite	22700	Tank Block
16960		19450	Seat	22750	Tank Lining, Ceramic
16975			Semiconductor		

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
 23125 *Thin Film*
 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
 *26975 *Extrusion*
 27000 Feasibility Studies
 27050 Fixturing
 27100 Formulation Development, Ceramic Coatings
 27120 Glassblowing, Technical
 27150 Grindability Testing
 27200 **Grinding:**
 27250 Centerless

27300 Custom
 27350 Cylindrical
 27400 Fine
 27450 Heat Treating
 27500 Honing
 27550 Honing, Flat
 27600 Injection Molding
 27650 Inspection
 27700 Laboratory Testing
 27750 **Lapping:**
 27800 Flat
 27850 Production
 27900 Lapping and Polishing
 27950 **Lasering:**
 28000 Laser Cutting
 28050 Laser Drilling
 28100 Laser Engraving
 28150 Laser Machining
 28200 Laser Marking
 28250 Laser Micromachining
 28300 Laser Scribing
 28350 Laser Welding
 28400 Lead/Cadmium Testing
 28450 Legal, Patent & Trademark
 28500 Machining
 28550 Market Research
 28600 Masking
 28650 Materials Analysis
 28700 Metallization
 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