

ex	842839	Handling Equipment: Automatic material handling machines for transport handling and storage of bare or assembled PCB/PWB's and their electronic components	<input type="checkbox"/>
ex	842890	Handling Equipment: Automatic material handling machines for transport handling and storage of bare or assembled PCB/PWB's and their electronic components	<input type="checkbox"/>
	8431	Parts suitable for use solely or principally with the machinery of heading Nos 8425 to 8430:	
		-Of machinery of heading No 8428:	
ex	843139	- - Other:	
		- - - [Of automated material handling machines for transport, handling and storage of semiconductor wafers, wafer cassettes, wafer boxes, other material for semiconductor devices], bare PCB/PWBs, PCB/PWB assemblies and their electronic components	<input type="checkbox"/> Parts in brackets already covered in the ITA
	8443	Printing machinery, including ink-jet printing machines, other than those of heading No 8471; machines for uses ancillary to printing:	
		- Other printing machinery:	
ex	844359	- - Other:	
		- - - Of a kind used in the manufacture of PCB/PWBs	<input type="checkbox"/> Screen printing equipment
ex	844359	Apparatus for application of defined/non-defined liquids to printed circuit boards or printed wiring boards during processing	<input type="checkbox"/> PCB/PCA fabrication equipment
ex	844359	Screen Printing equipment: Prints defined/non-defined liquids during PCB/PWB processing.	<input type="checkbox"/>
	8456	Machine-tools for working any material by removal of material, by laser or other light or photon beam, ultrasonic, electro-discharge, electro-chemical, electron beam, ionic beam or plasma arc processes:	
ex	845610	- Operated by laser or other light or photon beam processes:	
		- - [Of a kind used in the manufacture of semiconductor wafers or devices] or PCB/PWBs	<input type="checkbox"/> Part in brackets already covered in the ITA; laser hole formation equipment
ex	845610	Laser Hole Formation Equipment: Creates holes via ablation during PCB/PWB processing	<input type="checkbox"/>
ex	845610	Laser hole formation equipment used during printed circuit board or printed wiring board processing	<input type="checkbox"/> PCB/PCA fabrication equipment
		- Other:	
ex	845699	- - Other:	
		- - - [Apparatus for stripping or cleaning semiconductor wafers] or PCB/PWBs	<input type="checkbox"/> Part in brackets already covered in the ITA; cleaning equipment
		- - - Apparatus for dry-etching patterns on LCD substrates	<input type="checkbox"/> Apparatus for semiconductor materials are already covered in the ITA (8456 91)
ex	845699	Plasma Equipment: A container of varying size, capable of holding a number of PWB/PCB's panels. In addition to the container, the unit includes a vacuum system and an RF generator. Various gases can be injected into the container to allow different plasmas to form and accomplish different processes on the PWB/PCB's.	<input type="checkbox"/>
ex	845699	Batch processing equipment used to generate plasma from gases under vacuum during printed circuit board or printed wiring board processing	<input type="checkbox"/> PCB/PCA fabrication equipment

ex	846039	High-precision apparatus used to re-point carbide drills used in the processing of printed circuit boards or printed wiring boards	<input type="checkbox"/> PCB/PCA fabrication equipment
ex	846039	Drill Sharpening Equipment: High-precision equipment to re-point carbide drills	<input type="checkbox"/>
ex	846090	Cleaning Equipment: Apparatus using abrasive impregnated brushes or pads with or without the addition of volcanic pumice to clean and texture the surface of copper foil during PWB/PCB's processing.	<input type="checkbox"/>
ex	846190	Cutting or scoring apparatus used during printed circuit board or printed wiring board processing	<input type="checkbox"/> PCB/PCA fabrication equipment
	8465	Machine-tools (including machines for nailing, stapling, glueing or otherwise assembling) for wood cork, bone, hard rubber, hard plastics or similar hard materials:	
ex	846591	Scoring Equipment: Cutting equipment to create a "V" groove in PCB/PWB's to enable separation of individual PCB/PWB's from a larger panel.	<input type="checkbox"/>
ex	846592	Routing Equipment: Performs internal and external profiling during PCB/PWB processing.	<input type="checkbox"/>
ex	846595	Drilling Equipment for the processing of printed circuit boards or printed wiring boards	<input type="checkbox"/> PCB/PCA fabrication equipment
ex	846595	Drilling Equipment: Single or multiple spindle CNC mechanical drilling machines with spindle speed >50,000 rpm and accepting drills <6.25 mm in diameter	<input type="checkbox"/>
ex	846595	Drilling Equipment: Creates holes mechanically during PCB/PWB processing	<input type="checkbox"/>
ex	846596	Routing Equipment: Performs internal and external profiling during PCB/PWB processing	<input type="checkbox"/>
		- Other:	
ex	846599	- - Other:	
		- - - For scribing or scoring PCB/PWBs or substrates containing PCB/PWBs	<input type="checkbox"/> Scoring equipment, routing equipment; also ex 8465 92?
ex	846599	Temperature or pressure-controlled, lamination press used to bond layers into multilayer printed circuit boards or printed wiring boards	<input type="checkbox"/> PCB/PCA fabrication equipment
ex	846599	Scoring Equipment: Cutting equipment to create a "V" groove in PCB/PWB's to enable separation of individual PCB/PWB's from a larger panel.	<input type="checkbox"/>
	8466	Parts and accessories suitable for use solely or principally with the machines of heading Nos 8456 to 8465, including work or tool holders, self-opening dieheads, dividing heads and other special attachments for machine-tools; tool holders for...	
		-Other:	
ex	846693	- - For machines of heading Nos 8456 to 8461:	
		- - - For apparatus for dry-etching patterns on LCD substrates	<input type="checkbox"/> Parts for apparatus for semiconductor materials already covered in the ITA (8466 93)
		- - [For machines of a kind used in the manufacture of semiconductor wafers or devices] or PCB/PWBs	<input type="checkbox"/> Part in brackets already covered in the ITA
		- - - For machines for scribing or scoring PCB/PWBs or substrates containing PCB/PWBs	<input type="checkbox"/>
	8477	Machinery for working rubber or plastics or for the manufacture of products from these materials, not specified or included elsewhere in this chapter:	
		- Other machinery for moulding or otherwise forming:	
ex	847759	- - Other:	

		--- [Encapsulation equipment for assembly of semiconductor devices] or PCB/PWBs			<input type="checkbox"/> Part in brackets already covered in the ITA; encapsulation/covering equipment
ex	847780	- Other machinery:			
		--- Vacuum assisted presses for the lamination of individual PCB/PWBs into multilayer PCB/PWBs			<input type="checkbox"/> Lamination presses
ex	847780	Registration Equipment: Mechanical/optical equipment to align Printed Circuit Boards/Printed Wiring Boards (PCB/PWB's) during photographic/mechanical processing.			<input type="checkbox"/>
ex	847780	Registration Systems for capacitor manufacturing			<input type="checkbox"/>
ex	847790	- Parts:			
		--- [For encapsulation equipment for assembly of semiconductor devices] or PCB/PWBs			<input type="checkbox"/> Part in brackets already covered in the ITA
		--- For vacuum assisted presses for the lamination of individual PCB/PWBs into multilayer PCB/PWBs			<input type="checkbox"/> e.g. vacuum frames
8479		Machines and mechanical appliances having individual functions, not specified or included elsewhere in this chapter:			
ex	847981	Winders for Capacitor manufacturing			<input type="checkbox"/>
		- Other machines and mechanical appliances:			
ex	847982	- - Mixing, kneading, crushing, grinding, screening, sifting, homogenizing, emulsifying or stirring machines:			<input type="checkbox"/> Chemical regeneration equipment; also ex 8479 89
		--- Apparatus for the regeneration and mixing of etchant solutions			<input type="checkbox"/> PCB/PCA fabrication equipment
ex	847982	Metering or mixing equipment used to extend the life of solutions used during the processing of printed circuit boards or printed wiring boards			
ex	847989	- - Other:			
		--- Apparatus for coating dry film photo resist, photosensitive layers, soldering paste or other adhesive materials on substrates or components used for the manufacture of PCB/PWBs			<input type="checkbox"/> Horizontal/vertical wet processing equipment, dry film laminators, roller coating and curtain coating equipment; also ex 8424 89?
		--- Automated machines for the placement or removal of components or contact elements on semiconductor materials or PCB/PWBs			<input type="checkbox"/> Automated component placement systems
		--- Automated machines for the placement or alignment of PCB/PWBs during the processing			<input type="checkbox"/> Registration equipment
		--- Machines for cleaning the copper surfaces of PCB/PWBs during the manufacturing			<input type="checkbox"/> Cleaning equipment
ex	847989	Automated Component Placement Systems: Apparatus and equipment for removal of components or contact elements on semiconductor materials or PCB/PWB's or ceramic substrates or other materials			<input type="checkbox"/>
ex	847989	Solder Ball Moulder for PCB/PWB assembly			
ex	847989	Mechanical Cleaning Equipment: Mechanical cleans the copper surface of a PCB/PWB during processing (Deburring Machine/Jet Scrubbing Machine/Rinse Machine/Acid Rinse Machine)			<input type="checkbox"/>
ex	847989	Anti-Static Equipment: Aids in the removal of dust particles and electrostatic charge during PCB/PWB processing			<input type="checkbox"/>
ex	847989	Heating Equipment and ovens: : Apparatus and equipment for heating by infrared radiation, ultraviolet and thermal energy during PCB/PWB processing: : Ovens for curing solder or adhesives during PCB/PWB's			<input type="checkbox"/>

ex	847989	Chemical Regeneration Equipment: Metering/mixing equipment to extend the life of solutions used during etchant processing of PCB/PWB's (Soft Etching Machine/Rotary Etching Machine for PWB fabrication)	<input type="checkbox"/>
ex	847989	Stripping Machine for PWB registration processing	<input type="checkbox"/>
ex	847989	Timing Buffer for PWB fabrication	<input type="checkbox"/>
ex	847989	Photomask Matching Station for PWB fabrication	<input type="checkbox"/>
ex	847989	Cleaning Equipment: Apparatus using abrasive impregnated brushes or pads with or without the addition of volcanic pumice to clean and texture the surface of copper foil during PWB/PCB's processing.	<input type="checkbox"/>
ex	847989	Apparatus for provision of spot application of liquids, solder pastes, adhesives or sealants to selected components	<input type="checkbox"/>
ex	847989	Roller Coating equipment : Applies via a roller liquid photo-sensitive materials to PCB/PWB's during processing.	<input type="checkbox"/>
ex	847989	Screen Printing equipment: Apparatus for application or coating or laminating PCB/PWB's with solder or solder flux or other materials.	<input type="checkbox"/>
ex	847989	Apparatus for application of non-defined coating via flooding during printed circuit boards or printed wiring boards during processing	<input type="checkbox"/>
ex	847989	Precision spot application equipment: Apparatus for application of liquids, solder pastes or adhesives or sealants to selected components.	<input type="checkbox"/>
ex	847989	Lamination Presses: Temperature/pressure-controlled lamination press used to bond layers into multilayer PCB/PWBs.	<input type="checkbox"/>
ex	847989	Hot Air Solder Leveling Equipment: Coater used to apply molten solder during PCB/PWB processing. Can be horizontal or vertical.	<input type="checkbox"/>
ex	847989	Automated component placement systems: Apparatus and equipment for placement of components or contact elements on semiconductor materials or PCB/PWB's or ceramic substrates or other substrate materials.	<input type="checkbox"/>
ex	847989	Automated component placement systems: Apparatus and equipment for removal of components or contact elements on semiconductor materials or PCB/PWB's or ceramic substrates or other substrate materials.	<input type="checkbox"/>
ex	847989	Routing equipment used for internal and external profiling during printed circuit board or printed wiring board processing	<input type="checkbox"/>
ex	847989	Apparatus for placement of components or contact element on semiconductor materials, printed circuit boards or printed wiring boards, ceramic substrates or other substrate materials	<input type="checkbox"/>
ex	847989	Apparatus for application, coating or laminating of printed circuit boards or printed wiring boards during processing	<input type="checkbox"/>
ex	847989	Registration Equipment to align printed circuit boards during photographic or mechanical processing	<input type="checkbox"/>
ex	847989	Vacuum frames for holding one or more printed circuit boards or printed wiring boards during assembly	<input type="checkbox"/>
ex	847989	Anti-static apparatus used in the removal of dust particles and electrostatic charge during printed circuit board or printed wiring board processing	<input type="checkbox"/>
ex	847989	Apparatus for application of dry film photo-resist to one or two sides of printed circuit boards or printed wiring boards	<input type="checkbox"/>
ex	847989	Apparatus for application, via a roller, liquid photo-sensitive materials to printed circuit boards or printed wiring boards during processing	<input type="checkbox"/>
ex	847989	Capacitor Assembly Machines	<input type="checkbox"/>
ex	847990	- Parts:	<input type="checkbox"/>
		- - Of apparatus for the regeneration and mixing of etchant solutions	<input type="checkbox"/>

		-- Of apparatus for coating dry film photo resist, photosensitive layers, soldering paste or other adhesive materials on substrates or components used for the manufacture of PCB/PWBs	<input type="checkbox"/>
		-- Of automated machines for the placement or removal of components or contact elements on semiconductor materials or PCB/PWBs	<input type="checkbox"/>
		-- Of automated machines for the placement or removal of components or contact elements on semiconductor materials or PCB/PWBs	<input type="checkbox"/>
		-- Of machines for cleaning the copper surfaces of PCB/PWBs during the manufacturing	<input type="checkbox"/>
8514		Industrial or laboratory electric (including induction or dielectric) furnaces and ovens; other industrial or laboratory induction or dielectric heating equipment:	
ex	851420	- Induction or dielectric furnaces and ovens:	
		-- [For the manufacture of semiconductor devices on semiconductor wafers] and of PCB/PWBs	<input type="checkbox"/> Part in brackets already covered in the ITA; Heating equipment and ovens
ex	851430	-Other furnaces and ovens:	
		-- [For the manufacture of semiconductor devices on semiconductor wafers] and of PCB/PWBs	<input type="checkbox"/> Part in brackets already covered in the ITA; Heating equipment and ovens
ex	851430	Apparatus for curing solder or adhesives during printed circuit board or printed wiring board processing	<input type="checkbox"/> PCB/PCA assembly equipment
ex	851490	- Parts:	
		-- [Of furnaces and ovens for the manufacture of semiconductor devices on semiconductor wafers] and of PCB/PWBs	<input type="checkbox"/> Part in brackets already covered in the ITA
8515		Electric (including electrically heated gas), laser or other light or photon beam, ultrasonic, electron beam, magnetic pulse or plasma arc soldering, brazing or welding machines and apparatus, whether or not capable of cutting; electric machines....:	
		- Brazing or soldering machines and apparatus:	
ex	851519	- -Other:	<input type="checkbox"/> Reflow soldering equipment, hot air solder leveling equipment, wave soldering equipment
		- - - Machines for soldering components on PCB/PWBs	<input type="checkbox"/>
ex	851519	Hot Air Solder Leveling Equipment: Coater used to apply molten solder during PCB/PWB processing	<input type="checkbox"/>
ex	851519	Reflow Soldering Equipment: Equipment for soldering PCB/PWB's assembly	<input type="checkbox"/>
ex	851519	Wave soldering equipment: Brings molten solder into contact with assembled PCB/PWB's	<input type="checkbox"/>
ex	851519	Wet processing apparatus used to clean, strip and plate the edge connectors during printed circuit board or printed wiring board processing	<input type="checkbox"/> PCB/PCA assembly equipment
ex	851519	Hot air solder levelling apparatus used to apply molten solder during printed circuit board or printed wiring board processing	<input type="checkbox"/> PCB/PCA assembly equipment
ex	851519	Reflow soldering apparatus used during printed circuit board or printed wiring board processing	<input type="checkbox"/> PCB/PCA assembly equipment
ex	851519	Apparatus used to bring molten solder into contact with assembled printed circuit boards or printed wiring boards	<input type="checkbox"/> PCB/PCA assembly equipment
ex	851519	Apparatus for application, coating or laminating of printed circuit boards or printed wiring boards during processing	<input type="checkbox"/> PCB/PCA assembly equipment

ex	851590	- Parts:			
		- - Of machines for soldering components on PCB/PWBs			
	8537	Boards, panels (including numerical control panels), consoles, desks, cabinets and other bases, equipment with two or more apparatus of heading No. 85.35 or 85.36, for electric control or the distribution of electricity, including those incorporating instruments or apparatus of Chapter 90, other than switching apparatus of heading No. 85.17			
ex	853710	- For a voltage not exceeding 1000 V			
	8538	Parts suitable for use solely or principally with the apparatus of heading No. 85.35, 85.36 or 85.37:			
ex	853810	- Boards, panels, consoles, desks, cabinets and other bases for the goods of heading No. 85.37, not equipped with their apparatus			
	8543	Electrical machines and apparatus, having individual functions, not specified or included elsewhere in this chapter:			
ex	854330	- Machines and apparatus for electroplating, electrolysis or electrophoresis:			
		- - [Apparatus for wet etching, developing, stripping or cleaning semiconductor wafers], PCB/PWBs and their connectors			
ex	854330	Vertical Wet Processing Equipment: Processes PCB/PWB's in a vertical position through chemical or electrochemical operations.			
		- Other machines and apparatus:			
ex	854389	- - Other:			
		- - - [Apparatus for physical deposition on semiconductor wafers] or LCD substrates			
ex	854389	Static electricity eliminators (field service kits) used for the prevention of static damage to printed circuit boards or printed circuit assemblies during manufacture and storage			
ex	854390	- Parts:			
		- - [Of apparatus for physical deposition on semiconductor wafers] or LCD substrates			
		- - [Of apparatus for wet etching, developing, stripping or cleaning semiconductor wafers], PCB/PWBs and their connectors			
ex	854390	Parts for static electricity eliminators (heel straps, ground cords) used for the prevention of static damage to printed circuit boards or printed circuit assemblies during manufacture and storage			
ex	854451	Cable and connectors over 80V (ground cord) used for the prevention of static damage to printed circuit boards or printed circuit assemblies during manufacture and storage			
	9006	Photographic (other than cinematographic) cameras; photographic flashlight apparatus and flashbulbs other than discharge lamps of heading No 8539:			
ex	900610	- Cameras of a kind used for preparing printing plates or cylinders:			
		- -Laser photo plotters			

ex	900610	-Parts and accessories: - - Other:		
		- -Of laser photo plotters		<input type="checkbox"/>
ex	900922 9010	Exposure Equipment: Projects light energy through a mask to form an image on a PCB/PWB Apparatus and equipment for photographic (including cinematographic) laboratories (including apparatus for the projection or drawing of circuit patterns on sensitized semiconductor materials), not specified or included elsewhere in this chapter;...		<input type="checkbox"/>
ex	901050	- Other apparatus and equipment for photographic (including cinematographic) laboratories; negatoscopes: - - Apparatus for the projection or drawing of circuit patterns on sensitized substrates for the manufacture of PCB/PWBs	<input type="checkbox"/> Exposure equipment, direct imaging equipment	
ex	901050	Developing Machine for PWB fabrication		<input type="checkbox"/>
ex	901050	Photo Plotter: Generates a drawing or photo tool used to manufacture a PCB/PWB		<input type="checkbox"/>
ex	901050	Exposure Equipment: Projects light energy through a mask to form an image on a PCB/PWB.		<input type="checkbox"/>
ex	901050	Direct Imaging Equipment: Forms an image without a mask during PCB/PWB processing.		<input type="checkbox"/>
ex	901050	Exposure equipment used to form an image on a printed circuit board or printed wiring board	<input type="checkbox"/> PCB/PCA fabrication equipment	
ex	901050	Direct image apparatus which forms an image without a mark during printed circuit board or printed wiring board processing	<input type="checkbox"/> PCB/PCA fabrication equipment	
ex	901050	Photo plotter for drawing or photo-tool for use in the production of printed circuit boards or printed circuit assemblies		<input type="checkbox"/>
ex	901090	- Parts and accessories: - - Of apparatus for the projection or drawing of circuit patterns on sensitized substrates for the manufacture of PCB/PWBs		<input type="checkbox"/>
ex	901710 9022	Photo plotter for drawing or photo-tool for use in the production of printed circuit boards or printed circuit assemblies Apparatus based on the use of X-rays or of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus, X-ray tubes and other X-ray generators, ...: - Apparatus based on the use of X-rays, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus: - - For other uses: - - - For the physical inspection of concealed solder joints on PCB/PWBs	<input type="checkbox"/> PCB/PCA fabrication equipment	
ex	902219		<input type="checkbox"/> Automatic optical inspection equipment	
ex	902219	X-ray apparatus for physical inspection of concealed solder joints in printed circuit boards or printed wiring boards	<input type="checkbox"/> Apparatus for testing PCBs/PCAs	
	9030	Oscilloscopes, spectrum analyzers and other instruments and apparatus for measuring or checking electrical quantities, excluding meters of heading No 9028; instruments and apparatus for measuring or detecting alpha, beta, gamma, X-ray, cosmic or other...		
ex	903039	Wristaps used for the prevention of static damage to printed circuit boards or printed circuit assemblies during manufacture and storage	<input type="checkbox"/> Apparatus for the prevention of static damage to assemblies during manufacture and storage	
ex	903039	Electrical bare board test apparatus used to determine continuity or non-continuity of a finished printed circuit board or printed wiring board, known as a Fixture	<input type="checkbox"/> Apparatus for testing PCBs/PCAs	