

# ASSEMBLY

## BUYERS GUIDE PRODUCT CATEGORIES

### Adhesives, Coatings, Tapes, Sealants and Lubricants

#### Adhesives:

00300	<i>Adhesives, Acrylic</i>
00400	<i>Adhesives, Anaerobic</i>
00500	<i>Adhesives, Conductive</i>
00600	<i>Adhesives, Cyanoacrylate</i>
00700	<i>Adhesives, Epoxy</i>
00800	<i>Adhesives, Fastener Retention</i>
00900	<i>Adhesives, Hot-Melt</i>
01000	<i>Adhesives, Silicone</i>
01100	<i>Adhesives, Urethane</i>
01200	<i>Adhesives, IR &amp; UV Curable</i>
01300	Adhesive Tapes, Conductive
01400	Adhesive Tapes, Pressure Sensitive
01500	Conformal Coatings
01600	Encapsulating and Potting Material
01700	Formed-In-Place Gasket Material
01800	Lubricants, Assembly
01900	Sealant Material

### Assembly Hardware and Machine Components

02100	Bearings
02200	Cabinets and Enclosures
02300	Castings and Stampings
02400	Clamps, Manual and Powered
02500	Couplings, Mechanical
02600	Machine Bases, Tables and Platforms
02700	Machine Mounts
02800	Modular Structural Framing Components
02900	Shock Absorbers, Mechanical and Gas

### Automated Assembly Machines and Systems

03100	Assembly Machine Chassis
<u>Assembly Machines:</u>	
03300	<i>Assembly Machines, Carousel</i>
03400	<i>Assembly Machines, Continuous Motion</i>
03500	<i>Assembly Machines, In-Line</i>
03600	<i>Assembly Machines, Non-synchronous (Power-and-Free)</i>
03700	<i>Assembly Machines, Rotary</i>
03800	<i>Assembly Machines, Walking Beam Transfer</i>
03900	Assembly Machine Dial Plates
04000	Flexible Assembly Systems
04100	Nutrunning Machines, Single- and Multiple-Spindle
04200	Screwdriving Machines, Single- and Multiple-Spindle

### Auto ID, Bar Coding, Product Marking and Labeling Equipment

04400	Bar Code Printers and Readers
04500	Engraving and Stamping Machines
04600	Ink Jet Printers
04700	Labels
04800	Label Printers and Dispensers
04900	Laser Marking Machines
05000	Marking and Printing Machines
05100	RFID Systems
05200	RFID Tags

### Autonomous Vehicle Technology

#### Automated Systems and Services:

05500 *Sensors*

#### Electrification Systems and Services:

05700 *Batteries*

05800 *Capacitors*

05900 *Fuel Cells*

06000 *Motors*

06100 *Power Electronics*

#### Vehicle Systems and Services:

06300 *Electrical*

06400 *Electronic*

06500 *Electrical & Electronic Semiconductors*

06600 *Electrical & Electronic Sensors*

06700 *Materials*

06800 *Manufacturing*

06900 *Powertrain/Propulsion*

07000 *Powertrain/Propulsion, Engines*

07100 *Powertrain/Propulsion, Transmissions*

07200 *Test & Measurement*

### Brazing, Soldering and Welding Equipment

07400 Brazing Systems

07500 Fume Extractors

07600 Soldering Irons and Controllers

#### Soldering Machines:

07800 *Soldering Machines, Induction*

07900 *Soldering Machines, Iron*

08000 *Soldering Machines, Laser*

08100 *Soldering Machines, Microflame*

08200 Ultrasonic Welding Machines, Metal

08300 Ultrasonic Welding Machines, Plastic

08400 Ultrasonic Welding Machine Horns

**Welders:**

08600	<i>Welders, Friction</i>
08700	<i>Welders, Hot Plate</i>
08800	<i>Welders, Induction</i>
08900	<i>Welders, Plastic, Hot Air</i>
09000	<i>Welders, Laser</i>
09100	<i>Welders, Spot</i>
09200	<i>Welders, Stud</i>

**Cleaning Equipment and Supplies****Cleaning Machines:**

09500	<i>Cleaning Machines, Aqueous</i>
09600	<i>Cleaning Machines, Plasma</i>
09700	<i>Cleaning Machines, Solvent Bath</i>
09800	<i>Cleaning Machines, Ultrasonic</i>
09900	Cleaning Materials

**Contract Assembly and Assembly-Related Services**

10100	Contract Assembly and Manufacturing
10200	Contract Engineering Services
10300	Contract Inspection and Testing
10400	Contract PCB Assembly
10500	Contract R&D Services
10600	Contract Wire Harness Assembly
10700	Rapid Prototyping Services
10800	<b>Training Services:</b>
10900	<i>Advanced Technical Training and Certifications</i>

**Conveyors and Handling Systems**

11100	Automatic Guided Vehicles (AGVS)
11200	Automated Storage and Retrieval Systems (ASRS)
11300	Bins, Totes, Trays and Containers
11400	Carts
	<b>Conveyors:</b>
11600	<i>Conveyors, Accumulating</i>
11700	<i>Conveyors, Belt</i>
11800	<i>Conveyors, Carousel</i>
11900	<i>Conveyors, Magnetic Belt</i>
12000	<i>Conveyors, Overhead</i>
12100	<i>Conveyors, Power-and-Free or Towline</i>
12200	<i>Conveyors, Roller</i>
12300	<i>Conveyors, Vacuum</i>
12400	<i>Overhead Cranes and Lifting Devices</i>
12500	Returnable Packaging
12600	Tray and Pallet Transfer Systems
12700	Tray Stackers and De-stackers
12800	Lift Tables and Lift Assist Devices

**Dispensing and Curing Equipment**

13000	Adhesive Cartridges
13100	Adhesive Dispensers, Automatic
13200	Adhesive Dispensers, Manual
13300	Adhesive Mixing and Metering Equipment
13400	Adhesive Packaging Systems
13500	Dispensing Needles and Tips
13600	Dispensing Valves

13700	Encapsulating and Potting Equipment
13800	IR & UV Curing Equipment
13900	Lubricant Dispensing Equipment
14000	Solder Paste Dispensing Equipment

**Electrical, Electronic and Fiber Optic Components and Supplies**

14200	Cable Assemblies and Cord Sets
14300	Component Carrier Tape
14400	Connectors, Splices and Terminals
14500	Electric Power Distribution Equipment
14600	Fractional Horsepower Motors
14700	Heat Shrink Tubing
14800	Printed Circuit Boards (Bare)
14900	Pushbuttons and Switches
15000	Signal Lights and Status Displays
15100	Static Control Material
15200	Stencils and Squeegees for Screen Printing
15300	Uninterruptible Power Supplies
15400	Wire and Cable
15500	Wire and Cable Ties
15600	Wire Wrap
15700	Wire Marking Labels

**Fasteners and Precision Formed Parts**

15900	Bolts
16000	Fasteners, Tamper-Proof
16100	Fasteners, Torque-Limiting
16200	Inserts
16300	Nuts
16400	Pins, Coiled Spring
16500	Pins, Solid
16600	Precision Formed Parts
16700	Quick-Operating Fasteners
16800	Retaining Rings
16900	Rivets, Blind
17000	Rivets, Self-Piercing
17100	Rivets, Solid
17200	Screws
17300	Threaded Studs
17400	Weld Nuts and Studs

**Forming and Riveting Machines**

17600	Clinching and Staking Machines
17700	Impact Riveting Machines
17800	Orbital Forming and Riveting Machines
17900	Radial Forming and Riveting Machines
18000	Spin-Rolling Machines

**Inspection Equipment: Acoustic, Optical and X-Ray**

18200	Acoustical Inspection Machines
18300	Automated Optical Inspection (AOI) Machines
18400	Magnifiers
18500	Microscopes
18600	Optical Comparators
18700	X-Ray Inspection Machines

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### Motion Control, Positioning and Indexing Equipment

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18900	Actuators, Linear
19000	Actuators, Rotary
19100	Ballscrews
19200	Cam and Dial Indexers
19300	Couplings
19400	Encoders, Linear
19500	Encoders, Rotary
19600	Laser-Guided Positioning Devices
19700	Linear Motors
19800	Linear Slides
19900	Motion Control Systems
20000	Multi-axis Actuators
20100	Nano-positioning Devices and Systems
20200	Rotary Indexing Tables
20300	Servo Drives and Systems
20400	Servo System Controllers
20500	Stepper Motors and Controls
20600	X-Y Tables
20700	X-Y Positioning Stages

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### Parts Feeders and Positioning Equipment

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20900	Guidance Devices for Manual Parts Picking
21000	Part Counters
21100	Part Feeder Controls
	<b>Part Feeders:</b>
21300	<i>Part Feeders, Centrifugal</i>
21400	<i>Part Feeders, Conveyor-Based</i>
21500	<i>Part Feeders, Elevator</i>
21600	<i>Part Feeders, Hopper</i>
21700	<i>Part Feeders, Magazine</i>
21800	<i>Part Feeders, Robotic</i>
21900	<i>Part Feeders, Vibratory Bowl</i>
22000	<i>Part Feeders, Vibratory Linear</i>
22100	Part Positioners and Manipulators
22200	Part Tracks and Escapements
22300	Parts Trays and Pallets
22400	Pick-and-Place Machines
22500	Screw Feeders
22600	Sorting and Separating Machines
22700	Spring Feeders
22800	Vacuum Part Pickups and Suction Cups

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### PCB Assembly Machines, Equipment and Tools

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23000	Component Placement Machines, Surface Mount
23100	Component Insertion Machines, Through-Hole
23200	Component Taping Machines
23300	Lead Forming and Clinching Machines
23400	Flux Application Machines
23500	Hand Tools for Electronics Assembly
23600	Odd-Form Parts Insertion and Placement Machines
23700	PCB De-paneling Machines
23800	PCB Handling and Feeding Machines
23900	Reflow Ovens
24000	Screen and Stencil Printing Machines
24100	Solder Ball Placement Machines
24200	Static Control Devices

24300	Stencil Cleaning Machines
24400	Wave Soldering Machines

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### Pneumatic and Hydraulic Equipment and Components

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24600	Controls, Hydraulic
24700	Controls, Pneumatic
24800	Couplings, Hydraulic and Pneumatic
24900	Cylinders, Hydraulic
25000	Cylinders, Pneumatic
25100	FRL Units
25200	Hose, Compressed Air
25300	Hydraulic Pumps
25400	Lubrication Equipment
25500	Motors, Hydraulic
25600	Vacuum Pumps
25700	Valves, Hydraulic and Pneumatic

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### Power and Hand Tools and Accessories

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25900	Angle Attachments for Power Tools
26000	Drills, Pneumatic
26100	Drills, Electric
26200	Extensions
26300	Heat Guns
26400	Impact Wrenches, Pneumatic
26500	Impact Wrenches, Electric
26600	Material Handling Equipment
26700	Nut Drivers, Manual
26800	Nutrunners, Electric
26900	Nutrunners, Pneumatic
27000	Portable Rivet-Setting Guns and Tooling
27100	Pulse Tools
27200	Screwdriving Bits
	<b>Screwdrivers:</b>
27400	<i>Screwdrivers, Cordless Electric</i>
27500	<i>Screwdrivers, Electric</i>
27600	<i>Screwdrivers, Manual</i>
27700	<i>Screwdrivers, Pneumatic</i>
27800	Sockets for Power Tools
27900	Tool Balancers
28000	Torque-Absorbing Arms for Power Tools
28100	Torque Wrenches

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### Presses, and Seal and O-Ring Installation Machines

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28300	Eyeletting Machines
28400	Insert Drivers, Heat and Ultrasonic
28500	Pin Insertion Machines
	<b>Presses:</b>
28700	<i>Presses, Electric</i>
28800	<i>Presses, Electromechanical</i>
28900	<i>Presses, Hydraulic</i>
29000	<i>Presses, Hydropneumatic</i>
29100	<i>Presses, Manual</i>
29200	<i>Presses, Pneumatic</i>
29300	Seal and O-Ring Installation Machines

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**Programmable Controllers, Software, Machine Controls and Data Acquisition Devices**

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29500 Computer-Guided Assembly Aids and Systems  
29600 Data Acquisition Devices  
29700 Design software (CAD, CAM, DFMA)  
29800 Documentation Software  
29900 Programmable Controllers  
30000 Simulation Software  
30100 Machine Controls  
30200 MES & ERP Software  
30300 Quality software (SPC, data analytics)

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**Robots and Robot Accessories**

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30500 Collision Sensors and Crash Protection Devices  
30600 Compliance Devices  
30700 Control Systems for Robots and Vision  
30800 End Effectors and Tool Changers  
30900 Grippers, Mechanical  
**Robots:**  
31100 *Robots, 5- and 6-Axis*  
31200 *Robots, Cartesian Coordinate*  
31300 *Robots, Collaborative (Cobots)*  
31400 *Robots, Dispensing*  
31500 *Robots, Gantry*  
31600 *Robots, SCARA*  
31700 *Robots, Soldering*

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**Solder, Solder Paste and Flux, Brazing Alloys and Flux**

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31900 Brazing Alloys  
31950 Solder, Solder Paste and Flux, Brazing Flux

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**Test, Measurement, Calibration and Motion Analysis Equipment**

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32100 Adhesion Testers  
32200 Cable and Wire Testing Equipment  
32300 Connector Crimp Monitors  
32400 Electronic Circuit Test Systems  
32500 Electrostatic Test Equipment  
32600 Gauges, Force  
32700 Gauges, Thread  
32800 General Test Equipment and Systems  
32900 Laser Measurement Equipment  
33000 Leak Testing Machines and Systems  
33100 Load Cells  
33200 Motion Analysis Equipment  
33300 Multimeters  
33400 Press Fit Monitors  
33500 Pressure Measurement Devices  
33600 Productivity and Process Monitoring Systems  
33700 Sensors, Force

33800 Sensors, Torque  
33900 Thermal Profilers  
34000 Torque Analyzers  
34100 Torque-Tool Control Systems  
34200 Torque-Tool Calibration Equipment  
34300 Wirebond Pull Testers  
34400 X-Ray Fluorescence Analyzers

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**Vision Systems, Sensors and Guarding Devices**

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34600 Cameras  
34700 Guarding Devices, Electronic  
34800 Guarding Devices, Mechanical  
34900 Vision Systems  
35000 Vision System Lighting Equipment  
35100 Electro-Optical Sensors  
35200 Proximity Sensors  
35300 Torque Sensors

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**Wire Processing Machines and Tools**

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35500 Coil Winding Machines  
35600 Connector Crimping Machines  
35700 Wire and Cable Tie Installation Machines  
35800 Wire and Cable Tie Installation Tools  
35900 Wire Cutting, Stripping and Terminating Machines  
36000 Wire Cutting, Stripping and Terminating Tools  
36100 Wire Harness Assembly Boards  
36200 Wire Harness Manufacturing Equipment  
36300 Wire Marking Machines

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**Workstations, Seating, Work Lighting and Accessories**

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36500 Assembly Benches  
36600 Carts  
36700 Chairs and Stools  
36800 Mobile Tables  
36900 Protective Clothing and Gloves  
37000 Racks and Shelves  
37100 Safety Items  
37200 Work Lamps and Lighting  
37300 Workstation Components and Accessories  
**Workstations:**  
37500 *Workstations, Adjustable Height*  
37600 *Workstations, Modular*