

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) Electro-mechanical domestic appliances of heading 85.09; digital cameras of heading 85.25; or
- (f) Hand-operated mechanical floor sweepers, not motorised (heading 96.03).

2.- Subject to the operation of Note 3 to Section XVI, a machine or appliance which answers to a description in one or more of the headings 84.01 to 84.24 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 and not the latter.

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 or 84.71).

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 :

- (a) Digital machines, capable of (1) storing the processing program or programs and at least the data immediately necessary for the execution of the program; (2) being freely programmed in accordance with the requirements of the user; (3) performing arithmetical computations specified by the user; and, (4) executing, without human intervention, a processing program which requires them to modify their execution, by logical decision during the processing run;
- (b) Analogue machines capable of simulating mathematical models and comprising at least : analogue elements, control elements and programming elements;

- (c) Hybrid machines consisting of either a digital machine with analogue elements or an analogue machine with digital elements.
- (B) Automatic data processing machines may be in the form of systems consisting of a variable number of separate units. Subject to paragraph (E) below, a unit is to be regarded as being a part of a complete system if it meets all of the following conditions :
- (a) It is of a kind solely or principally used in an automatic data processing system;
- (b) It is connectable to the central processing unit either directly or through one or more other units; and
- (c) It is able to accept or deliver data in a form (codes or signals) which can be used by the system.
- (C) Separately presented units of an automatic data processing machine are to be classified in heading 84.71.
- (D) Printers, keyboards, X-Y co-ordinate input devices and disk storage units which satisfy the conditions of paragraphs (B) (b) and (B) (c) above, are in all cases to be classified as units of heading 84.71.
- (E) Machines performing a specific function other than data processing and incorporating or working in conjunction with an automatic data processing machine 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.

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 (B) 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
	8418.22	-- Absorption-type, electrical
	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 refrigerating or freezing chests, cabinets, display counters, show-cases and similar refrigerating or freezing furniture
		- Other refrigerating or freezing equipment; heat pumps :
	8418.61	-- Compression type units whose condensers are heat exchangers
	8418.69	-- Other
		- Parts :
	8418.91	-- Furniture designed to receive refrigerating or freezing equipment
	8418.99	-- Other
84.19		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.
		- Instantaneous or storage water heaters, non-electric :
	8419.11	-- Instantaneous gas water heaters
	8419.19	-- Other
	8419.20	- Medical, surgical or laboratory sterilisers
		- Dryers :
	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 :
	8419.81	-- For making hot drinks or for cooking or heating food
	8419.89	-- Other
	8419.90	- Parts
84.20		Calendering or other rolling machines, other than for metals or glass, and cylinders therefor.
	8420.10	- Calendering or other rolling machines
		- Parts :
	8420.91	-- Cylinders

	8420.99	-- Other
84.21		Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids or gases.
		- Centrifuges, including centrifugal dryers :
	8421.11	-- Cream separators
	8421.12	-- Clothes-dryers
	8421.19	-- Other
		- Filtering or purifying machinery and apparatus for liquids :
	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	<p>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.</p> <ul style="list-style-type: none"> 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 : <ul style="list-style-type: none"> 8424.81 -- Agricultural or horticultural 8424.89 -- Other 8424.90 - Parts
84.25	<p>Pulley tackle and hoists other than skip hoists; winches and capstans; jacks.</p> <ul style="list-style-type: none"> - Pulley tackle and hoists other than skip hoists or hoists of a kind used for raising vehicles : <ul style="list-style-type: none"> 8425.11 -- Powered by electric motor 8425.19 -- Other 8425.20 - Pit-head winding gear; winches specially designed for use underground - Other winches; capstans : <ul style="list-style-type: none"> 8425.31 -- Powered by electric motor 8425.39 -- Other - Jacks; hoists of a kind used for raising vehicles : <ul style="list-style-type: none"> 8425.41 -- Built-in jacking systems of a type used in garages 8425.42 -- Other jacks and hoists, hydraulic 8425.49 -- Other
84.26	<p>Ships' derricks; cranes, including cable cranes; mobile lifting frames, straddle carriers and works trucks fitted with a crane.</p> <ul style="list-style-type: none"> - Overhead travelling cranes, transporter cranes, gantry cranes, bridge cranes, mobile lifting frames and straddle carriers : <ul style="list-style-type: none"> 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 : <ul style="list-style-type: none"> 8426.41 -- On tyres 8426.49 -- Other - Other machinery : <ul style="list-style-type: none"> 8426.91 -- Designed for mounting on road vehicles 8426.99 -- Other
84.27	<p>Fork-lift trucks; other works trucks fitted with lifting or handling equipment.</p> <ul style="list-style-type: none"> 8427.10 - Self-propelled trucks powered by an electric motor 8427.20 - Other self-propelled trucks 8427.90 - Other trucks

84.28	<p>Other lifting, handling, loading or unloading machinery (for example, lifts, escalators, conveyors, teleferics).</p> <ul style="list-style-type: none"> 8428.10 - Lifts and skip hoists 8428.20 - Pneumatic elevators and conveyors - Other continuous-action elevators and conveyors, for goods or materials : <ul style="list-style-type: none"> 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 8428.50 - Mine wagon pushers, locomotive or wagon traversers, wagon tippers and similar railway wagon handling equipment 8428.60 - Teleferics, chair-lifts, ski-draglines; traction mechanisms for funiculars 8428.90 - Other machinery
84.29	<p>Self-propelled bulldozers, angledozers, graders, levellers, scrapers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers.</p> <ul style="list-style-type: none"> - Bulldozers and angledozers : <ul style="list-style-type: none"> 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 : <ul style="list-style-type: none"> 8429.51 -- Front-end shovel loaders 8429.52 -- Machinery with a 360° revolving superstructure 8429.59 -- Other
84.30	<p>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.</p> <ul style="list-style-type: none"> 8430.10 - Pile-drivers and pile-extractors 8430.20 - Snow-ploughs and snow-blowers - Coal or rock cutters and tunnelling machinery : <ul style="list-style-type: none"> 8430.31 -- Self-propelled 8430.39 -- Other - Other boring or sinking machinery : <ul style="list-style-type: none"> 8430.41 -- Self-propelled 8430.49 -- Other 8430.50 - Other machinery, self-propelled - Other machinery, not self-propelled : <ul style="list-style-type: none"> 8430.61 -- Tamping or compacting machinery 8430.69 -- Other
84.31	<p>Parts suitable for use solely or principally with the machinery of headings 84.25 to 84.30.</p> <ul style="list-style-type: none"> 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 type-founding or type-setting, for preparing or making printing blocks, plates, cylinders or other printing components; printing type, blocks, plates, cylinders and other printing components; blocks, plates, cylinders and lithographic stones, prepared for printing purposes (for example, planed, grained or polished).
	8442.10	- Phototype-setting and composing machines
	8442.20	- Machinery, apparatus and equipment for type-setting or composing by other processes, with or without founding device
	8442.30	- Other machinery, apparatus and equipment
	8442.40	- Parts of the foregoing machinery, apparatus or equipment
	8442.50	- Printing type, blocks, plates, cylinders and other printing components; blocks, 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 the printing type, blocks, plates, cylinders and other printing components of heading 84.42; ink-jet printing machines, other than those of heading 84.71; machines for uses ancillary to printing.
		- Offset printing machinery :
	8443.11	-- Reel fed
	8443.12	-- Sheet fed, office type (sheet size not exceeding 22 x 36 cm)
	8443.19	-- Other
		- Letterpress printing machinery, excluding flexographic printing:
	8443.21	-- Reel fed
	8443.29	-- Other
	8443.30	- Flexographic printing machinery
	8443.40	- Gravure printing machinery
		- Other printing machinery :
	8443.51	-- Ink-jet printing machines
	8443.59	-- Other
	8443.60	- Machines for uses ancillary to printing
	8443.90	- Parts
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 :
	8448.41	-- Shuttles
	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		Household or laundry-type washing machines, including machines which both wash and dry.
		- Machines, each of a dry linen capacity not exceeding 10 kg :
	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		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.
	8451.10	- Dry-cleaning machines
		- Drying machines :
	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		Sewing machines, other than book-sewing machines of heading 84.40; furniture, bases and covers specially designed for sewing machines; sewing machine needles.
	8452.10	- Sewing machines of the household type
		- Other sewing machines :
	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		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.
	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
		- Other :
	8456.91	-- For dry-etching patterns on semiconductor materials
	8456.99	-- 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		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.
	8462.10	- Forging or die-stamping machines (including presses) and hammers
		- Bending, folding, straightening or flattening machines (including presses) :
	8462.21	-- Numerically controlled
	8462.29	-- Other
		- Shearing machines (including presses), other than combined punching and shearing machines :
	8462.31	-- Numerically controlled
	8462.39	-- Other
		- Punching or notching machines (including presses), including combined punching and shearing machines :
	8462.41	-- Numerically controlled
	8462.49	-- Other

		- Other :
	8462.91	-- Hydraulic presses
	8462.99	-- Other
84.63		Other machine-tools for working metal or cermets, without removing material.
	8463.10	- Draw-benches for bars, tubes, profiles, wire or the like
	8463.20	- Thread rolling machines
	8463.30	- Machines for working wire
	8463.90	- Other
84.64		Machine-tools for working stone, ceramics, concrete, asbestos-cement or like mineral materials or for cold working glass.
	8464.10	- Sawing machines
	8464.20	- Grinding or polishing machines
	8464.90	- Other
84.65		Machine-tools (including machines for nailing, stapling, glueing or otherwise assembling) for working wood, cork, bone, hard rubber, hard plastics or similar hard materials.
	8465.10	- Machines which can carry out different types of machining operations without tool change between such operations
		- Other :
	8465.91	-- Sawing machines
	8465.92	-- Planing, milling or moulding (by cutting) machines
	8465.93	-- Grinding, sanding or polishing machines
	8465.94	-- Bending or assembling machines
	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		Typewriters other than printers of heading 84.71; word-processing machines.
		- Automatic typewriters and word-processing machines :
	8469.11	-- Word-processing machines
	8469.12	-- Automatic typewriters
	8469.20	- Other typewriters, electric
	8469.30	- Other typewriters, non-electric
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
	8470.40	- Accounting 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.
	8471.10	- Analogue or hybrid automatic data processing machines
	8471.30	- Portable digital automatic data processing machines, weighing not more than 10 kg, consisting of a least a central processing unit, a keyboard and a display
		- Other digital 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	- Digital 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
	8472.20	- Addressing machines and address plate embossing 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		Machinery parts, not containing electrical connectors, insulators, coils, contacts or other electrical features, not specified or included elsewhere in this Chapter.
	8485.10	- Ships' or boats' propellers and blades therefor
	8485.90	- Other
