

# appliance DESIGN

## 2008 BUYERS GUIDE – PRODUCT LISTING BOOKLET

Check all categories carefully before making your selection. Please retain this list for your files.

**NOTE: PLEASE SEE PAGE 6 FOR A COMPLETE LIST OF SERVICE CATEGORIES  
(Product Code Numbers 60000-62550)**

<b>A</b>	
00020	<b>ABRASIVES</b>
	<b>ACTUATORS:</b>
00060	Electric
00080	Hydraulic
00100	Mechanical
00120	Pneumatic
00140	Valve
	<b>ADHESIVE DISPENSING (See Dispensing)</b>
	<b>ADHESIVES (See also Tapes):</b>
00200	Anaerobic
00220	Electrically Conductive
00240	Epoxy
00260	Hot Melt
00280	Structural Bonding
00300	Thermoplastic
00320	Thermosetting
00340	Other
	<b>ALARMS:</b>
00380	Audible
00400	Visual
	<b>ALLOYS:</b>
00440	Brazing
00460	Ferrous
00480	Nonferrous
00500	Soldering
00520	Welding
00540	Other
	<b>ALUMINUM:</b>
00580	Alloys
00600	Coils, Sheets, Strips
00620	Foil
00640	Pre-Coated
00660	Roll, Embossed, Patterned
00680	Structural Shapes
00700	Other
00820	<b>ASSEMBLY EQUIPMENT/SYSTEMS</b>
00840	<b>ASSEMBLY, SECONDARY</b>
00860	<b>ASSEMBLY TOOLS</b>

<b>B</b>	
00900	<b>BAR CODING-AUTO ID EQUIPMENT/SYSTEMS</b>
	<b>BATTERIES:</b>
00960	Alkaline

00980	Lead Acid
01000	Lithium
01020	Nickel-Cadmium and Nickel Metal Hydride
01060	Other
01080	<b>BATTERY CHARGERS</b>
01100	<b>BATTERY HOLDERS</b>
01120	<b>BEARINGS</b>
01240	<b>BELLOWS</b>
	<b>BELLS (See Alarms, Audible)</b>
01280	<b>BELTS</b>
01400	<b>BIMETALS</b>
01420	<b>BLANKING MACHINES</b>
	<b>BLOCKS (See Fuse Block and Terminal Blocks)</b>
	<b>BLOWER:</b>
01480	Housings
01500	Wheels
	<b>BLOWERS:</b>
01540	Axial
01560	Centrifugal
01580	Other
01600	<b>BOLTS</b>
01720	<b>BOXES, ELECTRICAL</b>
01740	<b>BRAKES</b>
01860	<b>BRASS</b>
	<b>BRAZING (See Rods, Brazing &amp; Alloy Also):</b>
01900	Equipment
01920	Materials
01940	<b>BRONZE</b>
01960	<b>BRUSHES, COMMUTATOR</b>
01980	<b>BUMPERS AND PADS</b>
	<b>BUSHINGS, ELECTRICAL INSULATING:</b>
02020	Metal
02040	Plastic
02060	Rubber
	<b>BUSHINGS AND SLEEVES:</b>
02100	Metal
02120	Plastic
02140	Rubber
	<b>BUZZERS (See Alarms, Audible)</b>

<b>C</b>	
02180	<b>CABINETS, CASES &amp; ENCLOSURES</b>

	<b>CABLE, ELECTRIC (See Wire &amp; Cable)</b>
	<b>CABLE TIES (See Ties, Wire and Cable)</b>
02260	<b>CAMS</b>
	<b>CAPACITORS:</b>
02300	Fixed
02320	Power Factor Correction
02340	Variable
02360	Other
02380	<b>CAPS, PLUGS AND CLOSURES</b>
02400	<b>CARBON</b>
02420	<b>CASTERS (See Wheels Also)</b>
	<b>CASTINGS:</b>
02560	Die, Aluminum
02580	Die, Magnesium
02600	Die, Zinc
02620	Ferrous
02640	Nonferrous
02660	Nonmetallic
02680	Other
	<b>CELLS (See Batteries)</b>
02720	<b>CERAMIC FIBER</b>
02740	<b>CERAMIC PRODUCTS</b>
02760	<b>CHARCOAL, ACTIVATED</b>
02800	<b>CIRCUIT BREAKERS</b>
02820	<b>CIRCUIT PROTECTORS</b>
	<b>CIRCUIT, FLEXIBLE (See Flexible Circuits)</b>
	<b>CLAMPS:</b>
02880	Cable, Electric
02900	Hose Bands
02920	Tubing
02940	Vacuum
02960	Other
03020	<b>CLINCHING AND CRIMPING EQUIPMENT</b>
03040	<b>CLOCKS (See Timers Also)</b>
03220	<b>CLUTCHES</b>
	<b>COATINGS AND FINISHES:</b>
03360	Acid-Resistant
03380	Alkali-Resistant
03400	Chemical
03420	Conductive
03440	Corrosion-Resistant
03460	Dry Film Lubricant
03480	Electrocoating
03500	Enamels
03520	Fire-Retardant

03540 Heat-Resistant  
 03560 High Solids  
 03580 Lacquers  
 03600 Liquid Paints  
 03620 Porcelain  
 03640 Powders  
 03660 Pretreatment  
 03680 Primers  
 03700 Shielding  
 03720 Silicone  
 03740 Strippable  
 03760 Two-Component  
 03780 Vacuum  
 03800 Water-Base  
 03820 Other (Incl. Pre-Printed Finishes & Tool Surface Treatment)  
 03840 **COCKS AND FAUCETS, DRAIN COILS:**  
 03940 Armature  
 03960 Cooling, Heating  
 03980 Field  
 04000 Relays  
 04020 Solenoid  
 04040 **COLD HEADED PARTS**  
 04060 **COLLARS, SHAFT**  
 04080 **COMMUTATORS AND SLIP RINGS**  
 04100 **COMPOSITES**  
**COMPRESSED AIR DEVICES:**  
 04140 Dryers  
 04160 Oil Removal  
 04180 Regulators  
 04200 Silencers  
**COMPRESSORS:**  
 04240 Air  
 04260 Piston  
 04280 Rotary  
 04300 Scroll  
 04320 **COMPUTERS/HARDWARE**  
 04520 **CONDENSORS**  
 04540 **CONDUIT**  
**CONNECTORS:**  
 04580 Electrical  
 04600 Electronic  
 04620 Hydraulic  
 04640 Pneumatic  
 04660 Tubing  
 04680 Wire and Cable  
 04720 **CONTACTORS, MAGNETIC (See Relays Also)**  
**CONTACTS:**  
 04760 Automatic In-Die  
 04780 Electrical (Relay, Switch)  
 04800 Other  
**CONTROLS/CONTROL SYSTEMS, APPLIANCE:**  
 04900 AC, Refrigeration  
 04920 Clothes Dryer Temp, Limit  
 04940 Elec Htg Temp, Limit  
 04960 Electric Range, Oven  
 04980 Electric Water Heater Temperature, Limit  
 05000 Electric Heat, Moisture Sensing  
 05020 Gas Heating Fan, High Limit  
 05040 Gas Ignition  
 05060 Gas Range, Oven  
 05080 Gas Valves, Pressure Regulating  
 05100 Gas Water Heater Temperature, Limit

05120 Home Laundry  
 05140 Microwave Oven  
 05160 Portable Appliance Temperature Limit  
 05180 Vending and Coin-Op  
**CONTROLS/CONTROL SYSTEMS, GENERAL:**  
 05220 Electric  
 05240 Electric Motor  
 05260 Electronic  
 05280 Fluidic  
 05300 Humidity  
 05320 Liquid Level  
 05340 Pressure  
 05360 Pushbutton  
 05380 Sequence  
 05400 Speed Motor Regulators  
 05420 Temperature  
 05440 Time  
 05460 Turbidity  
 05480 Other  
 05520 **COPPER**  
 05540 **CORD REELS**  
 05560 **CORD SETS, ELECTRIC**  
 05680 **COUPLINGS**  
**COVERS:**  
 05820 Fastener  
 05840 Protective

---

## D

---

05920 **DECORATIVE FINISHING EQUIPMENT, SPECIAL DECORATIVE TRIM:**  
 05960 Decals  
 05980 Plastic  
 06000 Metals  
 06020 Pressure-Sensitive Sheet and Roll  
 06040 Other  
 06060 **DEEP DRAWING METAL**  
 06100 **DIALS AND SCALES**  
**DIAPHRAGMS:**  
 06140 Metal  
 06160 Plastic  
 06180 Rubber  
**DIE CASTING ALLOYS:**  
 06220 Aluminum  
 06240 Brass  
 06260 Ferrous  
 06280 Magnesium  
 06300 Zinc  
 06340 **DIE CUT PARTS**  
 06460 **DIELECTRIC MATERIALS**  
 06500 **DIGITAL READOUTS**  
 06520 **DIODES**  
**DISPENSING SYSTEMS AND DEVICES:**  
 06580 Adhesives  
 06600 Foam Insulation  
 06620 Lubricants  
 06640 Sealants  
**DISPLAY DEVICES:**  
 06680 Fiber Optic  
 06700 Gas Discharge  
 06720 Light Emitting Diode  
 06740 Liquid Crystal  
 06760 Organic Light Emitting Diode  
 06780 Vacuum Fluorescent

06800 Other  
 06840 **DRILLING, REAMING AND TAPPING MACHINES**  
**DRIVES:**  
 06880 Adjustable Speed, Electrical  
 06900 Adjustable Speed, Mechanical  
 06920 Constant Speed  
 06940 Flexible Shaft  
 06960 Gear  
 06980 Right Angle  
 07000 Roller Gear  
 07020 V-Belt  
 07040 Worm Gear Reduction  
 07060 Other

---

## E

---

07100 **ELASTOMERS**  
**ELECTRONIC COMPONENTS (See Type of Component)**  
**ELECTRONIC HARDWARE (See Hardware, Electronic)**  
 07300 **EMI/RFI SUPPRESSION AND SHIELDING COMPONENTS**  
 07320 **EMBOSSING MACHINES AND EQUIPMENT**  
**ENAMELS (See Coatings and Finishes)**  
 07380 **ENCODERS**  
 07420 **EVAPORATORS**  
 07440 **EXPANDED METAL**  
**EXTRUSIONS:**  
 07540 Metal  
 07560 Plastic  
 07580 Rubber  
 07620 **EYELETS**

---

## F

---

07640 **FABRICATED EXTRUSIONS**  
**FANS:**  
 07680 Axial  
 07700 Centrifugal  
 07720 Circulating, Exhaust or Ventilating  
 07740 Rotary  
 07760 Other  
 07780 **FASTENERS (See Bolts, Nuts, Rivets, Screws, Washers Also)**  
**FASTENERS:**  
 07820 Custom  
 07840 Metric  
 07860 Staplers and Staples  
 07880 Threaded  
 07900 Unthreaded  
 07920 **FELT**  
 07940 **FIBER GLASS**  
**FIBER OPTICS:**  
 07980 Cable  
 08000 Connectors  
 08020 Receivers and Transmitters  
 08040 Transducers  
 08060 **FILTERS**  
**FINISHES AND COATINGS (See Coatings and Finishes)**  
 08600 **FITTINGS**  
**FLASHERS, Visual (See Alarms, Visual)**

08820 **FLAT WIRE AND CABLE**  
 08840 **FLAT WIRE AND CABLE CONNECTORS**  
 08860 **FLEXIBLE CIRCUITS**  
 08880 **FLOATS**  
 08900 **FLOOR CARE BRUSHES & BRUSH ASSEMBLY**  
*FLUIDICS (See Controls)*  
 08980 **FLUXES**  
*FOAM (See Plastic Foam)*  
 09020 **FOIL**  
**FORGINGS:**  
 09080 Metal  
 09100 Plastic  
 09140 **FRICITION MATERIALS**  
 09240 **FUSE BLOCKS & HOLDERS**  
 09260 **FUSES**

**G**

09280 **GAS COMPONENTS (See Controls/Control Systems, Appl. Also)**  
**GAS COMPONENTS:**  
 09320 Burners  
 09330 Flame Arrestors  
 09340 Igniters and Ignition Systems  
 09360 Manifolds  
 09380 Pilots, Flame  
 09400 Pilots, Electronic  
 09420 Pressure Regulators  
 09440 Valves  
 09450 **GASKETING EQUIPMENT, FORM IN PLACE**  
 09460 **GASKET MATERIALS**  
 09480 **GASKETS**  
**GEARS AND PINIONS:**  
 09505 Metal  
 09510 Plastic  
 09780 **GLASS PRODUCTS AND ASSEMBLIES**  
 09800 **GLIDES**  
*GRAPHITE (See Lubricants)*  
 09860 **GRAPHITE PRODUCTS**  
 09900 **GROMMETS**

**H**

09920 **HANDLES**  
 09940 **HANGERS, PARTS**  
 09960 **HARDWARE, ELECTRONIC**  
*HARNESS (See Wire and Cable)*  
 10000 **HEAT EXCHANGERS**  
 10040 **HEAT SHRINKABLE FORMS**  
 10060 **HEAT SINKS**  
**HEATING ELEMENTS:**  
 10120 Area  
 10140 Cartridge  
 10160 Compressor, Crankcase  
 10180 Flexible Wire  
 10200 Foil  
 10220 Glass  
 10230 Graphite  
 10240 Injection Molded  
 10260 Polymer Thick Film  
 10280 Spot  
 10300 Strip

10310 Thick Film  
 10320 Three-Dimensional  
 10340 Tubular  
 10360 **HINGES**  
 10380 **HONEYCOMB MATERIALS**  
**HOSE (See Tubing Also):**  
 10420 Assemblies  
 10440 Flexible Metal  
 10460 Plastic  
 10480 Refrigerant  
 10500 Rubber  
 10520 Other  
 10540 **HOT STAMPING MACHINES**

**I**

10560 **IGNITERS & IGNITION SYSTEMS**  
**INDICATOR LIGHTS AND LAMPS:**  
 10600 Fluorescent  
 10620 Incandescent  
 10640 LED (Light Emitting Diode)  
 10660 Neon  
 10680 Other  
 10690 **INDUCTION HEATING ELEMENTS**  
**INSERTS:**  
 10740 Self-Threading  
 10760 Threaded  
 10780 Threadless  
 10800 **INSPECTION SYSTEMS/EQUIPMENT (Component Value)**  
*INSTRUMENTS (See Testing and Measurement Equipment)*  
**INSULATING MATERIALS:**  
 10860 Electrical  
 10880 Sound  
 10900 Thermal  
 10920 Vacuum Panels  
 10940 **INTEGRATED CIRCUITS (See Microcontrollers Also)**  
 10960 **IRON, CAST**

**K-L**

10980 **KEYBOARDS**  
 11000 **KNOBS**  
 11120 **LABELS AND LABELING EQUIPMENT (See Nameplates Also)**  
*LACQUERS (See Coatings and Finishes)*  
**LAMINATED MATERIALS:**  
 11180 Metal  
 11200 Metal-to-Plastic  
 11220 Plastic  
 11240 Other  
 11260 **LAMP HOLDERS, SOCKETS**  
*LAMPS (See Indicator Lights)*  
**LASERS**  
 11310 **LASER MARKING EQUIPMENT**  
 11315 **LASER WELDING EQUIPMENT**  
 11320 **LATCHES**  
 11340 **LATHES**  
 11360 **LEVELERS, LEG**  
 11380 **LINE MONITORS**

11400 **LINKAGES, MECHANICAL**  
 11420 **LOCK ASSEMBLIES**  
 11440 **LUBRICANTS**  
 11580 **LUGS, WIRE TERMINAL**

**M**

11620 **MAGNESIUM**  
 11640 **MAGNESIUM OXIDE, FUSED**  
 11660 **MAGNETIC TAPE RECORDER HEADS**  
 11680 **MAGNETIC SEPARATION**  
 11700 **MAGNETRONS**  
**MAGNETS:**  
 11740 Circuit Design  
 11760 Electro  
 11780 Permanent  
 11840 **MARKING MACHINES AND MATERIALS**  
 11850 **MASKING PRODUCTS**  
**METAL POWDERS:**  
 12160 Equipment  
 12180 Materials  
*METALS (See Type of Metal)*  
*METERS (See Testing & Measurement Equipment)*  
 12300 **MICA**  
 12320 **MICROCONTROLLERS, MICROPROCESSORS, ASICS, DSPs, DRIVERS, POWER ICs, RECTIFIERS, ANALOG-DIGITAL CONVERTERS, OTHER ICs**  
 12420 **MIRRORS**  
**MOTOR ROTORS, ARMATURE:**  
 12840 Die Cast  
**MOTORS:**  
 12900 AC  
 12920 DC  
 12940 DC Brushless  
 12960 Capacitor  
 12980 Combined with Gear Reducer  
 13000 Fractional (0.1 to 1.0 Hp)  
 13020 Hermetic  
 13040 Hydraulic  
 13060 Immersible  
 13080 Induction  
 13100 Integral Horsepower  
 13120 Miniature  
 13140 Miniature, Battery Driven  
 13160 Multispeed  
 13180 Permanent Magnet  
 13200 Pneumatic  
 13220 Shaded Pole  
 13240 Special Purpose  
 13260 Spring  
 13280 Stepping  
 13300 Subfractional (0.1 Hp or Less)  
 13320 Switched Reluctance  
 13340 Synchronous  
 13360 Timing  
 13380 Universal  
 13400 Other  
 13420 **MOUNTS, MOTOR**

---

**N**

---

13460 **NAMEPLATE MACHINES (Stamping and Embossing)**  
13480 **NAMEPLATES (See Labels and Labeling Equipment Also)**  
13500 **NICKEL AND NICKEL ALLOYS**  
13520 **NICKEL CROWNS**  
**NOISE CONTROL DEVICES:**  
13560 Curtains  
13580 Enclosures  
13600 Other  
13620 **NUMBERING MACHINES, HEADS**  
**NUTS:**  
13660 Aluminum  
13680 Anchor, Plate  
13700 Cap, Acorn  
13720 Flange  
13740 Locking  
13760 Machine, Numbered Sizes  
13780 Metric  
13800 Plastic  
13820 Pre-Assembled Nut and Lock Washer  
13840 Retaining  
13860 Stainless Steel  
13880 Wing  
13900 Other

---

**O-P**

---

13920 **OIL BURNERS AND COMPONENTS**  
**OPTICS, FIBER (See Fiber Optics)**  
14060 **PACKING, Services**  
14080 **PACKING MATERIALS**  
**PAINTS (See Coatings and Finishes)**  
14120 **PATTERNED AND EMBOSSED METALS**  
**PERFORATED MATERIALS:**  
14160 Fabric  
14180 Foam Rubber  
14200 Hardboard  
14220 Metals  
14240 Paper  
14260 Plastic  
14280 **PHOTOELECTRONIC DEVICES**  
14300 **PHOTOETCHED PARTS**  
14320 **PINS**  
**PIPE (See Tubing)**  
14540 **PLASTIC FABRICATED PARTS**  
14560 **PLASTIC FOAM**  
14580 **PLASTIC STRUCTURAL SHAPES (Film, Rod, Sheet, Tubing)**  
**PLASTICS AND RESINS, SPECIALTY:**  
14620 Additives (Fire Retardants, Etc.)  
14640 Custom Compounding  
14660 Dyes, Colors  
14680 Reinforced  
14700 Sheet Molding  
14720 Structural Foam  
**PLASTICS AND RESINS, THERMOPLASTICS:**

14760 ABS  
14780 Acetal  
14800 Acrylic  
14820 Acrylonitrile  
14840 Analysis  
14860 Cellulosic  
14880 Fluorocarbons (TFE)  
14900 Nylon (Polyamide)  
14920 Phenylene Oxide Based  
14940 Polyamide-imide  
14960 Polyaryletherkefone  
14980 Polycarbonate  
15000 Polyester  
15020 Polyetherimide  
15040 Polyethersulfone  
15060 Polyethylene  
15080 Polyimide  
15100 Polyolefin  
15120 Polyphenylene Sulfide  
15140 Polypropylene  
15160 Polystyrene  
15180 Polysulfone  
15200 Polyvinyl Chloride  
15220 Urethanes (Polyurethanes)  
15240 Vinyl  
15260 Other

**PLASTICS AND RESINS, THERMOSETS:**

15300 Alkyd, Amino  
15320 Diallyl Phthalate (DAP)  
15340 Epoxy  
15360 Furan  
15380 Melamine  
15400 Phenolic  
15420 Polyester  
15440 Polyurethane  
15460 Silicone  
15480 Urea-Formaldehyde  
15500 Other  
**POLLUTION CONTROLS:**  
15540 Air  
15560 Water  
15580 Other  
**PORCELAIN ENAMEL (See Coatings and Finishes)**  
15640 **POTENTIOMETERS (See Rheostats Also)**  
15660 **POWDER RECOVERY EQUIPMENT, FINISHING POWDERED METAL PARTS (See Metal Powders)**  
**POWDERS (See Coatings and Finishes)**  
**POWER SUPPLIES:**  
15740 AC  
15760 DC  
15780 Uninterruptible  
15800 **PRECIOUS METALS**  
**PREFINISHED METALS:**  
15840 Aluminum  
15860 Steel  
15880 Other  
**PREPAINTED AND COIL COATED METALS:**  
15920 Aluminum  
15940 Steel  
15960 Other  
**PREFORMS:**  
16000 Hermetic Sealing

16020 Solder  
**PRETREATMENT (See Coatings and Finishes Also):**  
16200 Chemicals  
16240 **PRINTED CIRCUIT BOARD CONNECTORS**  
16260 **PRINTED CIRCUIT BOARDS**  
**PRINTED CIRCUIT MATERIALS:**  
16440 Boards  
16460 Chemicals  
16480 Coatings  
16500 Solder  
16520 Thick Film Paste  
16540 Other  
16560 **PRINTING MECHANISMS**  
16620 **PROGRAMMABLE CONTROLLERS**  
16640 **PROTECTIVE MATERIALS**  
16660 **PROTECTORS, THREADED**  
16680 **PROTOTYPING EQUIPMENT**  
16700 **PULLEYS**  
**PUMPS:**  
16740 Heat  
16760 Metering  
16780 Water  
16800 Other

---

**R**

---

16820 **RATCHETS**  
**RECORDERS (See Testing Equipment)**  
16860 **RECTIFIERS**  
**REDUCERS, SPEED:**  
16900 Friction  
16920 Right Angle  
16940 Shaft Mounted  
16960 Spur Gear  
16980 Worm Gear  
17000 Other  
17020 **REFRIGERANT CHARGING, EQUIPMENT**  
17040 **REFRIGERANTS AND BLOWING AGENTS**  
17060 **REINFORCED PLASTICS**  
17080 **RELAYS**  
17100 **RESINS (See Plastics and Resins Also)**  
17140 **RESISTORS**  
17160 **RETAINING RINGS**  
17180 **RHEOSTATS**  
**RIVET FORMING MACHINES:**  
17192 Radial  
17194 Orbital  
17196 Other  
17200 **RIVET SETTING MACHINES, TOOLS**  
**RIVETS:**  
17240 Blind  
17260 Solid  
17280 Tubular  
17520 **RODS, BRAZING AND WELDING**  
17600 **RUBBER**

---

**S**

---

17840 **SCREENS**  
**SCREW MACHINE PARTS:**  
17900 Metal  
17920 Plastic  
17960 **SCREWDRIVERS, AUTOMATIC SCREWS:**  
17985 Metal  
17990 Plastic  
17995 Leg Leveling  
18380 Other  
18400 **SEALANTS**  
18500 **SEALS (See Gaskets Also)**  
**SEARCHES, PATENT (See Design and Development Services)**  
18680 **SEMICONDUCTOR SOCKETS**  
**SEMICONDUCTORS (See INTEGRATED CIRCUITS AND MICROCONTROLLERS)**  
**SENSORS:**  
18740 Accelerometer  
18750 Capacitive  
18760 Current  
18770 Field Effect  
18780 Gas  
18790 Infrared  
18800 Liquid Level  
18820 Moisture/Humidity  
18840 Motion  
18860 Pressure  
18880 Proximity  
18900 Speed  
18920 Temperature  
18940 Turbidity  
18960 Voltage  
18980 Other  
19020 **SHAFTS AND SPLINES**  
**SHIELDING (See EMI/RFI Suppression & Shielding)**  
19080 **SHIMS**  
19100 **SILICON-CONTROLLED RECTIFIERS**  
**SILICONES**  
19120 **SLIDES**  
**SLIP RINGS (See Commutators and Slip Rings)**  
19200 **SOCKETS**  
**SOFTWARE:**  
19240 CAD/CAM/CAE  
19250 CFD  
19255 Electromagnetic Simulation  
19260 Embedded/Networking  
19280 Information Systems (MRP II)  
19300 Inventory Control  
19320 Labeling  
19330 Molding Simulation  
19335 Product Lifecycle Management  
19340 Process Control  
19360 Production Control  
19380 Quality Control  
19400 Services  
19410 Supply Chain Management  
19415 Thermal Modeling  
19420 Other  
19440 **SOLDER**  
19480 **SOLENOIDS & VALVES**

19500 **SOLVENTS**  
19510 **SOUND DAMPING MATERIALS**  
19520 **SPEAKERS**  
19540 **SPECIALTY METALS**  
19820 **SPRINGS**  
20100 **SPROCKETS**  
**SPUTTERINGS (See Coatings)**  
20140 **STAKERS, THERMAL HEAT STAMPINGS:**  
20180 Fiber  
20200 Metal  
20220 Plastic  
20240 Precision  
20260 **STATIC ELIMINATORS**  
**STEEL:**  
20320 Aluminized  
20340 Basic Oxygen  
20360 Carbon  
20380 Decarburized  
20400 Electro-Galvanized  
20420 Enameling  
20440 Free Machining  
20460 Galfan  
20480 Galvanized  
20500 Heat Resisting  
20520 Motor Lamination  
20540 Patterned  
20560 Prefinished  
20580 Prepainted  
20600 Spring  
20620 Stainless  
20640 Structural Shapes  
20660 Zincmetal  
20680 Other  
20700 **STENCILS**  
**STRAIN RELIEFS**  
**STRAPPING:**  
20760 Metal  
20780 Plastic  
**STRIPPERS, WIRE:**  
20840 Automatic  
20860 Hand  
**STUDS:**  
20900 Plastic  
20920 Steel  
20940 **SURGE ARRESTORS**  
**SWITCHES:**  
20980 Cam  
21000 Differential Pressure  
21020 Electric Appliance  
21040 Foot, Knee  
21060 Indicating, Illuminated  
21080 Key  
21100 Limit  
21120 Membrane  
21140 Mercury  
21160 Miniature, Subminiature  
21180 Motor Control  
21200 Motor Reversing  
21220 Motor Starting  
21240 Precision Snap-Acting  
21260 Pressure  
21280 Pushbutton  
21300 Reed  
21320 Rocker  
21340 Rotary  
21360 Slide  
21380 Snap Action  
21400 Solid-State

21420 Stepping  
21440 Temperature Control  
21460 Thumbwheel  
21480 Time, Automatic  
21500 Toggle  
21520 Touch  
21540 Other  
21560 **SWIVELS**

---

**T**

---

**TAPE:**  
21680 Asbestos  
21700 Decorative Trim  
21720 Glass Fiber  
21740 Magnetic Recording  
21760 PTFE, Plastic  
21780 Plastic, Electrical  
21800 Plastic, Nonelectrical  
21820 Pressure Sensitive  
21840 Protective  
21860 Other  
21880 **TERMINAL BLOCKS**  
21900 **TERMINAL BOARDS**  
21920 **TERMINALS**  
**TESTING & MEASUREMENT EQUIPMENT:**  
21960 Adhesion  
21980 Air Analysis  
22000 Amplifiers  
22020 Armature/Stator Testing  
22040 Automatic Testing Equipment  
22060 Colorimeters  
22080 Corrosion Test Chambers  
22100 Dimensional Measuring  
22120 Electrical Standards  
22140 Electronic  
22160 Environmental  
22180 Fluid Pressure Standards  
22200 Furnaces, Melting  
22220 Hardness Testing  
22240 Insulation Leakage  
22260 Leak Detectors, Electronic  
22280 Leak Detectors, Other  
22300 Magnifiers, Microscopes  
22320 Metal Identification  
22340 Meters  
22360 Microwave Leakage  
22380 Moisture Detectors  
22400 Motors  
22420 Optical  
22440 Oscilloscopes  
22460 Paint Testing  
22480 Recording Meters  
22500 Semiconductor  
22520 Sound Measuring  
22540 Spectrophotometers  
22560 Stroboscopes  
22580 Tachometers  
22600 Temperature Measuring  
22620 Torque  
22640 Vacuum  
22660 Vibration Measuring  
22680 Other  
22720 **THERMAL CUT-OFFS**  
22740 **THERMAL PROTECTORS**  
**THERMISTORS**  
**THERMO ELECTRIC COOLING/HEATING DEVICES**

22800 **THERMOCOUPLES**  
 22820 **THERMOMETERS**  
 22840 **THERMOSTATS**  
 22860 **THYRISTORS**  
 22880 **TIES, WIRE AND CABLE**  
**TIMERS, APPLIANCE:**  
 22920 Dishwashers  
 22940 Dryers  
 22960 Ovens  
 22980 Portable Electrics  
 23000 Ranges  
 23020 Refrigerators  
 23040 Washers  
 23060 Other  
**TIMERS, GENERAL:**  
 23100 Electric  
 23120 Electronic  
 23140 Interval  
 23160 Other  
 23180 **TIN**  
 23200 **TITANIUM**  
 23280 **TOOLS, PNEUMATIC (Production)**  
 23300 **TRANSDUCERS**  
**TRANSFORMERS:**  
 23360 Audio  
 23380 Light Ballasts  
 23400 Power  
 23420 Voltage Regulating  
 23440 Other  
 23460 **TRANSISTORS**  
**TRANSMISSIONS (See Drives)**  
 23520 **TRIACS**  
 23580 **TUBES, ELECTRONIC (Gas, Vacuum) (See Magnetrons Also)**  
**TUBING:**  
 23620 Aluminum  
 23640 Assemblies  
 23660 Copper  
 23680 Custom Fabrications  
 23700 Finned  
 23720 Flexible  
 23740 Gas  
 23760 Heat Shrinkable  
 23780 Plastic  
 23800 Steel  
 23820 Other

---

**U**

---

**ULTRASONICS:**  
 23860 Brazing, Welding  
 23880 Cleaning  
 23900 **UNIONS, ROTATING**

---

**V**

---

**VALVES:**  
 23940 Balls  
 23960 Backflow  
 23980 Butterfly  
 24000 Float  
 24020 Flow Control  
 24040 Metering  
 24060 Needle  
 24080 Pilot  
 24100 Pressure Regulating

24120 Relief  
 24140 Shutoff  
 24160 Solenoid  
 24180 Other  
 24200 **VAPOR CURING EQUIPMENT**  
**VARNISHES (See Coatings and Finishes)**  
 24240 **VENTING**  
 24260 **VENTS**  
 24280 **VIBRATION DAMPERS (See Mounts, Motor Also)**  
 24290 **VIBRATION DAMPERS, Magnetic Pulse**  
**VITREOUS ENAMEL (See Coatings and Finishes)**

---

**W-Z**

---

**WASHERS:**  
 24400 Bushing  
 24420 C  
 24440 Insulating  
 24460 Lock  
 24480 Nonmetallic  
 24500 Other  
**WELDING EQUIPMENT:**  
 24580 Arc  
 24600 Arcless Tig  
 24620 Electrical  
 24640 Friction  
 24660 Magnetic Pulse  
 24680 Spot  
 24700 Ultrasonic  
 24720 **WELDING PLATENS**  
**WHEELS:**  
 24760 Metal  
 24780 Plastic  
 24800 Rubber Tired  
**WIRE & CABLE:**  
 24860 Aluminum  
 24880 Cable, Electric  
 24900 Copper  
 24920 Fabricated Parts  
 24940 Harnesses  
 24960 High Temperature  
 24980 Magnet  
 25000 Resistance  
 25020 Spring  
 25040 Stainless Steel  
 25060 Steel  
 25080 Thermocouple  
 25100 Welding  
 25120 Other  
 25140 **WIRE FORMS**  
 25160 **WIRE MARKING AND CODING (Materials and Equipment)**  
 25180 **WIRE TENSIONING SYSTEMS**  
 25200 **WIRE TERMINALS (See Connectors, Electrical Also)**  
 25220 **WIRE TERMINATING EQUIPMENT**  
 25240 **WIRE WRAPPING EQUIPMENT**  
 25260 **WIRING (Automatic)/WIRE INSERTING EQUIPMENT**  
 25300 **ZINC**

---

**SERVICE CATEGORIES**

---

60000 **ANODIZING, ALUMINUM, SERVICES**  
 60050 **CERTIFICATION SERVICES CONSULTANTS:**  
 60150 Design  
 60200 Electronics  
 60250 Engineering  
 60300 Human Factors/Ergonomics  
 60350 Manufacturing  
 60400 Materials  
 60450 Molding  
 60500 Motor & Drive  
 60550 Outsourcing  
 60600 Product Liability  
 60650 Software  
 60700 Sound Quality  
**CONTRACT MANUFACTURING:**  
 60800 Components  
 60850 Electronics  
 60900 Finished Products  
 60950 Subassemblies  
 61000 **CONTRACT SERVICES**  
 61050 **CUSTOM METAL ASSEMBLY FABRICATORS**  
 61100 **DECORATING SERVICES**  
 61150 **DESIGN AND DEVELOPMENT SERVICES**  
 61200 **DIE CASTING SERVICES**  
 61250 **ELECTROPLATING SERVICES**  
 61300 **EMI/RFI TESTING & CONSULTING**  
 61350 **FINISHING SERVICES, CUSTOM**  
 61400 **INDUSTRIAL DESIGN (See Design & Development Services Also)**  
 61450 **MARKET RESEARCH SERV.**  
 61500 **METAL FORMING & STAMPING SERVICES**  
 61550 **METAL INJECTION MOLDING SERVICES**  
 61600 **METAL POWDERS, SERVICES**  
**MOLDING SERVICES:**  
 61700 Extrusion  
 61750 Injection  
 61800 Rotot Molding  
 61850 Thermoforming  
 61900 Other  
 61950 **PORCELAIN ENAMELING SERVICES**  
 62000 **PROTOTYPING SERVICE**  
 62050 **ROLL FORMING, SERVICES**  
 62100 **RUBBER PARTS AND SERVICES**  
 62150 **SCREEN PRINTING**  
 62200 **SERVICE CENTERS, METALS**  
 62250 **SOUND QUALITY EVALUATION EQUIPMENT AND SERVICES**  
 62300 **SYSTEMS ENGINEERING**  
 62350 **TESTING LABORATORIES, SERVICES**  
**WELDING SERVICES:**  
 62500 Metal Assemblies  
 62550 Plastic Assemblies