

ASSEMBLY Buyers Guide Product Booklet

ADHESIVES, COATINGS, TAPES AND SEALANTS

00300	ADHESIVES, ACRYLIC
00400	ADHESIVES, ANAEROBIC
00500	ADHESIVES, CONDUCTIVE
00600	ADHESIVES, CYANOACRYLATE
00700	ADHESIVES, EPOXY
00800	ADHESIVES, FASTENER RETENTION
00900	ADHESIVES, HOT-MELT
01000	ADHESIVES, SILICONE
01100	ADHESIVES, URETHANE
01200	ADHESIVES, IR & UV CUREABLE
01300	ADHESIVE TAPES, CONDUCTIVE
01400	ADHESIVE TAPES, PRESSURE SENSITIVE
01500	ADHESIVE PREFORMS
01600	CONFORMAL COATINGS
01700	ENCAPSULATING AND POTTING MATERIAL
01800	FORMED-IN-PLACE GASKET MATERIAL
01900	SEALANT MATERIAL

ASSEMBLY HARDWARE AND MACHINE COMPONENTS

02100	BEARINGS
02200	CABINETS AND ENCLOSURES
02300	CLAMPS, MANUAL & POWERED
02400	COUPLINGS, MECHANICAL
02500	MACHINE BASES, TABLES AND PLATFORMS
02600	MACHINE MOUNTS
02700	MODULAR STRUCTURAL FRAMING COMPONENTS
02750	SENSOR BRACKETS
02800	SHOCK ABSORBERS, MECHANICAL & GAS

AUTOMATED ASSEMBLY MACHINES AND SYSTEMS

03000	ASSEMBLY MACHINE CHASSIS
03200	ASSEMBLY MACHINES, CAROUSEL
03250	ASSEMBLY MACHINES, CONTINUOUS MOTION
03300	ASSEMBLY MACHINES, IN-LINE
03400	ASSEMBLY MACHINES, NONSYNCHRONOUS (POWER-AND-FREE)
03500	ASSEMBLY MACHINES, ROTARY
03600	ASSEMBLY MACHINES, WALKING BEAM TRANSFER
03700	ASSEMBLY MACHINE DIAL PLATES
03800	FLEXIBLE ASSEMBLY SYSTEMS
03900	NUTRUNNING MACHINES, SINGLE- AND MULTIPLE-SPINDLE
04000	SCREWDRIVING MACHINES, SINGLE- AND MULTIPLE-SPINDLE

AUTO ID, BAR CODING, PRODUCT MARKING AND LABELING EQUIPMENT

04200	BAR CODE PRINTERS AND READERS
04300	ENGRAVING AND STAMPING MACHINES
04400	INK JET PRINTERS

04500	LABELS
04600	LABEL PRINTERS AND DISPENSERS
04700	LASER MARKING MACHINES
04800	MARKING AND PRINTING MACHINES
04900	PAD PRINTERS
05000	RFID SYSTEMS
05100	RFID TAGS

BRAZING, SOLDERING AND WELDING EQUIPMENT

05300	BRAZING SYSTEMS
05350	CRIMP SOLDERING
05400	FUME EXTRACTORS
05500	SOLDERING IRONS AND CONTROLLERS
05700	SOLDERING MACHINES, HOT AIR
05800	SOLDERING MACHINES, HOT BAR
05900	SOLDERING MACHINES, MICROFLAME
06000	SOLDERING TIPS AND TIP CLEANERS
06100	ULTRASONIC WELDING MACHINES, METAL
06200	ULTRASONIC WELDING MACHINES, PLASTIC
06300	ULTRASONIC WELDING MACHINE HORNS
06500	WELDERS, FRICTION
06600	WELDERS, HOT PLATE
06700	WELDERS, INDUCTION
06800	WELDERS, PLASTIC, HOT AIR
06900	WELDERS, LASER
07000	WELDERS, MICROFLAME
07100	WELDERS, SPOT
07200	WELDERS, STUD

CLEANING EQUIPMENT AND SUPPLIES

07500	CLEANING MACHINES, AQUEOUS
07600	CLEANING MACHINES, PLASMA
07700	CLEANING MACHINES, SOLVENT BATH
07800	CLEANING MACHINES, ULTRASONIC
07900	CLEANING MATERIALS

CONTRACT ASSEMBLY AND ASSEMBLY-RELATED SERVICES

08100	CONTRACT ASSEMBLY AND MANUFACTURING
08200	CONTRACT ENGINEERING SERVICES
08225	CONTRACT FASTENER COATING
08250	CONTRACT INSPECTION AND TESTING
08300	CONTRACT PCB ASSEMBLY
08350	CONTRACT R&D SERVICES
08500	CONTRACT WIRE HARNESS ASSEMBLY
08700	RAPID PROTOTYPING SERVICES
08800	TRAINING SERVICES

CONVEYORS AND HANDLING SYSTEMS

09000	AUTOMATIC GUIDED VEHICLES (AGVS)
09100	AUTOMATED STORAGE AND RETRIEVAL SYSTEMS (ASRS)
09200	BINS, TOTES, TRAYS AND CONTAINERS

09300	CABLE AND HOSE CARRIERS AND REELS
09400	CARTS
09600	CONVEYORS, ACCUMULATING
09700	CONVEYORS, BELT
09800	CONVEYORS, CAROUSEL
09900	CONVEYORS, MAGNETIC BELT
10000	CONVEYORS, OVERHEAD
10100	CONVEYORS, POWER-AND-FREE OR TOWLINE
10200	CONVEYORS, ROLLER
10300	CONVEYORS, VACUUM
10400	RETURNABLE PACKAGING
10500	TRAY AND PALLET TRANSFER SYSTEMS
10600	TRAY STACKERS AND DESTACKERS
10700	LIFT TABLES AND LIFT ASSIST DEVICES

DISPENSING AND CURING EQUIPMENT

10900	ADHESIVE CARTRIDGES
11000	ADHESIVE DISPENSERS, AUTOMATIC
11100	ADHESIVE DISPENSERS, MANUAL
11200	ADHESIVE MIXING AND METERING EQUIPMENT
11250	ADHESIVE PACKAGING SYSTEMS
11300	ADHESIVE TAPE DISPENSERS
11400	DISPENSING NEEDLES & TIPS
11500	DISPENSING VALVES
11600	ENCAPSULATING AND POTTING EQUIPMENT
11700	IR & UV CURING EQUIPMENT
11800	SOLDER PASTE DISPENSING EQUIPMENT

ELECTRICAL, ELECTRONIC AND FIBER OPTICS COMPONENTS AND SUPPLIES

12000	CABLE ASSEMBLIES AND CORD SETS
12100	COMPONENT CARRIER TAPE
12200	CONNECTORS, SPLICES AND TERMINALS
12300	ELECTRIC POWER DISTRIBUTION EQUIPMENT
12400	FRACTIONAL HORSEPOWER MOTORS
12500	HEAT SHRINK TUBING
12600	PRINTED CIRCUIT BOARDS (BARE)
12700	PUSHBUTTONS AND SWITCHES
12800	SHIELDING MATERIAL (EMI AND RFI)
12900	SIGNAL LIGHTS AND STATUS DISPLAYS
13000	SOLDER DAM AND MASK MATERIAL
13100	SOLDER WICK
13200	STANDOFFS
13300	STATIC CONTROL MATERIAL
13400	STENCILS AND SQUEEGEES FOR SCREEN PRINTING
13500	STRAIN RELIEF DEVICES
13600	UNINTERRUPTIBLE POWER SUPPLIES
13700	WIRE AND CABLE
13800	WIRE AND CABLE TIES
13900	WIRE WRAP
14000	WIRE MARKING LABELS

FASTENERS AND PRECISION FORMED PARTS

14200	BOLTS
14400	FASTENERS, TAMPER-PROOF
14500	FASTENERS, TORQUE-LIMITING
14600	INSERTS
14700	NAILS
14800	NUTS
14900	PINS, COILED SPRING

15000	PINS, SOLID
15100	PRECISION FORMED PARTS
15200	QUICK-OPERATING FASTENERS
15300	RETAINING RINGS
15400	RIVETS, BLIND
15500	RIVETS, SELF-PIERCING
15600	RIVETS, SOLID
15700	SCREWS
15800	SCREW-WASHER ASSEMBLIES (SEMS)
16100	THREADED STUDS
16200	WASHERS
16300	WELD NUTS AND STUDS

FORMING AND RIVETING MACHINES

16500	CLINCHING AND STAKING MACHINES
16600	IMPACT RIVETING MACHINES
16700	INJECTED METAL ASSEMBLY MACHINES
16800	ORBITAL FORMING AND RIVETING MACHINES
16900	RADIAL FORMING AND RIVETING MACHINES
17000	SPIN-ROLLING MACHINES

INSPECTION EQUIPMENT: ACOUSTIC, OPTICAL AND X-RAY

17200	ACOUSTICAL INSPECTION MACHINES
17300	AUTOMATED OPTICAL INSPECTION (AOI) MACHINES
17400	MAGNIFIERS
17500	MICROSCOPES
17600	OPTICAL COMPARATORS
17700	SOLDER PASTE INSPECTION MACHINES
17800	X-RAY INSPECTION MACHINES

MOTION CONTROL, POSITIONING AND INDEXING EQUIPMENT

18000	ACTUATORS, LINEAR
18100	ACTUATORS, ROTARY
18200	BALL SCREWS
18300	CAM AND DIAL INDEXERS
18600	COUPLINGS, TORQUE-LIMITING
18700	COUPLINGS, ZERO-BACKLASH
18800	ENCODERS, LINEAR
18900	ENCODERS, ROTARY
19000	LASER-GUIDED POSITIONING DEVICES
19100	LINEAR MOTORS
19200	LINEAR SLIDES
19300	MOTION CONTROL SYSTEMS
19400	NANOPOSITIONING DEVICES AND SYSTEMS
19500	ROTARY INDEXING TABLES
19600	SERVO DRIVES AND SYSTEMS
19700	SERVO SYSTEM CONTROLLERS
19800	STEPPER MOTORS AND CONTROLS
19900	X-Y TABLES

PARTS FEEDERS AND POSITIONING EQUIPMENT

20100	COUNTING SCALES
20200	GUIDANCE DEVICES FOR MANUAL PARTS PICKING
20300	PART COUNTERS
20400	PART FEEDER CONTROLS
20700	PART FEEDERS, CENTRIFUGAL
20750	PART FEEDERS, CONVEYOR-BASED

20800	PART FEEDERS, ELEVATOR
20900	PART FEEDERS, HOPPER
21000	PART FEEDERS, MAGAZINE
21050	PART FEEDERS, ROBOTIC
21100	PART FEEDERS, VIBRATORY BOWL
21200	PART FEEDERS, VIBRATORY LINEAR
21300	PART POSITIONERS AND MANIPULATORS
21400	PART TRACKS AND ESCAPEMENTS
21500	PARTS TRAYS AND PALLETS
21600	PICK-AND-PLACE MACHINES
21700	SCREW FEEDERS
21800	SORTING AND SEPARATING MACHINES
21900	SPRING FEEDERS
22000	VACUUM PART PICKUPS AND SUCTION CUPS

PCB ASSEMBLY MACHINES, EQUIPMENT AND TOOLS

22200	COMPONENT PLACEMENT MACHINES, SURFACE MOUNT
22300	COMPONENT INSERTION MACHINES, THROUGH-HOLE
22400	COMPONENT TAPING MACHINES
22500	LEAD FORMING AND CLINCHING MACHINES
22600	CONFORMAL COATING APPLICATION MACHINES
22700	DESOLDERING STATIONS
22800	FLUX APPLICATION MACHINES
22900	HAND TOOLS FOR ELECTRONICS ASSEMBLY
23000	ODD-FORM PARTS INSERTION AND PLACEMENT MACHINES
23100	PCB CARRIERS
23200	PCB DRILLING MACHINES
23300	PCB DEPANELING MACHINES
23400	PCB HANDLING AND FEEDING MACHINES
23500	PCB REWORK AND REPAIR EQUIPMENT
23600	REFLOW OVENS
23700	SCREEN AND STENCIL PRINTING MACHINES
23800	SOLDER BALL PLACEMENT MACHINES
24000	STATIC CONTROL DEVICES
24100	STENCIL CLEANING MACHINES
24200	TERMINAL AND CONNECTOR INSERTION MACHINES
24300	VAPOR RECOVERY SYSTEMS
24400	WAVE SOLDERING MACHINES

PNEUMATIC AND HYDRAULIC EQUIPMENT AND COMPONENTS

24600	AIR COMPRESSORS
24700	CONTROLS, HYDRAULIC
24800	CONTROLS, PNEUMATIC
24850	COUPLINGS, HYDRAULIC AND PNEUMATIC
24900	CYLINDERS, HYDRAULIC
25000	CYLINDERS, PNEUMATIC
25100	FRL UNITS
25200	GASKETS
25300	HOSE, COMPRESSED AIR
25400	HYDRAULIC PUMPS
25500	LUBRICATION EQUIPMENT
25600	MOTORS, HYDRAULIC
25700	MOTORS, PNEUMATIC

25800	O-RINGS AND SEALS
25900	VACUUM PUMPS
26000	VALVES, HYDRAULIC AND PNEUMATIC

POWER AND HAND TOOLS AND ACCESSORIES

26200	ANGLE ATTACHMENTS FOR POWER TOOLS
26300	DRILLS, PNEUMATIC
26400	DRILLS, ELECTRIC
26500	EXTENSIONS
26600	HEAT GUNS
26700	IMPACT WRENCHES, PNEUMATIC
26800	IMPACT WRENCHES, ELECTRIC
26900	NUT DRIVERS, MANUAL
27000	NUTRUNNERS, ELECTRIC
27100	NUTRUNNERS, PNEUMATIC
27300	PORTABLE RIVET-SETTING GUNS AND TOOLING
27400	PULSE TOOLS
27500	SCREWDRIVING BITS
27700	SCREWDRIVERS, CORDLESS ELECTRIC
27800	SCREWDRIVERS, ELECTRIC
27900	SCREWDRIVERS, MANUAL
28000	SCREWDRIVERS, PNEUMATIC
28100	SOCKETS FOR POWER TOOLS
28200	STUD DRIVING TOOLS, POWDER ACTUATED
28300	TOOL BALANCERS
28400	TOOL BOXES AND CHESTS
28500	TORQUE-ABSORBING ARMS FOR POWER TOOLS
28600	TORQUE WRENCHES

PRESSES, AND SEAL AND O-RING INSTALLATION MACHINES

28800	EYELETTING MACHINES
28900	INSERT DRIVERS, HEAT AND ULTRASONIC
29000	PIN INSERTION MACHINES
29200	PRESSES, ELECTRIC
29300	PRESSES, ELECTROMECHANICAL
29400	PRESSES, HYDRAULIC
29500	PRESSES, HYDROPNEUMATIC
29600	PRESSES, MANUAL
29700	PRESSES, PNEUMATIC
29900	SEAL AND O-RING INSTALLATION MACHINES

PRODUCTION MACHINES AND EQUIPMENT

30100	ABRASIVE BLASTERS
30200	COOLING MACHINES
30300	LASER CUTTING MACHINES
30400	OVENS (EXCLUDING THOSE FOR PCB SOLDERING)
30500	PACKAGING MACHINES
30700	SPRING COILING MACHINES
30800	TYING, BUNDLING AND TAPING MACHINES

PROGRAMMABLE CONTROLLERS, SOFTWARE, MACHINE CONTROLS AND DATA ACQUISITION DEVICES

31000	COMPUTER-GUIDED ASSEMBLY AIDS AND SYSTEMS
31100	DATA ACQUISITION DEVICES
31200	PROGRAMMABLE CONTROLLERS
31300	SOFTWARE (DFMA, RAPID PROTOTYPING, SIMULATION, SPC, VISION)

31400 MACHINE CONTROLS

ROBOTS AND ROBOT ACCESSORIES

31600 COLLISION SENSORS AND CRASH PROTECTION DEVICES
31700 COMPLIANCE DEVICES
31800 CONTROL SYSTEMS FOR ROBOTS AND VISION
31900 END EFFECTORS AND TOOL CHANGERS
32000 GRIPPERS, MECHANICAL
32200 ROBOTS, 5- AND 6-AXIS
32300 ROBOTS, CARTESIAN COORDINATE
32500 ROBOTS, DISPENSING
32600 ROBOTS, GANTRY
32700 ROBOTS, SCARA
32800 ROBOTS, SOLDERING

SOLDER, SOLDER PASTE AND FLUX, BRAZING ALLOYS AND FLUX

33000 BRAZING ALLOYS
33100 BRAZING FLUX
33200 BRAZING PASTE
33300 BRAZING ALLOY PREFORMS
33400 SOLDER PASTE
33500 SOLDER FLUX
33600 SOLDER PREFORMS

TEST, MEASUREMENT, CALIBRATION AND MOTION ANALYSIS EQUIPMENT

33800 ADHESION TESTERS
33900 CABLE AND WIRE TESTING EQUIPMENT
34000 CONNECTOR CRIMP MONITORS
34100 ELECTRONIC CIRCUIT TEST SYSTEMS
34200 ELECTROSTATIC TEST EQUIPMENT
34300 GAUGES, FORCE
34400 GAUGES, THREAD
34450 GENERAL TEST EQUIPMENT AND SYSTEMS
34500 LASER MEASUREMENT EQUIPMENT
34600 LEAK TESTING MACHINES AND SYSTEMS
34700 LOAD CELLS
34800 MOTION ANALYSIS EQUIPMENT
34900 MULTIMETERS
35000 PRESS FIT MONITORS
35100 PRESSURE MEASUREMENT DEVICES
35200 PRODUCTIVITY & PROCESS MONITORING SYSTEMS
35300 SENSORS, FORCE
35400 SENSORS, TORQUE
35600 THERMAL PROFILERS
35700 TORQUE ANALYZERS
35800 TORQUE-TOOL CONTROL SYSTEMS

35900 TORQUE-TOOL CALIBRATION EQUIPMENT
36000 TEST EQUIPMENT FOR FIBER OPTIC CABLE
36100 WIREBOND PULL TESTERS
36200 WIRE STRIP MONITORS
36250 X-RAY FLOURESCENCE ANALYZERS

VISION SYSTEMS, SENSORS AND GUARDING DEVICES

36400 CAMERAS
36500 GUARDING DEVICES, ELECTRONIC
36600 GUARDING DEVICES, MECHANICAL
36700 VISION SYSTEMS
36800 VISION SYSTEM LIGHTING EQUIPMENT
36900 ELECTRO-OPTICAL SENSORS
37000 PROXIMITY SENSORS
37100 TACTILE SENSORS
37200 TORQUE SENSORS
37300 TWO-HAND SAFETY CONTROLS

WIRE PROCESSING MACHINES AND TOOLS

37500 COIL WINDING MACHINES
37600 CONNECTOR CRIMPING MACHINES
37800 WIRE AND CABLE TIE INSTALLATION MACHINES
37900 WIRE AND CABLE TIE INSTALLATION TOOLS
38000 WIRE CUTTING, STRIPPING AND TERMINATING MACHINES
38100 WIRE CUTTING, STRIPPING AND TERMINATING TOOLS
38200 WIRE HARNESS ASSEMBLY BOARDS
38300 WIRE HARNESS MANUFACTURING EQUIPMENT
38400 WIRE MARKING MACHINES

WORKSTATIONS, SEATING, WORK LIGHTING AND ACCESSORIES

38600 ASSEMBLY BENCHES
38650 CARTS
38700 CHAIRS AND STOOLS
38800 MOBILE TABLES
38900 PROTECTIVE CLOTHING AND GLOVES
39000 RACKS AND SHELVES
39100 SAFETY ITEMS
39200 WORK LAMPS AND LIGHTING
39300 WORKSTATION COMPONENTS & ACCESSORIES
39500 WORKSTATIONS, ADJUSTABLE HEIGHT
39600 WORKSTATIONS, MODULAR
39700 WORKSTATIONS, PICK-TO-LIGHT