

Chapter 84

Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof

Notes.

- 1.- This Chapter does not cover :
 - (a) Millstones, grindstones or other articles of Chapter 68;
 - (b) Machinery or appliances (for example, pumps) of ceramic material and ceramic parts of machinery or appliances of any material (Chapter 69);
 - (c) Laboratory glassware (heading 70.17); machinery, appliances or other articles for technical uses or parts thereof, of glass (heading 70.19 or 70.20);
 - (d) Articles of heading 73.21 or 73.22 or similar articles of other base metals (Chapters 74 to 76 or 78 to 81);
 - (e) Vacuum cleaners of heading 85.08;
 - (f) Electro-mechanical domestic appliances of heading 85.09; digital cameras of heading 85.25; or
 - (g) Hand-operated mechanical floor sweepers, not motorised (heading 96.03).
- 2.- Subject to the operation of Note 3 to Section XVI and subject to Note 9 to this Chapter, a machine or appliance which answers to a description in one or more of the headings 84.01 to 84.24, or heading 84.86 and at the same time to a description in one or other of the headings 84.25 to 84.80 is to be classified under the appropriate heading of the former group or under heading 84.86, as the case may be, and not the latter group.

Heading 84.19 does not, however, cover :

 - (a) Germination plant, incubators or brooders (heading 84.36);
 - (b) Grain dampening machines (heading 84.37);
 - (c) Diffusing apparatus for sugar juice extraction (heading 84.38);
 - (d) Machinery for the heat-treatment of textile yarns, fabrics or made up textile articles (heading 84.51);
or
 - (e) Machinery or plant, designed for mechanical operation, in which a change of temperature, even if necessary, is subsidiary.

Heading 84.22 does not cover :

 - (a) Sewing machines for closing bags or similar containers (heading 84.52); or
 - (b) Office machinery of heading 84.72.

Heading 84.24 does not cover :

Ink-jet printing machines (heading 84.43).
- 3.- A machine-tool for working any material which answers to a description in heading 84.56 and at the same time to a description in heading 84.57, 84.58, 84.59, 84.60, 84.61, 84.64 or 84.65 is to be classified in heading 84.56.
- 4.- Heading 84.57 applies only to machine-tools for working metal, other than lathes (including turning centres), which can carry out different types of machining operations either :
 - (a) by automatic tool change from a magazine or the like in conformity with a machining programme (machining centres),

- (b) by the automatic use, simultaneously or sequentially, of different unit heads working on a fixed position workpiece (unit construction machines, single station), or
 - (c) by the automatic transfer of the workpiece to different unit heads (multi-station transfer machines).
- 5.- (A) For the purposes of heading 84.71, the expression “automatic data processing machines” means machines capable of :
- (i) Storing the processing program or programs and at least the data immediately necessary for the execution of the program;
 - (ii) Being freely programmed in accordance with the requirements of the user;
 - (iii) Performing arithmetical computations specified by the user; and
 - (iv) Executing, without human intervention, a processing program which requires them to modify their execution, by logical decision during the processing run.
- (B) Automatic data processing machines may be in the form of systems consisting of a variable number of separate units.
- (C) Subject to paragraphs (D) and (E) below, a unit is to be regarded as being part of an automatic data processing system if it meets all of the following conditions :
- (i) It is of a kind solely or principally used in an automatic data processing system;
 - (ii) It is connectable to the central processing unit either directly or through one or more other units; and
 - (iii) It is able to accept or deliver data in a form (codes or signals) which can be used by the system.

Separately presented units of an automatic data processing machine are to be classified in heading 84.71.

However, keyboards, X-Y co-ordinate input devices and disk storage units which satisfy the conditions of paragraphs (C) (ii) and (C) (iii) above, are in all cases to be classified as units of heading 84.71.

- (D) Heading 84.71 does not cover the following when presented separately, even if they meet all of the conditions set forth in Note 5 (C) above :
- (i) Printers, copying machines, facsimile machines, whether or not combined;
 - (ii) Apparatus for the transmission or reception of voice, images or other data, including apparatus for communication in a wired or wireless network (such as a local or wide area network);
 - (iii) Loudspeakers and microphones;
 - (iv) Television cameras, digital cameras and video camera recorders;
 - (v) Monitors and projectors, not incorporating television reception apparatus.
- (E) Machines incorporating or working in conjunction with an automatic data processing machine and performing a specific function other than data processing are to be classified in the headings appropriate to their respective functions or, failing that, in residual headings.
- 6.- Heading 84.82 applies, *inter alia*, to polished steel balls, the maximum and minimum diameters of which do not differ from the nominal diameter by more than 1 % or by more than 0.05 mm, whichever is less.

Other steel balls are to be classified in heading 73.26.

- 7.- A machine which is used for more than one purpose is, for the purposes of classification, to be treated as if its principal purpose were its sole purpose.

Subject to Note 2 to this Chapter and Note 3 to Section XVI, a machine the principal purpose of which is not described in any heading or for which no one purpose is the principal purpose is, unless the context otherwise requires, to be classified in heading 84.79. Heading 84.79 also covers machines for making rope or cable (for example, stranding, twisting or cabling machines) from metal wire, textile yarn or any other material or from a combination of such materials.

- 8.- For the purposes of heading 84.70, the term “pocket-size” applies only to machines the dimensions of which do not exceed 170 mm x 100 mm x 45 mm.
- 9.- (A) Notes 8 (a) and 8 (b) to Chapter 85 also apply with respect to the expressions “semiconductor devices” and “electronic integrated circuits”, respectively, as used in this Note and in heading 84.86. However, for the purposes of this Note and of heading 84.86, the expression “semiconductor devices” also covers photosensitive semiconductor devices and light emitting diodes.

- (B) For the purposes of this Note and of heading 84.86, the expression “manufacture of flat panel displays” covers the fabrication of substrates into a flat panel. It does not cover the manufacture of glass or the assembly of printed circuit boards or other electronic components onto the flat panel. The expression “flat panel display” does not cover cathode-ray tube technology.
- (C) Heading 84.86 also includes machines and apparatus solely or principally of a kind used for :
- (i) the manufacture or repair of masks and reticles;
 - (ii) assembling semiconductor devices or electronic integrated circuits; and
 - (iii) lifting, handling, loading or unloading of boules, wafers, semiconductor devices, electronic integrated circuits and flat panel displays.
- (D) Subject to Note 1 to Section XVI and Note 1 to Chapter 84, machines and apparatus answering to the description in heading 84.86 are to be classified in that heading and in no other heading of the Nomenclature.

Subheading Notes.

- 1.- For the purposes of subheading 8471.49, the term “systems” means automatic data processing machines whose units satisfy the conditions laid down in Note 5 (C) to Chapter 84 and which comprise at least a central processing unit, one input unit (for example, a keyboard or a scanner), and one output unit (for example, a visual display unit or a printer).
- 2.- Subheading 8482.40 applies only to bearings with cylindrical rollers of a uniform diameter not exceeding 5 mm and having a length which is at least three times the diameter. The ends of the rollers may be rounded.

Heading	H.S. Code	
84.01		Nuclear reactors; fuel elements (cartridges), non-irradiated, for nuclear reactors; machinery and apparatus for isotopic separation.
	8401.10	- Nuclear reactors
	8401.20	- Machinery and apparatus for isotopic separation, and parts thereof
	8401.30	- Fuel elements (cartridges), non-irradiated
	8401.40	- Parts of nuclear reactors
84.02		Steam or other vapour generating boilers (other than central heating hot water boilers capable also of producing low pressure steam); super-heated water boilers.
		- Steam or other vapour generating boilers :
	8402.11	-- Watertube boilers with a steam production exceeding 45 t per hour
	8402.12	-- Watertube boilers with a steam production not exceeding 45 t per hour
	8402.19	-- Other vapour generating boilers, including hybrid boilers
	8402.20	- Super-heated water boilers
	8402.90	- Parts
84.03		Central heating boilers other than those of heading 84.02.
	8403.10	- Boilers
	8403.90	- Parts

84.04	Auxiliary plant for use with boilers of heading 84.02 or 84.03 (for example, economisers, super-heaters, soot removers, gas recoverers); condensers for steam or other vapour power units.
8404.10	- Auxiliary plant for use with boilers of heading 84.02 or 84.03
8404.20	- Condensers for steam or other vapour power units
8404.90	- Parts
84.05	Producer gas or water gas generators, with or without their purifiers; acetylene gas generators and similar water process gas generators, with or without their purifiers.
8405.10	- Producer gas or water gas generators, with or without their purifiers; acetylene gas generators and similar water process gas generators, with or without their purifiers
8405.90	- Parts
84.06	Steam turbines and other vapour turbines.
8406.10	- Turbines for marine propulsion
	- Other turbines :
8406.81	-- Of an output exceeding 40 MW
8406.82	-- Of an output not exceeding 40 MW
8406.90	- Parts
84.07	Spark-ignition reciprocating or rotary internal combustion piston engines.
8407.10	- Aircraft engines
	- Marine propulsion engines :
8407.21	-- Outboard motors
8407.29	-- Other
	- Reciprocating piston engines of a kind used for the propulsion of vehicles of Chapter 87 :
8407.31	-- Of a cylinder capacity not exceeding 50 cc
8407.32	-- Of a cylinder capacity exceeding 50 cc but not exceeding 250 cc
8407.33	-- Of a cylinder capacity exceeding 250 cc but not exceeding 1,000 cc
8407.34	-- Of a cylinder capacity exceeding 1,000 cc
8407.90	- Other engines
84.08	Compression-ignition internal combustion piston engines (diesel or semi-diesel engines).
8408.10	- Marine propulsion engines
8408.20	- Engines of a kind used for the propulsion of vehicles of Chapter 87
8408.90	- Other engines
84.09	Parts suitable for use solely or principally with the engines of heading 84.07 or 84.08.
8409.10	- For aircraft engines
	- Other :

	8409.91	-- Suitable for use solely or principally with spark-ignition internal combustion piston engines
	8409.99	-- Other
84.10		Hydraulic turbines, water wheels, and regulators therefor.
		- Hydraulic turbines and water wheels :
	8410.11	-- Of a power not exceeding 1,000 kW
	8410.12	-- Of a power exceeding 1,000 kW but not exceeding 10,000 kW
	8410.13	-- Of a power exceeding 10,000 kW
	8410.90	- Parts, including regulators
84.11		Turbo-jets, turbo-propellers and other gas turbines.
		- Turbo-jets :
	8411.11	-- Of a thrust not exceeding 25 kN
	8411.12	-- Of a thrust exceeding 25 kN
		- Turbo-propellers :
	8411.21	-- Of a power not exceeding 1,100 kW
	8411.22	-- Of a power exceeding 1,100 kW
		- Other gas turbines :
	8411.81	-- Of a power not exceeding 5,000 kW
	8411.82	-- Of a power exceeding 5,000 kW
		- Parts :
	8411.91	-- Of turbo-jets or turbo-propellers
	8411.99	-- Other
84.12		Other engines and motors.
	8412.10	- Reaction engines other than turbo-jets
		- Hydraulic power engines and motors :
	8412.21	-- Linear acting (cylinders)
	8412.29	-- Other
		- Pneumatic power engines and motors :
	8412.31	-- Linear acting (cylinders)
	8412.39	-- Other
	8412.80	- Other
	8412.90	- Parts
84.13		Pumps for liquids, whether or not fitted with a measuring device; liquid elevators.
		- Pumps fitted or designed to be fitted with a measuring device :
	8413.11	-- Pumps for dispensing fuel or lubricants, of the type used in filling-stations or in garages
	8413.19	-- Other

	8413.20	- Hand pumps, other than those of subheading 8413.11 or 8413.19
	8413.30	- Fuel, lubricating or cooling medium pumps for internal combustion piston engines
	8413.40	- Concrete pumps
	8413.50	- Other reciprocating positive displacement pumps
	8413.60	- Other rotary positive displacement pumps
	8413.70	- Other centrifugal pumps
		- Other pumps; liquid elevators :
	8413.81	-- Pumps
	8413.82	-- Liquid elevators
		- Parts :
	8413.91	-- Of pumps
	8413.92	-- Of liquid elevators
84.14		Air or vacuum pumps, air or other gas compressors and fans; ventilating or recycling hoods incorporating a fan, whether or not fitted with filters.
	8414.10	- Vacuum pumps
	8414.20	- Hand- or foot-operated air pumps
	8414.30	- Compressors of a kind used in refrigerating equipment
	8414.40	- Air compressors mounted on a wheeled chassis for towing
		- Fans :
	8414.51	-- Table, floor, wall, window, ceiling or roof fans, with a self-contained electric motor of an output not exceeding 125 W
	8414.59	-- Other
	8414.60	- Hoods having a maximum horizontal side not exceeding 120 cm
	8414.80	- Other
	8414.90	- Parts
84.15		Air conditioning machines, comprising a motor-driven fan and elements for changing the temperature and humidity, including those machines in which the humidity cannot be separately regulated.
	8415.10	- Window or wall types, self-contained or "split-system"
	8415.20	- Of a kind used for persons, in motor vehicles
		- Other :
	8415.81	-- Incorporating a refrigerating unit and a valve for reversal of the cooling/heat cycle (reversible heat pumps)
	8415.82	-- Other, incorporating a refrigerating unit
	8415.83	-- Not incorporating a refrigerating unit
	8415.90	- Parts

84.16	Furnace burners for liquid fuel, for pulverised solid fuel or for gas; mechanical stokers, including their mechanical grates, mechanical ash dischargers and similar appliances.
8416.10	- Furnace burners for liquid fuel
8416.20	- Other furnace burners, including combination burners
8416.30	- Mechanical stokers, including their mechanical grates, mechanical ash dischargers and similar appliances
8416.90	- Parts
84.17	Industrial or laboratory furnaces and ovens, including incinerators, non-electric.
8417.10	- Furnaces and ovens for the roasting, melting or other heat-treatment of ores, pyrites or of metals
8417.20	- Bakery ovens, including biscuit ovens
8417.80	- Other
8417.90	- Parts
84.18	Refrigerators, freezers and other refrigerating or freezing equipment, electric or other; heat pumps other than air conditioning machines of heading 84.15.
8418.10	- Combined refrigerator-freezers, fitted with separate external doors - Refrigerators, household type :
8418.21	-- Compression-type
8418.29	-- Other
8418.30	- Freezers of the chest type, not exceeding 800 l capacity
8418.40	- Freezers of the upright type, not exceeding 900 l capacity
8418.50	- Other furniture (chests, cabinets, display counters, show-cases and the like) for storage and display, incorporating refrigerating or freezing equipment - Other refrigerating or freezing equipment; heat pumps :
8418.61	-- Heat pumps other than air conditioning machines of heading 84.15
8418.69	-- Other - Parts :
8418.91	-- Furniture designed to receive refrigerating or freezing equipment
8418.99	-- Other

84.19	<p>Machinery, plant or laboratory equipment, whether or not electrically heated (excluding furnaces, ovens and other equipment of heading 85.14), for the treatment of materials by a process involving a change of temperature such as heating, cooking, roasting, distilling, rectifying, sterilising, pasteurising, steaming, drying, evaporating, vaporising, condensing or cooling, other than machinery or plant of a kind used for domestic purposes; instantaneous or storage water heaters, non-electric.</p> <ul style="list-style-type: none"> - Instantaneous or storage water heaters, non-electric : <ul style="list-style-type: none"> 8419.11 -- Instantaneous gas water heaters 8419.19 -- Other 8419.20 - Medical, surgical or laboratory sterilisers - Dryers : <ul style="list-style-type: none"> 8419.31 -- For agricultural products 8419.32 -- For wood, paper pulp, paper or paperboard 8419.39 -- Other 8419.40 - Distilling or rectifying plant 8419.50 - Heat exchange units 8419.60 - Machinery for liquefying air or other gases - Other machinery, plant and equipment : <ul style="list-style-type: none"> 8419.81 -- For making hot drinks or for cooking or heating food 8419.89 -- Other 8419.90 - Parts
84.20	<p>Calendering or other rolling machines, other than for metals or glass, and cylinders therefor.</p> <ul style="list-style-type: none"> 8420.10 - Calendering or other rolling machines - Parts : <ul style="list-style-type: none"> 8420.91 -- Cylinders 8420.99 -- Other
84.21	<p>Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids or gases.</p> <ul style="list-style-type: none"> - Centrifuges, including centrifugal dryers : <ul style="list-style-type: none"> 8421.11 -- Cream separators 8421.12 -- Clothes-dryers 8421.19 -- Other - Filtering or purifying machinery and apparatus for liquids : <ul style="list-style-type: none"> 8421.21 -- For filtering or purifying water 8421.22 -- For filtering or purifying beverages other than water 8421.23 -- Oil or petrol-filters for internal combustion engines 8421.29 -- Other

		- Filtering or purifying machinery and apparatus for gases :
	8421.31	-- Intake air filters for internal combustion engines
	8421.39	-- Other
		- Parts :
	8421.91	-- Of centrifuges, including centrifugal dryers
	8421.99	-- Other
84.22		Dish washing machines; machinery for cleaning or drying bottles or other containers; machinery for filling, closing, sealing or labelling bottles, cans, boxes, bags or other containers; machinery for capsuling bottles, jars, tubes and similar containers; other packing or wrapping machinery (including heat-shrink wrapping machinery); machinery for aerating beverages.
		- Dish washing machines :
	8422.11	-- Of the household type
	8422.19	-- Other
	8422.20	- Machinery for cleaning or drying bottles or other containers
	8422.30	- Machinery for filling, closing, sealing, or labelling bottles, cans, boxes, bags or other containers; machinery for capsuling bottles, jars, tubes and similar containers; machinery for aerating beverages
	8422.40	- Other packing or wrapping machinery (including heat-shrink wrapping machinery)
	8422.90	- Parts
84.23		Weighing machinery (excluding balances of a sensitivity of 5 cg or better), including weight operated counting or checking machines; weighing machine weights of all kinds.
	8423.10	- Personal weighing machines, including baby scales; household scales
	8423.20	- Scales for continuous weighing of goods on conveyors
	8423.30	- Constant weight scales and scales for discharging a predetermined weight of material into a bag or container, including hopper scales
		- Other weighing machinery :
	8423.81	-- Having a maximum weighing capacity not exceeding 30 kg
	8423.82	-- Having a maximum weighing capacity exceeding 30 kg but not exceeding 5,000 kg
	8423.89	-- Other
	8423.90	- Weighing machine weights of all kinds; parts of weighing machinery
84.24		Mechanical appliances (whether or not hand-operated) for projecting, dispersing or spraying liquids or powders; fire extinguishers, whether or not charged; spray guns and similar appliances; steam or sand blasting machines and similar jet projecting machines.
	8424.10	- Fire extinguishers, whether or not charged
	8424.20	- Spray guns and similar appliances

	8424.30	- Steam or sand blasting machines and similar jet projecting machines
		- Other appliances :
	8424.81	-- Agricultural or horticultural
	8424.89	-- Other
	8424.90	- Parts
84.25		Pulley tackle and hoists other than skip hoists; winches and capstans; jacks.
		- Pulley tackle and hoists other than skip hoists or hoists of a kind used for raising vehicles :
	8425.11	-- Powered by electric motor
	8425.19	-- Other
		- Other winches; capstans :
	8425.31	-- Powered by electric motor
	8425.39	-- Other
		- Jacks; hoists of a kind used for raising vehicles :
	8425.41	-- Built-in jacking systems of a type used in garages
	8425.42	-- Other jacks and hoists, hydraulic
	8425.49	-- Other
84.26		Ships' derricks; cranes, including cable cranes; mobile lifting frames, straddle carriers and works trucks fitted with a crane.
		- Overhead travelling cranes, transporter cranes, gantry cranes, bridge cranes, mobile lifting frames and straddle carriers :
	8426.11	-- Overhead travelling cranes on fixed support
	8426.12	-- Mobile lifting frames on tyres and straddle carriers
	8426.19	-- Other
	8426.20	- Tower cranes
	8426.30	- Portal or pedestal jib cranes
		- Other machinery, self-propelled :
	8426.41	-- On tyres
	8426.49	-- Other
		- Other machinery :
	8426.91	-- Designed for mounting on road vehicles
	8426.99	-- Other
84.27		Fork-lift trucks; other works trucks fitted with lifting or handling equipment.
	8427.10	- Self-propelled trucks powered by an electric motor
	8427.20	- Other self-propelled trucks
	8427.90	- Other trucks
84.28		Other lifting, handling, loading or unloading machinery (for example, lifts, escalators, conveyors, teleferics).
	8428.10	- Lifts and skip hoists
	8428.20	- Pneumatic elevators and conveyors

		- Other continuous-action elevators and conveyors, for goods or materials :
	8428.31	-- Specially designed for underground use
	8428.32	-- Other, bucket type
	8428.33	-- Other, belt type
	8428.39	-- Other
	8428.40	- Escalators and moving walkways
	8428.60	- Teleferics, chair-lifts, ski-draglines; traction mechanisms for funiculars
	8428.90	- Other machinery
84.29		Self-propelled bulldozers, angledozers, graders, levellers, scrapers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers.
		- Bulldozers and angledozers :
	8429.11	-- Track laying
	8429.19	-- Other
	8429.20	- Graders and levellers
	8429.30	- Scrapers
	8429.40	- Tamping machines and road rollers
		- Mechanical shovels, excavators and shovel loaders :
	8429.51	-- Front-end shovel loaders
	8429.52	-- Machinery with a 360° revolving superstructure
	8429.59	-- Other
84.30		Other moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or boring machinery, for earth, minerals or ores; pile-drivers and pile-extractors; snow-ploughs and snow-blowers.
	8430.10	- Pile-drivers and pile-extractors
	8430.20	- Snow-ploughs and snow-blowers
		- Coal or rock cutters and tunnelling machinery :
	8430.31	-- Self-propelled
	8430.39	-- Other
		- Other boring or sinking machinery :
	8430.41	-- Self-propelled
	8430.49	-- Other
	8430.50	- Other machinery, self-propelled
		- Other machinery, not self-propelled :
	8430.61	-- Tamping or compacting machinery
	8430.69	-- Other
84.31		Parts suitable for use solely or principally with the machinery of headings 84.25 to 84.30.

	8431.10	- Of machinery of heading 84.25
	8431.20	- Of machinery of heading 84.27
		- Of machinery of heading 84.28 :
	8431.31	-- Of lifts, skip hoists or escalators
	8431.39	-- Other
		- Of machinery of heading 84.26, 84.29 or 84.30 :
	8431.41	-- Buckets, shovels, grabs and grips
	8431.42	-- Bulldozer or angledozer blades
	8431.43	-- Parts for boring or sinking machinery of subheading 8430.41 or 8430.49
	8431.49	-- Other
84.32		Agricultural, horticultural or forestry machinery for soil preparation or cultivation; lawn or sports-ground rollers.
	8432.10	- Ploughs
		- Harrows, scarifiers, cultivators, weeders and hoes :
	8432.21	-- Disc harrows
	8432.29	-- Other
	8432.30	- Seeders, planters and transplanters
	8432.40	- Manure spreaders and fertiliser distributors
	8432.80	- Other machinery
	8432.90	- Parts
84.33		Harvesting or threshing machinery, including straw or fodder balers; grass or hay mowers; machines for cleaning, sorting or grading eggs, fruit or other agricultural produce, other than machinery of heading 84.37.
		- Mowers for lawns, parks or sports-grounds :
	8433.11	-- Powered, with the cutting device rotating in a horizontal plane
	8433.19	-- Other
	8433.20	- Other mowers, including cutter bars for tractor mounting
	8433.30	- Other haymaking machinery
	8433.40	- Straw or fodder balers, including pick-up balers
		- Other harvesting machinery; threshing machinery :
	8433.51	-- Combine harvester-threshers
	8433.52	-- Other threshing machinery
	8433.53	-- Root or tuber harvesting machines
	8433.59	-- Other
	8433.60	- Machines for cleaning, sorting or grading eggs, fruit or other agricultural produce
	8433.90	- Parts

84.34		Milking machines and dairy machinery.
	8434.10	- Milking machines
	8434.20	- Dairy machinery
	8434.90	- Parts
84.35		Presses, crushers and similar machinery used in the manufacture of wine, cider, fruit juices or similar beverages.
	8435.10	- Machinery
	8435.90	- Parts
84.36		Other agricultural, horticultural, forestry, poultry-keeping or bee-keeping machinery, including germination plant fitted with mechanical or thermal equipment; poultry incubators and brooders.
	8436.10	- Machinery for preparing animal feeding stuffs - Poultry-keeping machinery; poultry incubators and brooders :
	8436.21	-- Poultry incubators and brooders
	8436.29	-- Other
	8436.80	- Other machinery - Parts :
	8436.91	-- Of poultry-keeping machinery or poultry incubators and brooders
	8436.99	-- Other
84.37		Machines for cleaning, sorting or grading seed, grain or dried leguminous vegetables; machinery used in the milling industry or for the working of cereals or dried leguminous vegetables, other than farm-type machinery.
	8437.10	- Machines for cleaning, sorting or grading seed, grain or dried leguminous vegetables
	8437.80	- Other machinery
	8437.90	- Parts
84.38		Machinery, not specified or included elsewhere in this Chapter, for the industrial preparation or manufacture of food or drink, other than machinery for the extraction or preparation of animal or fixed vegetable fats or oils.
	8438.10	- Bakery machinery and machinery for the manufacture of macaroni, spaghetti or similar products
	8438.20	- Machinery for the manufacture of confectionery, cocoa or chocolate
	8438.30	- Machinery for sugar manufacture
	8438.40	- Brewery machinery
	8438.50	- Machinery for the preparation of meat or poultry
	8438.60	- Machinery for the preparation of fruits, nuts or vegetables
	8438.80	- Other machinery
	8438.90	- Parts

84.39		Machinery for making pulp of fibrous cellulosic material or for making or finishing paper or paperboard.
	8439.10	- Machinery for making pulp of fibrous cellulosic material
	8439.20	- Machinery for making paper or paperboard
	8439.30	- Machinery for finishing paper or paperboard
		- Parts :
	8439.91	-- Of machinery for making pulp of fibrous cellulosic material
	8439.99	-- Other
84.40		Book-binding machinery, including book-sewing machines.
	8440.10	- Machinery
	8440.90	- Parts
84.41		Other machinery for making up paper pulp, paper or paperboard, including cutting machines of all kinds.
	8441.10	- Cutting machines
	8441.20	- Machines for making bags, sacks or envelopes
	8441.30	- Machines for making cartons, boxes, cases, tubes, drums or similar containers, other than by moulding
	8441.40	- Machines for moulding articles in paper pulp, paper or paperboard
	8441.80	- Other machinery
	8441.90	- Parts
84.42		Machinery, apparatus and equipment (other than the machine-tools of headings 84.56 to 84.65) for preparing or making plates, cylinders or other printing components; plates, cylinders and other printing components; plates, cylinders and lithographic stones, prepared for printing purposes (for example, planed, grained or polished).
	8442.30	- Machinery, apparatus and equipment
	8442.40	- Parts of the foregoing machinery, apparatus or equipment
	8442.50	- Plates, cylinders and other printing components; plates, cylinders and lithographic stones, prepared for printing purposes (for example, planed, grained or polished)
84.43		Printing machinery used for printing by means of plates, cylinders and other printing components of heading 84.42; other printers, copying machines and facsimile machines, whether or not combined; parts and accessories thereof.
		- Printing machinery used for printing by means of plates, cylinders and other printing components of heading 84.42 :
	8443.11	-- Offset printing machinery, reel-fed
	8443.12	-- Offset printing machinery, sheet-fed, office type (using sheets with one side not exceeding 22 cm and the other side not exceeding 36 cm in the unfolded state)

	8443.13	-- Other offset printing machinery
	8443.14	-- Letterpress printing machinery, reel fed, excluding flexographic printing
	8443.15	-- Letterpress printing machinery, other than reel fed, excluding flexographic printing
	8443.16	-- Flexographic printing machinery
	8443.17	-- Gravure printing machinery
	8443.19	-- Other
		- Other printers, copying machines and facsimile machines, whether or not combined :
	8443.31	-- Machines which perform two or more of the functions of printing, copying or facsimile transmission, capable of connecting to an automatic data processing machine or to a network
	8443.32	-- Other, capable of connecting to an automatic data processing machine or to a network
	8443.39	-- Other
		- Parts and accessories :
	8443.91	-- Parts and accessories of printing machinery used for printing by means of plates, cylinders and other printing components of heading 84.42
	8443.99	-- Other
84.44	8444.00	Machines for extruding, drawing, texturing or cutting man-made textile materials.
84.45		Machines for preparing textile fibres; spinning, doubling or twisting machines and other machinery for producing textile yarns; textile reeling or winding (including weft-winding) machines and machines for preparing textile yarns for use on the machines of heading 84.46 or 84.47.
		- Machines for preparing textile fibres :
	8445.11	-- Carding machines
	8445.12	-- Combing machines
	8445.13	-- Drawing or roving machines
	8445.19	-- Other
	8445.20	- Textile spinning machines
	8445.30	- Textile doubling or twisting machines
	8445.40	- Textile winding (including weft-winding) or reeling machines
	8445.90	- Other
84.46		Weaving machines (looms).
	8446.10	- For weaving fabrics of a width not exceeding 30 cm
		- For weaving fabrics of a width exceeding 30 cm, shuttle type :

	8446.21	-- Power looms
	8446.29	-- Other
	8446.30	- For weaving fabrics of a width exceeding 30 cm, shuttleless type
84.47		Knitting machines, stitch-bonding machines and machines for making gimped yarn, tulle, lace, embroidery, trimmings, braid or net and machines for tufting.
		- Circular knitting machines :
	8447.11	-- With cylinder diameter not exceeding 165 mm
	8447.12	-- With cylinder diameter exceeding 165 mm
	8447.20	- Flat knitting machines; stitch-bonding machines
	8447.90	- Other
84.48		Auxiliary machinery for use with machines of heading 84.44, 84.45, 84.46 or 84.47 (for example, dobbies, Jacquards, automatic stop motions, shuttle changing mechanisms); parts and accessories suitable for use solely or principally with the machines of this heading or of heading 84.44, 84.45, 84.46 or 84.47 (for example, spindles and spindle flyers, card clothing, combs, extruding nipples, shuttles, healds and heald-frames, hosiery needles).
		- Auxiliary machinery for machines of heading 84.44, 84.45, 84.46 or 84.47 :
	8448.11	-- Dobbies and Jacquards; card reducing, copying, punching or assembling machines for use therewith
	8448.19	-- Other
	8448.20	- Parts and accessories of machines of heading 84.44 or of their auxiliary machinery
		- Parts and accessories of machines of heading 84.45 or of their auxiliary machinery :
	8448.31	-- Card clothing
	8448.32	-- Of machines for preparing textile fibres, other than card clothing
	8448.33	-- Spindles, spindle flyers, spinning rings and ring travellers
	8448.39	-- Other
		- Parts and accessories of weaving machines (looms) or of their auxiliary machinery :
	8448.42	-- Reeds for looms, healds and heald-frames
	8448.49	-- Other
		- Parts and accessories of machines of heading 84.47 or of their auxiliary machinery :
	8448.51	-- Sinkers, needles and other articles used in forming stitches
	8448.59	-- Other
84.49	8449.00	Machinery for the manufacture or finishing of felt or nonwovens in the piece or in shapes, including machinery for making felt hats; blocks for making hats.

84.50		<p>Household or laundry-type washing machines, including machines which both wash and dry.</p> <ul style="list-style-type: none"> - Machines, each of a dry linen capacity not exceeding 10 kg : <ul style="list-style-type: none"> 8450.11 -- Fully-automatic machines 8450.12 -- Other machines, with built-in centrifugal drier 8450.19 -- Other 8450.20 - Machines, each of a dry linen capacity exceeding 10 kg 8450.90 - Parts
84.51		<p>Machinery (other than machines of heading 84.50) for washing, cleaning, wringing, drying, ironing, pressing (including fusing presses), bleaching, dyeing, dressing, finishing, coating or impregnating textile yarns, fabrics or made up textile articles and machines for applying the paste to the base fabric or other support used in the manufacture of floor coverings such as linoleum; machines for reeling, unreeling, folding, cutting or pinking textile fabrics.</p> <ul style="list-style-type: none"> 8451.10 - Dry-cleaning machines - Drying machines : <ul style="list-style-type: none"> 8451.21 -- Each of a dry linen capacity not exceeding 10 kg 8451.29 -- Other 8451.30 - Ironing machines and presses (including fusing presses) 8451.40 - Washing, bleaching or dyeing machines 8451.50 - Machines for reeling, unreeling, folding, cutting or pinking textile fabrics 8451.80 - Other machinery 8451.90 - Parts
84.52		<p>Sewing machines, other than book-sewing machines of heading 84.40; furniture, bases and covers specially designed for sewing machines; sewing machine needles.</p> <ul style="list-style-type: none"> 8452.10 - Sewing machines of the household type - Other sewing machines : <ul style="list-style-type: none"> 8452.21 -- Automatic units 8452.29 -- Other 8452.30 - Sewing machine needles 8452.40 - Furniture, bases and covers for sewing machines and parts thereof 8452.90 - Other parts of sewing machines
84.53		<p>Machinery for preparing, tanning or working hides, skins or leather or for making or repairing footwear or other articles of hides, skins or leather, other than sewing machines.</p> <ul style="list-style-type: none"> 8453.10 - Machinery for preparing, tanning or working hides, skins or leather 8453.20 - Machinery for making or repairing footwear

	8453.80	- Other machinery
	8453.90	- Parts
84.54		Converters, ladles, ingot moulds and casting machines, of a kind used in metallurgy or in metal foundries.
	8454.10	- Converters
	8454.20	- Ingot moulds and ladles
	8454.30	- Casting machines
	8454.90	- Parts
84.55		Metal-rolling mills and rolls therefor.
	8455.10	- Tube mills
		- Other rolling mills :
	8455.21	-- Hot or combination hot and cold
	8455.22	-- Cold
	8455.30	- Rolls for rolling mills
	8455.90	- Other parts
84.56		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.
	8456.10	- Operated by laser or other light or photon beam processes
	8456.20	- Operated by ultrasonic processes
	8456.30	- Operated by electro-discharge processes
	8456.90	- Other
84.57		Machining centres, unit construction machines (single station) and multi-station transfer machines, for working metal.
	8457.10	- Machining centres
	8457.20	- Unit construction machines (single station)
	8457.30	- Multi-station transfer machines
84.58		Lathes (including turning centres) for removing metal.
		- Horizontal lathes :
	8458.11	-- Numerically controlled
	8458.19	-- Other
		- Other lathes :
	8458.91	-- Numerically controlled
	8458.99	-- Other
84.59		Machine-tools (including way-type unit head machines) for drilling, boring, milling, threading or tapping by removing metal, other than lathes (including turning centres) of heading 84.58.
	8459.10	- Way-type unit head machines
		- Other drilling machines :

	8459.21	-- Numerically controlled
	8459.29	-- Other
		- Other boring-milling machines :
	8459.31	-- Numerically controlled
	8459.39	-- Other
	8459.40	- Other boring machines
		- Milling machines, knee-type :
	8459.51	-- Numerically controlled
	8459.59	-- Other
		- Other milling machines :
	8459.61	-- Numerically controlled
	8459.69	-- Other
	8459.70	- Other threading or tapping machines
84.60		Machine-tools for deburring, sharpening, grinding, honing, lapping, polishing or otherwise finishing metal or cermets by means of grinding stones, abrasives or polishing products, other than gear cutting, gear grinding or gear finishing machines of heading 84.61.
		- Flat-surface grinding machines, in which the positioning in any one axis can be set up to an accuracy of at least 0.01 mm :
	8460.11	-- Numerically controlled
	8460.19	-- Other
		- Other grinding machines, in which the positioning in any one axis can be set up to an accuracy of at least 0.01 mm :
	8460.21	-- Numerically controlled
	8460.29	-- Other
		- Sharpening (tool or cutter grinding) machines :
	8460.31	-- Numerically controlled
	8460.39	-- Other
	8460.40	- Honing or lapping machines
	8460.90	- Other
84.61		Machine-tools for planing, shaping, slotting, broaching, gear cutting, gear grinding or gear finishing, sawing, cutting-off and other machine-tools working by removing metal or cermets, not elsewhere specified or included.
	8461.20	- Shaping or slotting machines
	8461.30	- Broaching machines
	8461.40	- Gear cutting, gear grinding or gear finishing machines
	8461.50	- Sawing or cutting-off machines
	8461.90	- Other

84.62	<p>Machine-tools (including presses) for working metal by forging, hammering or die-stamping; machine-tools (including presses) for working metal by bending, folding, straightening, flattening, shearing, punching or notching; presses for working metal or metal carbides, not specified above.</p> <p>8462.10 - Forging or die-stamping machines (including presses) and hammers</p> <p>- Bending, folding, straightening or flattening machines (including presses) :</p> <p>8462.21 -- Numerically controlled</p> <p>8462.29 -- Other</p> <p>- Shearing machines (including presses), other than combined punching and shearing machines :</p> <p>8462.31 -- Numerically controlled</p> <p>8462.39 -- Other</p> <p>- Punching or notching machines (including presses), including combined punching and shearing machines :</p> <p>8462.41 -- Numerically controlled</p> <p>8462.49 -- Other</p> <p>- Other :</p> <p>8462.91 -- Hydraulic presses</p> <p>8462.99 -- Other</p>
84.63	<p>Other machine-tools for working metal or cermets, without removing material.</p> <p>8463.10 - Draw-benches for bars, tubes, profiles, wire or the like</p> <p>8463.20 - Thread rolling machines</p> <p>8463.30 - Machines for working wire</p> <p>8463.90 - Other</p>
84.64	<p>Machine-tools for working stone, ceramics, concrete, asbestos-cement or like mineral materials or for cold working glass.</p> <p>8464.10 - Sawing machines</p> <p>8464.20 - Grinding or polishing machines</p> <p>8464.90 - Other</p>
84.65	<p>Machine-tools (including machines for nailing, stapling, glueing or otherwise assembling) for working wood, cork, bone, hard rubber, hard plastics or similar hard materials.</p> <p>8465.10 - Machines which can carry out different types of machining operations without tool change between such operations</p> <p>- Other :</p> <p>8465.91 -- Sawing machines</p> <p>8465.92 -- Planing, milling or moulding (by cutting) machines</p> <p>8465.93 -- Grinding, sanding or polishing machines</p> <p>8465.94 -- Bending or assembling machines</p>

	8465.95	-- Drilling or morticing machines
	8465.96	-- Splitting, slicing or paring machines
	8465.99	-- Other
84.66		Parts and accessories suitable for use solely or principally with the machines of headings 84.56 to 84.65, including work or tool holders, self-opening dieheads, dividing heads and other special attachments for machine-tools; tool holders for any type of tool for working in the hand.
	8466.10	- Tool holders and self-opening dieheads
	8466.20	- Work holders
	8466.30	- Dividing heads and other special attachments for machine-tools
		- Other :
	8466.91	-- For machines of heading 84.64
	8466.92	-- For machines of heading 84.65
	8466.93	-- For machines of headings 84.56 to 84.61
	8466.94	-- For machines of heading 84.62 or 84.63
84.67		Tools for working in the hand, pneumatic, hydraulic or with self-contained electric or non-electric motor.
		- Pneumatic :
	8467.11	-- Rotary type (including combined rotary-percussion)
	8467.19	-- Other
		- With self-contained electric motor :
	8467.21	-- Drills of all kinds
	8467.22	-- Saws
	8467.29	-- Other
		- Other tools :
	8467.81	-- Chain saws
	8467.89	-- Other
		- Parts :
	8467.91	-- Of chain saws
	8467.92	-- Of pneumatic tools
	8467.99	-- Other
84.68		Machinery and apparatus for soldering, brazing or welding, whether or not capable of cutting, other than those of heading 85.15; gas-operated surface tempering machines and appliances.
	8468.10	- Hand-held blow pipes
	8468.20	- Other gas-operated machinery and apparatus
	8468.80	- Other machinery and apparatus
	8468.90	- Parts
84.69	8469.00	Typewriters other than printers of heading 84.43; word-processing machines.

84.70		Calculating machines and pocket-size data recording, reproducing and displaying machines with calculating functions; accounting machines, postage-franking machines, ticket-issuing machines and similar machines, incorporating a calculating device; cash registers.
	8470.10	- Electronic calculators capable of operation without an external source of electric power and pocket-size data recording, reproducing and displaying machines with calculating functions - Other electronic calculating machines :
	8470.21	-- Incorporating a printing device
	8470.29	-- Other
	8470.30	- Other calculating machines
	8470.50	- Cash registers
	8470.90	- Other
84.71		Automatic data processing machines and units thereof; magnetic or optical readers, machines for transcribing data onto data media in coded form and machines for processing such data, not elsewhere specified or included.
	8471.30	- Portable automatic data processing machines, weighing not more than 10 kg, consisting of a least a central processing unit, a keyboard and a display - Other automatic data processing machines :
	8471.41	-- Comprising in the same housing at least a central processing unit and an input and output unit, whether or not combined
	8471.49	-- Other, presented in the form of systems
	8471.50	- Processing units other than those of sub-heading 8471.41 or 8471.49, whether or not containing in the same housing one or two of the following types of unit : storage units, input units, output units
	8471.60	- Input or output units, whether or not containing storage units in the same housing
	8471.70	- Storage units
	8471.80	- Other units of automatic data processing machines
	8471.90	- Other
84.72		Other office machines (for example, hectograph or stencil duplicating machines, addressing machines, automatic banknote dispensers, coin-sorting machines, coin-counting or wrapping machines, pencil-sharpening machines, perforating or stapling machines).
	8472.10	- Duplicating machines
	8472.30	- Machines for sorting or folding mail or for inserting mail in envelopes or bands, machines for opening, closing or sealing mail and machines for affixing or cancelling postage stamps
	8472.90	- Other

84.73		Parts and accessories (other than covers, carrying cases and the like) suitable for use solely or principally with machines of headings 84.69 to 84.72.
	8473.10	- Parts and accessories of the machines of heading 84.69
		- Parts and accessories of the machines of heading 84.70 :
	8473.21	-- Of the electronic calculating machines of subheading 8470.10, 8470.21 or 8470.29
	8473.29	-- Other
	8473.30	- Parts and accessories of the machines of heading 84.71
	8473.40	- Parts and accessories of the machines of heading 84.72
	8473.50	- Parts and accessories equally suitable for use with machines of two or more of the headings 84.69 to 84.72
84.74		Machinery for sorting, screening, separating, washing, crushing, grinding, mixing or kneading earth, stone, ores or other mineral substances, in solid (including powder or paste) form; machinery for agglomerating, shaping or moulding solid mineral fuels, ceramic paste, unhardened cements, plastering materials or other mineral products in powder or paste form; machines for forming foundry moulds of sand.
	8474.10	- Sorting, screening, separating or washing machines
	8474.20	- Crushing or grinding machines
		- Mixing or kneading machines :
	8474.31	-- Concrete or mortar mixers
	8474.32	-- Machines for mixing mineral substances with bitumen
	8474.39	-- Other
	8474.80	- Other machinery
	8474.90	- Parts
84.75		Machines for assembling electric or electronic lamps, tubes or valves or flashbulbs, in glass envelopes; machines for manufacturing or hot working glass or glassware.
	8475.10	- Machines for assembling electric or electronic lamps, tubes or valves or flashbulbs, in glass envelopes
		- Machines for manufacturing or hot working glass or glassware:
	8475.21	-- Machines for making optical fibres and preforms thereof
	8475.29	-- Other
	8475.90	- Parts
84.76		Automatic goods-vending machines (for example, postage stamp, cigarette, food or beverage machines), including money-changing machines.
		- Automatic beverage-vending machines :
	8476.21	-- Incorporating heating or refrigerating devices

	8476.29	-- Other
		- Other machines :
	8476.81	-- Incorporating heating or refrigerating devices
	8476.89	-- Other
	8476.90	- Parts
84.77		Machinery for working rubber or plastics or for the manufacture of products from these materials, not specified or included elsewhere in this Chapter.
	8477.10	- Injection-moulding machines
	8477.20	- Extruders
	8477.30	- Blow moulding machines
	8477.40	- Vacuum moulding machines and other thermoforming machines
		- Other machinery for moulding or otherwise forming :
	8477.51	-- For moulding or retreading pneumatic tyres or for moulding or otherwise forming inner tubes
	8477.59	-- Other
	8477.80	- Other machinery
	8477.90	- Parts
84.78		Machinery for preparing or making up tobacco, not specified or included elsewhere in this Chapter.
	8478.10	- Machinery
	8478.90	- Parts
84.79		Machines and mechanical appliances having individual functions, not specified or included elsewhere in this Chapter.
	8479.10	- Machinery for public works, building or the like
	8479.20	- Machinery for the extraction or preparation of animal or fixed vegetable fats or oils
	8479.30	- Presses for the manufacture of particle board or fibre building board of wood or other ligneous materials and other machinery for treating wood or cork
	8479.40	- Rope or cable-making machines
	8479.50	- Industrial robots, not elsewhere specified or included
	8479.60	- Evaporative air coolers
		- Other machines and mechanical appliances :
	8479.81	-- For treating metal, including electric wire coil-winders
	8479.82	-- Mixing, kneading, crushing, grinding, screening, sifting, homogenising, emulsifying or stirring machines
	8479.89	-- Other
	8479.90	- Parts

84.80	Moulding boxes for metal foundry; mould bases; moulding patterns; moulds for metal (other than ingot moulds), metal carbides, glass, mineral materials, rubber or plastics.
8480.10	- Moulding boxes for metal foundry
8480.20	- Mould bases
8480.30	- Moulding patterns
	- Moulds for metal or metal carbides :
8480.41	-- Injection or compression types
8480.49	-- Other
8480.50	- Moulds for glass
8480.60	- Moulds for mineral materials
	- Moulds for rubber or plastics :
8480.71	-- Injection or compression types
8480.79	-- Other
84.81	Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves.
8481.10	- Pressure-reducing valves
8481.20	- Valves for oleohydraulic or pneumatic transmissions
8481.30	- Check (nonreturn) valves
8481.40	- Safety or relief valves
8481.80	- Other appliances
8481.90	- Parts
84.82	Ball or roller bearings.
8482.10	- Ball bearings
8482.20	- Tapered roller bearings, including cone and tapered roller assemblies
8482.30	- Spherical roller bearings
8482.40	- Needle roller bearings
8482.50	- Other cylindrical roller bearings
8482.80	- Other, including combined ball/roller bearings
	- Parts :
8482.91	-- Balls, needles and rollers
8482.99	-- Other
84.83	Transmission shafts (including cam shafts and crank shafts) and cranks; bearing housings and plain shaft bearings; gears and gearing; ball or roller screws; gear boxes and other speed changers, including torque converters; flywheels and pulleys, including pulley blocks; clutches and shaft couplings (including universal joints).
8483.10	- Transmission shafts (including cam shafts and crank shafts) and cranks
8483.20	- Bearing housings, incorporating ball or roller bearings

	8483.30	- Bearing housings, not incorporating ball or roller bearings; plain shaft bearings
	8483.40	- Gears and gearing, other than toothed wheels, chain sprockets and other transmission elements presented separately; ball or roller screws; gear boxes and other speed changers, including torque converters
	8483.50	- Flywheels and pulleys, including pulley blocks
	8483.60	- Clutches and shaft couplings (including universal joints)
	8483.90	- Toothed wheels, chain sprockets and other transmission elements presented separately; parts
84.84		Gaskets and similar joints of metal sheeting combined with other material or of two or more layers of metal; sets or assortments of gaskets and similar joints, dissimilar in composition, put up in pouches, envelopes or similar packings; mechanical seals.
	8484.10	- Gaskets and similar joints of metal sheeting combined with other material or of two or more layers of metal
	8484.20	- Mechanical seals
	8484.90	- Other
[84.85]		
84.86		Machines and apparatus of a kind used solely or principally for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays; machines and apparatus specified in Note 9 (C) to this Chapter; parts and accessories.
	8486.10	- Machines and apparatus for the manufacture of boules or wafers
	8486.20	- Machines and apparatus for the manufacture of semiconductor devices or of electronic integrated circuits
	8486.30	- Machines and apparatus for the manufacture of flat panel displays
	8486.40	- Machines and apparatus specified in Note 9 (C) to this Chapter
	8486.90	- Parts and accessories
84.87		Machinery parts, not containing electrical connectors, insulators, coils, contacts or other electrical features, not specified or included elsewhere in this Chapter.
	8487.10	- Ships' or boats' propellers and blades therefor
	8487.90	- Other