

Description of Regulated Items listed in Nuclear Suppliers Group (NSG) Guidelines- Part 1	H.S Code Description	H.S Code
Source Material	Uranium ores and concentrates	26121000
Source Material	Thorium ores and concentrates	26122000
Gaseous diffusion barriers and barrier materials	Aluminium oxide, other than artificial - corundum	28182000
Natural Uranium	medical purposes For	28441010
Natural Uranium	Other	28441090
Enriched Uranium	medical purposes For	28442010
Enriched Uranium	Other	28442090
Depleted Uranium	medical purposes For	28443010
Thorium		
Depleted Uranium	Other	28443090
Thorium	Other	28443090
Plutonium	medical purposes For	28442010
Plutonium	Other	28442090
Special fissionable material (Spent Fuel Element)	Spent (irradiated) fuel elements (cartridges) of nuclear reactors	28445000
Deuterium and heavy water	water (deuterium oxide) Heavy	28451000
Gaseous diffusion barriers and barrier materials	Pentafluoro-2--1,1,3,3,3-(trifluoromethyl) prop-1-ene	29035910
	bromide (bromomethane) Methyl	29036100
	Other	29035990
Nuclear grade graphite	graphite Artificial	38011000
Fast-reacting ion exchange resins/adsorbents (Ion exchange)	Other	38249999
	based on polymers of Ion-exchangers headings .Nos. 39.01 to 39.13, in primary forms	39140000

Nuclear grade graphite	bricks and tiles of carbon fibres Worked	68151330
Nuclear grade graphite	Other	68151390
Gaseous diffusion barriers and barrier materials	powders and flakes Nickel	75040000
Nuclear reactor pressure tubes	Of nickel alloys	75071200
Diffuser housings	tanks, vats and similar ,Reservoirs containers, of any copacity, not fitted mechanical or thermal equipment with	75089020
Nuclear reactor pressure tubes	aluminium alloys Of	76082000
Diffuser housings	reservoirs, tanks, vats and Aluminium similar containers, for any material compressed or liquefied (other than gas), of a capacity exceeding 300 l, whether or not lined or with heat insulated, but not fitted mechanical or thermal equipment	76110000
Diffuser housings	Other	76129090
External thermal shields	articles of lead Other	78060000
Nuclear reactor pressure tubes	Containing less than 1 part hafnium to 500 parts zirconium by weight	81 09 91 00
Nuclear fuel cladding		
Complete nuclear reactors	reactors Nuclear	84011000

Plants for the separation of isotopes of natural uranium, depleted uranium or special fissionable material and equipment, other than analytical instruments, especially designed or prepared therefor	Machinery and apparatus for isotopic thereof separation, and parts	84012000
Gas centrifuges and assemblies and components especially designed or prepared for use in gas centrifuges		
Complete rotor assemblies:		
Rotor tubes		
Rings or Bellows		
Baffles		
Top caps/Bottom caps		
Centrifuge housing/recipients		
Scoops		
Feed systems/product and tails withdrawal systems		
Machine header piping systems		
Gaseous diffusion barriers and barrier materials		
Feed systems/product and tails withdrawal systems		
Header piping systems		
Especially designed or prepared vacuum manifolds, vacuum headers and vacuum pumps having a suction capacity of 5 m <sup>3</sup> /min or more		
Separation nozzles		
Vortex tubes		
Separation element housings		
Header piping systems		
Especially designed or prepared vacuum systems		
UF <sub>6</sub> /carrier gas separation systems		
Liquid-liquid exchange columns (Chemical exchange)		
Liquid-liquid centrifugal contactors (Chemical exchange)		
Uranium reduction systems and equipment (Chemical exchange)		
Feed preparation systems (Chemical exchange)		
Uranium oxidation systems (Chemical exchange)		

Uranium vaporisation systems (atomic vapour based methods)		
Liquid or vapour uranium metal handling systems and components (atomic vapour based methods)		
Uranium metal 'product' and 'tails' collector assemblies (atomic vapour based methods)		
Separator module housings (atomic vapour based methods)		
Supersonic expansion nozzles (molecular based methods)		
'Product' or 'tails' collectors (molecular based methods)		
Rotary shaft seals (molecular based methods)		
Separator module housings		
Especially designed or prepared systems, equipment and components for use in electromagnetic enrichment plants		
Electromagnetic isotope separators		
Ion collectors		
Vacuum housings		
Plants for the production or concentration of heavy water, deuterium and deuterium compounds and equipment especially designed or prepared therefor		
Water-hydrogen sulphide exchange towers		
Ammonia-hydrogen exchange towers		
Tower internals and stage sumps		
NH3 crackers		
Catalytic burners		
Complete heavy water upgrade systems or columns therefor		
NH3 synthesis converters or synthesis units		
Fluorination systems (molecular based methods)		
UF6 mass spectrometers/ion sources (molecular based methods)		
Feed systems/product and tails withdrawal systems (molecular based methods)		
UF6/carrier gas separation systems (molecular based methods)		
Laser systems		

Nuclear reactor vessels	of nuclear reactors Parts	84014000
Nuclear reactor control rods and equipment		
Nuclear reactor pressure tubes		
Nuclear reactor internals		
External thermal shields		
Special fissionable material (Fuel Element)	non ,Fuel elements (cartridges) -irradiated	84 01 30 00
Heat exchangers	vapour generating boilers Other, including hybrid boilers	84021900
Heat exchangers	for steam or other vapour Condensers power units	84042000
Desublimers, cold traps or pumps used to remove UF6 from the enrichment process for subsequent transfer upon heating	centrifugal pumps Other	84137000
'Product' or 'tails' stations used for transferring UF6 into containers		
Desublimers, cold traps or pumps used to remove UF6 from the enrichment process for subsequent transfer upon heating		
'Product' or 'tails' stations used for transferring UF6 into containers		
Desublimers, cold traps or pumps used to remove UF6 from the enrichment process for subsequent transfer upon heating		
'Product' or 'tails' stations used for transferring UF6 into containers		
Tower internals and stage sumps	Other	84138190
Primary coolant pumps or circulators		
Molecular pumps	pumps Vacuum	84141000
Desublimers, cold traps or pumps used to remove UF6 from the enrichment process for subsequent transfer upon heating		
'Product' or 'tails' stations used for transferring UF6 into containers		
Desublimers, cold traps or pumps used to remove UF6 from the enrichment process for subsequent transfer upon heating		
'Product' or 'tails' stations used for transferring UF6 into containers		
Vacuum pumps especially designed for service in UF6-bearing atmospheres		

Desublimers, cold traps or pumps used to remove UF6 from the enrichment process for subsequent transfer upon heating		
'Product' or 'tails' stations used for transferring UF6 into containers		
Vacuum pumps especially designed or prepared		
Feed autoclaves, ovens, or systems used for passing UF6 to the enrichment process	Other	84178090
Heat exchangers	exchange units Heat	84195000
Heat exchangers for cooling UF6		
Heat exchangers for gas cooling		
Solidification or liquefaction stations used to remove UF6 from the enrichment process by compressing and converting UF6 to a liquid or solid form	for liquefying air or other Machinery gases	84196000
Solidification or liquefaction stations used to remove UF6 from the enrichment process by compressing and converting UF6 to a liquid or solid form		
Solidification or liquefaction stations used to remove UF6 from the enrichment process by compressing and converting UF6 to a liquid or solid form		
Plants for the fabrication of nuclear reactor fuel elements, and equipment especially designed or prepared therefor	Other	84198900
Feed autoclaves, ovens, or systems used for passing UF6 to the enrichment process		
Desublimers, cold traps or pumps used to remove UF6 from the enrichment process for subsequent transfer upon heating		
Solidification or liquefaction stations used to remove UF6 from the enrichment process by compressing and converting UF6 to a liquid or solid form		
'Product' or 'tails' stations used for transferring UF6 into containers		
Feed autoclaves, ovens, or systems used for passing UF6 to the enrichment process		
Desublimers, cold traps or pumps used to remove UF6 from the enrichment process for subsequent transfer upon heating		
Solidification or liquefaction stations used to remove UF6 from the enrichment process by compressing and converting UF6 to a liquid or solid form		
'Product' or 'tails' stations used for transferring UF6 into containers		

Feed autoclaves, ovens, or systems used for passing UF6 to the enrichment process		
Desublimers, cold traps or pumps used to remove UF6 from the enrichment process for subsequent transfer upon heating		
Solidification or liquefaction stations used to remove UF6 from the enrichment process by compressing and converting UF6 to a liquid or solid form		
'Product' or 'tails' stations used for transferring UF6 into containers		
Uranium vaporisation systems (atomic vapour based methods)		
Uranium metal 'product' and 'tails' collector assemblies		
Especially designed or prepared systems for the conversion of uranium ore concentrates to UO3		
Especially designed or prepared systems for the conversion of UO3 to UF6		
Especially designed or prepared systems for the conversion of UO3 to UO2		
Especially designed or prepared systems for the conversion of UO2 to UF4		
Especially designed or prepared systems for the conversion of UF4 to UF6		
Especially designed or prepared systems for the conversion of UF4 to uranium metal		
Especially designed or prepared systems for the conversion of UF6 to UO2		
Especially designed or prepared systems for the conversion of UF6 to UF4		
Especially designed or prepared systems for the conversion of UO2 to UCl4		
Plants for the conversion of plutonium and equipment especially designed or prepared therefor		
Ion exchange columns (Ion exchange)	Other	84212990
Gaseous diffusion barriers and barrier materials	Other	84213900
Nuclear reactor fuel charging and discharging machines	Other	84261900
Nuclear reactor fuel charging and discharging machines	Other	84269900
Irradiated fuel element decladding equipment and chopping machines	Other	84569000
Irradiated fuel element decladding equipment and chopping machines	controlled shearing Numerically machines	84 62 33 00
Irradiated fuel element decladding equipment and chopping machines	Other	84623900

Special shut-off and control valves	valves Pressure-reducing	84811000
Special shut-off and control valves	valves Check	84813000
Magnetic suspension bearings	including combined ball/roller ,Other bearings	84 82 80 00
Magnetic suspension bearings	housings, not incorporating Bearing ball or roller bearings; plain shaft bearings	84833000
Bearings/Dampers	housings, not incorporating Bearing ball or roller bearings; plain shaft bearings	84833000
Rotary shaft seals	seals Mechanical	84842000
Rotary shaft seals (molecular based methods)		
Rotary shaft seals	Other	84849000
Rotary shaft seals (molecular based methods)		
Frequency changers	converters Electric rotary	85024000
Motor stators	suitable for use solely or Parts principally with the machines of 85.02 heading 85.01 or	85030000
Frequency changers	Other	85044090
High voltage power supplies		
Magnet power supplies		
Ion excitation coils	Other	85045090

Ion excitation coils	including parts ,Other	85059000
Magnet pole pieces		
Feed autoclaves, ovens, or systems used for passing UF6 to the enrichment process	Other	85 14 39 00
Uranium plasma generation systems	machines and apparatus Other	85158000
Microwave power sources and antennae	Other	85407900
Uranium plasma generation systems		
Uranium plasma generation systems	accelerators Particle	85431000
Ion sources		
Microwave power sources and antennae	Other	85437090
Laser systems	Others	90132090
Infrared absorption analysers	spectrophotometers ,Spectrometers and spectrographs using optical (IR ,radiations (UV,visible	90273000
UF6 mass spectrometers/ion sources	spectrometers Mass	90 27 81 00
Neutron detectors	and apparatus for Instruments measuring or detecting ionising radiations	90301000
Neutron measurement systems for process control		

Description of Regulated Items listed in Nuclear Suppliers Group (NSG) Guidelines- Part 2	H.S Code Description	H.S Code
Calcium	Calcium	28051200
Chlorine trifluoride (ClF <sub>3</sub> ).	Other	28129000
Radium-226 (226Ra)	For medical purposes	28444310
Tritium	Other	28444390
Radionuclides appropriate for making neutron sources based on alpha-n reaction:	For medical purposes	28444410
Radium-226 (226Ra)	Other	28444490
Tritium	For medical purposes	28444110
Tritium	Other	28444190
Tritium, Tritium compounds, mixtures containing Tritium	For medical purposes	28444110
Tritium, tritium compounds, mixtures containing tritium	Other	28444190
Actinium-225, actinium-227, californium-253, curium-240, curium-241, curium-242, curium-243, curium-244, einsteinium-253, einsteinium-254, gadolinium-148, polonium-208, polonium-209, polonium-210, radium-223, uranium-230 or uranium-232, and their compounds; alloys, dispersions (including cermets), ceramic products and mixtures containing these elements or compounds	For medical purposes	28444210
Actinium-225, actinium-227, californium-253, curium-240, curium-241, curium-242, curium-243, curium-244, einsteinium-253, einsteinium-254, gadolinium-148, polonium-208, polonium-209, polonium-210, radium-223, uranium-230 or uranium-232, and their compounds; alloys, dispersions (including cermets), ceramic products and mixtures containing these elements or compounds	Other	28444290
Boron enriched in boron-10 and its compounds	Boron enriched in boron-10 and its compounds	28452000
Lithium enriched in lithium-6 and its compounds	Lithium enriched in lithium-6 and its compounds	28453000
Helium-3	Helium-3	28454000

Tungsten, tungsten carbide, and alloys containing more than 90% tungsten by weight	Other	28499000
High explosive substances or mixtures	Prepared explosives, other than propellant powders.	36020000
Detonator firing sets (initiation systems, firesets), including electronically-charged, explosively-driven and optically-driven firing sets designed to drive multiple controlled detonators specified by Item 6.A.1. above	Safety Fuses	36031000
Electrically driven explosive detonators	Safety Fuses	36031000
Detonator firing sets (initiation systems, firesets), including electronically-charged, explosively-driven and optically-driven firing sets designed to drive multiple controlled detonators specified by Item 6.A.1. above	Detonating cords	36032000
Electrically driven explosive detonators	Detonating cords	36032000
Electrically driven explosive detonators	Percussion caps	36033000
Platinised catalysts	with precious metal or precious metal compounds as the active substance	38151200
Thermoset resin impregnated continuous "yarns", "rovings", "tows" or "tapes" made from carbon or glass "fibrous or filamentary materials"	Monofilament of which any cross-sectional dimension exceeds 1 mm	39169010
Thermoset resin impregnated continuous "yarns", "rovings", "tows" or "tapes" made from carbon or glass "fibrous or filamentary materials"	Of polyamides	39209200
Thermoset resin impregnated continuous "yarns", "rovings", "tows" or "tapes" made from carbon or glass "fibrous or filamentary materials"	Other	39219000
Carbon or aramid "fibrous or filamentary materials"	Of aramids	54021100
Carbon or aramid "fibrous or filamentary materials"	Other	54021900
Carbon or aramid "fibrous or filamentary materials"	Other	54041900
Carbon or aramid "fibrous or filamentary materials"	Of aramids	55011100
Carbon or aramid "fibrous or filamentary materials"	Of aramids	55031100
Carbon or aramid "fibrous or filamentary materials"	Single Yarn	55091100
Carbon or aramid "fibrous or filamentary materials"	Multiple (folded) or cabled Yarn	55091200

Thermoset resin impregnated continuous "yarns", "rovings", "tows" or "tapes" made from carbon or glass "fibrous or filamentary materials"	Other	56049000
Thermoset resin impregnated continuous "yarns", "rovings", "tows" or "tapes" made from carbon or glass "fibrous or filamentary materials"	Not plaited	56075010
Thermoset resin impregnated continuous "yarns", "rovings", "tows" or "tapes" made from carbon or glass "fibrous or filamentary materials"	Plaited	56075020
Composite structures in the form of tubes	Carbon fibres	68151310
Composite structures in the form of tubes	Carbon fibres	68151320
Carbon or aramid "fibrous or filamentary materials"	Carbon fibres	68151330
Crucibles made of materials resistant to liquid actinide metals	Other	69039000
Crucibles made of materials resistant to liquid actinide metals	Other	69039000
Crucibles made of materials resistant to liquid actinide metals	Other	69039000
Crucibles made of materials resistant to liquid actinide metals	Other	69091900
High-density (lead glass or other) radiation shielding windows	Coloured throughout the mass (body tinted), opacified, flashed or having an absorbent, reflecting or Non-reflecting layer	70031200
High-density (lead glass or other) radiation shielding windows	Other	70031900
High-density (lead glass or other) radiation shielding windows	Non-wired glass, having an absorbent, reflecting or Non-reflecting layer	70051000
Glass "fibrous or filamentary materials"	Chopped strands, of a length of not more than 50 mm	70191100
Thermoset resin impregnated continuous "yarns", "rovings", "tows" or "tapes" made from carbon or glass "fibrous or filamentary materials"	Chopped strands, of a length of not more than 50 mm	70191100
Glass "fibrous or filamentary materials"	Rovings	70191200
Thermoset resin impregnated continuous "yarns", "rovings", "tows" or "tapes" made from carbon or glass "fibrous or filamentary materials"	Rovings	70191200
Composite structures in the form of tubes	Other	70191900

Glass "fibrous or filamentary materials"	Other	70191900
Thermoset resin impregnated continuous "yarns", "rovings", "tows" or "tapes" made from carbon or glass "fibrous or filamentary materials"	Other	70191900
Platinised catalyts	Catalyts in the form of wire cloth or grill, of platinum	71151000
Maraging steel	Ingots and other primary forms	72241000
Maraging steel	Other	72249000
Maraging steel	Other	72259900
Maraging steel	Not further worked than hot-rolled	72269100
Maraging steel	Not further worked than cold-rolled (coldreduced)	72269200
Maraging steel	Other	72269900
Maraging steel	Of silico-manganese steel	72272000
Maraging steel	Other	72279000
High explosive containment vessels, chambers, containers and other similar containment devices designed for the testing of high explosives or explosive devices	Other	73090090
High explosive containment vessels, chambers, containers and other similar containment devices designed for the testing of high explosives or explosive devices	Tanks, casks, drums, cans, boxes and similar Containers of a capacity of 50 L or more	73101000
High explosive containment vessels, chambers, containers and other similar containment devices designed for the testing of high explosives or explosive devices	Other	73102190
High explosive containment vessels, chambers, containers and other similar containment devices designed for the testing of high explosives or explosive devices	Other	73102900
Porous nickel metal	Nickel powders and flakes	75040000
Porous nickel metal	Nickel plates, sheets, strip and foil Of nickel, not alloyed	75061000

Aluminium alloys	Other	76042900
Tungsten, tungsten carbide, and alloys containing more than 90% tungsten by weight	Unwrought tungsten, including bars and rods obtained simply by sintering; waste and scrap	81019400
Tungsten, tungsten carbide, and alloys containing more than 90% tungsten by weight	Other	81019900
Zirconium and articles thereof, including waste and scrap, Containing less than 1 part hafnium to 500 parts zirconium by weight	Containing less than 1 part hafnium to 500 parts zirconium by weight	81093100
	Containing less than 1 part hafnium to 500 parts zirconium by weight	81099100
Rhenium	Other	81124900
Crucibles made of materials resistant to liquid actinide metals	Other	81019900
Tungsten, tungsten carbide, and alloys containing more than 90% tungsten by weight	Other	81019900
Crucibles made of materials resistant to liquid actinide metals	Crucibles	81039100
Magnesium	Containing at least 99.8% by weight of magnesium	81041100
Magnesium	Other	81 04 19 00
Magnesium	Waste and scrap	81 04 20 00
Magnesium	Magnesium powder	81 04 30 10
Magnesium	Other	81 04 30 90
Magnesium	Other articles of magnesium	81049090
Bismuth having a purity of 99.99% or greater by weight	Containing more than 99.99 % of bismuth, weightby	81061000
Bismuth having a purity of 99.99% or greater by weight	Other	81069000
Titanium alloys	Other	81089000

Zirconium and articles thereof, including waste and scrap,Containing less than 1 part hafnium to 500 parts zirconium by weight	Containing less than 1 part hafnium to 500 parts zirconium by weight	81092100
Zirconium and articles thereof, including waste and scrap,Containing less than 1 part hafnium to 500 parts zirconium by weight	Containing less than 1 part hafnium to 500 parts zirconium by weight	81099100
Beryllium	Beryllium Unwrought; powders	81121200
Beryllium	Beryllium, Waste and scrap	81121300
Beryllium	Other	81121900
Rhenium	Rhenium, Unwrought; waste and scrap; powders	81124100
Rhenium	other	81124900
Hafnium	Hafnium, Unwrought; waste and scrap; powders	81123100
Hafnium	Other	81123900
Hydrogen isotope storage or purification systems using metal hydrides as the storage or purification medium.	Machinery and apparatus for isotopic separation, and parts thereof	84012000
Facilities or plants for the separation of lithium isotopes	Machinery and apparatus for isotopic separation, and parts thereof	84012000
Packed liquid-liquid exchange columns specially designed for lithium amalgams	Machinery and apparatus for isotopic separation, and parts thereof	84012000
Lithium amalgam electrolysis cells	Machinery and apparatus for isotopic separation, and parts thereof	84012000
Evaporators for concentrated lithium hydroxide solution	Machinery and apparatus for isotopic separation, and parts thereof	84012000
Ion exchange systems specially designed for lithium isotope separation, and specially designed component parts therefor	Machinery and apparatus for isotopic separation, and parts thereof	84012000
Chemical exchange systems (employing crown ethers, cryptands, or lariat ethers) specially designed for lithium isotope separation, and specially designed component parts therefor	Machinery and apparatus for isotopic separation, and parts thereof	84012000

Electromagnetic isotope separators	Machinery and apparatus for isotopic separation, and parts thereof	84012000
Specialised packings which may be used in separating heavy water from ordinary water	Machinery and apparatus for isotopic separation, and parts thereof	84012000
Water-hydrogen sulphide exchange tray columns	Machinery and apparatus for isotopic separation, and parts thereof	84012000
Internal contactors for the water-hydrogen sulphide exchange tray columns	Machinery and apparatus for isotopic separation, and parts thereof	84012000
Hydrogen-cryogenic distillation columns	Machinery and apparatus for isotopic separation, and parts thereof	84012000
Turboexpanders or turboexpander-compressor sets	Turbo-jets, turbo-propellers and other gas turbines Of a power not exceeding 5,000 KW	84118100
Turboexpanders or turboexpander-compressor sets	Turbo-jets, turbo-propellers and other turbines Of a power exceeding 5,000 gas KW	84118200
Mercury or lithium amalgam pumps;	Other reciprocating positive displacement pumps	84135000
Pumps capable of circulating solutions of concentrated or dilute potassium amide catalyst in liquid ammonia (KNH <sub>2</sub> /NH <sub>3</sub> )	Other reciprocating positive displacement pumps	84135000
Mercury or lithium amalgam pumps;	Other reciprocating positive displacement pumps	84135000
Pumps capable of circulating solutions of concentrated or dilute potassium amide catalyst in liquid ammonia (KNH <sub>2</sub> /NH <sub>3</sub> )	Other rotary positive displacement pumps	84136000
Mercury or lithium amalgam pumps;	Other rotary positive displacement pumps	84136000
Pumps capable of circulating solutions of concentrated or dilute potassium amide catalyst in liquid ammonia (KNH <sub>2</sub> /NH <sub>3</sub> )	Other centrifugal pumps	84137000
Mercury or lithium amalgam pumps;	Other centrifugal pumps	84137000
Pumps capable of circulating solutions of concentrated or dilute potassium amide catalyst in liquid ammonia (KNH <sub>2</sub> /NH <sub>3</sub> )	Other	84138190

Vacuum pumps	Other	84138190
Bellows-sealed scroll-type compressors and bellows-sealed scroll-type vacuum pumps	Vacuum pumps	84141000
Bellows-sealed scroll-type compressors and bellows-sealed scroll-type vacuum pumps	Vacuum pumps	84141000
Turboexpanders or turboexpander-compressor sets	Other	84148000
Hydrogen or helium refrigeration units	Other	84186990
Evaporators for concentrated lithium hydroxide solution	Compression-type refrigerating units	84189910
Hydrogen-cryogenic distillation columns	Distilling or rectifying plant	84194000
Hydrogen or helium refrigeration units	Machinery for liquefying air or other gases	84196000
Evaporators for concentrated lithium hydroxide solution	Other	84198900
Ion exchange systems specially designed for lithium isotope separation, and specially designed component parts therefor	Other	84198900
Chemical exchange systems (employing crown ethers, cryptands, or lariat ethers) specially designed for lithium isotope separation, and specially designed component parts therefor	Other	84212990
Hydrogen isotope storage or purification systems using metal hydrides as the storage or purification medium.	Other	84213900
Remote manipulators that can be used to provide remote actions in radiochemical separation operations or hot cells	Other machinery	84289000
Filament winding machines	Textile winding (including weft-winding) or reeling machines	84454000
Precision mandrels for the filament winding machines specified in Item 3.B.4.a.	Other	84459000
Precision mandrels for the filament winding machines specified in Item 3.B.4.a.	Other	84483900
Machine tools for turning	Multi-station transfer machines	84563000
Machine tools for turning	Lathes (including turning centres) Numerically controlled	84581100
Machine tools for turning	Other lathes Numerically controlled	84589100

Machine tools for milling	Other boring-milling machines Numerically controlled	84593100
Machine tools for milling	Milling machines, knee-type Numerically controlled	84595100
Machine tools for grinding	Other milling machines Numerically controlled	84596100
Machine tools for grinding	Flat-surface grinding machines Numerically controlled	84601200
Machine tools for grinding	Centreless grinding machines, numerically controlled	84602200
Flow-forming machines, spin-forming machines capable of flow-forming functions, and mandrels	Centreless grinding machines, numerically controlled	84622200
Rotor assembly equipment for assembly of gas centrifuge rotor tube sections, baffles, and end caps	Centreless grinding machines, numerically controlled	84622900
Rotor assembly equipment for assembly of gas centrifuge rotor tube sections, baffles, and end caps	Centreless grinding machines, numerically controlled	84629900
Flow-forming machines, spin-forming machines capable of flow-forming functions, and mandrels	Centreless grinding machines, numerically controlled	84629900
Isostatic presses	Centreless grinding machines, numerically controlled	84629900
Rotor assembly equipment for assembly of gas centrifuge rotor tube sections, baffles, and end caps	Other	84639000
Flow-forming machines, spin-forming machines capable of flow-forming functions, and mandrels	Other	84639000
Machine tools for grinding	Grinding or polishing machines	84642000
Machine tools	Other	84649000
Machine tools for milling	Planing, milling or moulding (by cutting) machines	84659200
Machine tools for grinding	Grinding, sanding or polishing machines	84659300
Machine tools	Other	84659900

Rotor-forming mandrels designed to form cylindrical rotors of inside diameter between 75 and 400 mm.	For machines of heading 84.62 or 84.63	84669400
Dies, moulds, and controls specially designed for the isostatic presses	For machines of heading 84.62 or 84.64	84669400
Bellows-forming mandrels and dies for producing single-convolution bellows	Vacuum moulding machines and other thermoforming machines	84774000
'Robots' or 'end-effectors'	Industrial robots, not elsewhere specified or included	84795000
High-power direct current power supplies	Other DC motors; DC generators, other than photovoltaic generators Of an output exceeding 750 W but not exceeding 75 kW	85013200
High-power direct current power supplies	Other DC motors; DC generators, other than photovoltaic generators Of an output exceeding 750 W but not exceeding 75 kW	85013200
High-voltage direct current power supplies	Other DC motors; DC generators, other than photovoltaic generators Of an than exceeding output exceeding 75 W but not 375 kW	85013300
High-power direct current power supplies	Other DC motors; DC generators, other than photovoltaic generators Of an output exceeding 75 kW but not exceeding 375 kW	85013300

High-voltage direct current power supplies	Other DC motors; DC generators, other than photovoltaic generators Of an output exceeding 375 kW	85013400
High-voltage direct current power supplies	Other DC motors; DC generators, other than photovoltaic generators Of an output exceeding 375 kW	85013400
Power supplies, specially designed for furnaces specified in Item 1.B.4.a.	Other	85044090
Frequency changers or generators	Other	85044090
High-power direct current power supplies	Other	85044090
High-voltage direct current power supplies	Electro-magnets ;Other, including parts	85059000
Controlled atmosphere (vacuum or inert gas) induction furnaces	Induction or dielectric furnaces and ovens	85142000
Arc remelt furnaces, arc melt furnaces and arc melt and casting furnaces	Plasma and vacuum arc furnaces	85143200
Electron beam melting furnaces, plasma atomisation furnaces and plasma melting furnaces	Electron beam furnaces	85143100
Plasma torches	Plasma and vacuum arc furnaces	85143200
Radiation-hardened TV cameras, or lenses therefor	Television cameras, digital cameras and video camera recorders; Other, radiation-hardened or radiation-tolerant goods as specified in Subheading Note 2 to this Chapter	85258200
Framing cameras with recording rates greater than 225,000 frames per second	Video cameras	85258010
Framing cameras capable of 50 ns or less frame exposure time	Digital cameras for still images	85258020

Radiation-hardened TV cameras, or lenses therefor	Television cameras, digital cameras and video camera recorders; Other, radiation-hardened or radiation-tolerant goods as specified in Subheading Note 2 to this Chapter	85 25 82 00
Electronic streak cameras capable of 50 ns or less time resolution	Digital cameras for still images	85258020
Framing cameras with recording rates greater than 225,000 frames per second	Other	85258099
Electronic streak cameras capable of 50 ns or less time resolution	Other	85258099
Framing cameras with recording rates greater than 225,000 frames per second	Other	85258099
Framing cameras capable of 50 ns or less frame exposure time	Other	85258099
Solid-state cameras or electron tube cameras with a fast image gating (shutter) time of 50 ns or less	Other	85299090
Plug-ins specially designed for use with streak cameras which have modular structures and that enable the performance specifications in 5.B.3.a.1. or 5.B.3.a.2	Other	85299090
Framing tubes and solid-state imaging devices having a fast image gating (shutter) time of 50ns or less specially designed for cameras specified in 5.B.3.b.1. or 5.B.3.b.2	Other	85299090
Plug-ins specially designed for use with framing cameras which have modular structures and that enable the performance specifications in 5.B.3.b.1. or 5.B.3.b.2	Other	85299090
Synchronizing electronics units, rotor assemblies consisting of turbines, mirrors and bearings specially designed for cameras specified in 5.B.3.b.1. or 5.B.3.b.2	Other	85299090
Solid-state imaging devices and image intensifiers tubes having a fast image gating (shutter) time of 50 ns or less specially designed for cameras specified in 5.B.3.c.1.	Other	85299090
Electro-optical shuttering devices (Kerr or Pockels cells) with a fast image gating (shutter) time of 50 ns or less	Other	85299090
Pulse discharge capacitors	Capacitors; Tantalum	85322100

Pulse discharge capacitors	Capacitors; Ceramic dielectric, single layer	85322300
Pulse discharge capacitors	Capacitors; Ceramic dielectric, multilayer	85322400
Pulse discharge capacitors	Capacitors; Dielectric of paper or plastics	85322500
Pulse discharge capacitors	Other	85322900
Switching devices as follows	Other	85359000
Triggered spark-gaps	Other	85359000
Modules or assemblies with a fast switching function	Other	85359000
Arrangements using single or multiple detonators designed to nearly simultaneously initiate an explosive surface over an area greater than 5000 mm <sup>2</sup> from a single firing signal with an initiation timing spread over the surface of less than 2.5 μs	Other	85364900
Modules or assemblies with a fast switching function	Other	85365090
Arrangements using single or multiple detonators designed to nearly simultaneously initiate an explosive surface over an area greater than 5000 mm <sup>2</sup> from a single firing signal with an initiation timing spread over the surface of less than 2.5 μs	Other switches; Electro- electronic switches consisting of optically-connected output and input circuits (insulated rheostatic electrical switches)	85365010
Control units specially designed for any of the 'robots' or 'end-effectors' specified in Item 1.A.3.a.	Other	85365090
Digital control units, combined with "software" specially designed for vibration testing	Boards, panels, consoles, desks, cabinets and other bases, equipped with two or more apparatus; For a voltage not exceeding 1,000 V	85371000
Coordinating and programming controls for the filament winding machines specified in Item 3.B.4.a	Boards, panels, consoles, desks, cabinets and other bases, equipped with two or more apparatus; For a voltage not exceeding 1,000 V	85371000

Digital control units, combined with "software" specially designed for vibration testing	Boards, panels, consoles, desks, and other bases, equipped with cabinets apparatus; For a voltage not two or more exceeding 1,000 V	85371000
Plug-ins specially designed for use with streak cameras which have modular structures and that enable the performance specifications in 5.B.3.a.1. or 5.B.3.a.3	Boards, panels, consoles, desks, cabinets and other bases, equipped with two or more apparatus; For a voltage exceeding 1,000 V	85372000
Synchronizing electronics units, rotor assemblies consisting of turbines, mirrors and bearings specially designed for cameras specified in 5.B.3.a.1.	Light-emitting diode (LED) light sources	85395000
Framing tubes and solid-state imaging devices having a fast image gating (shutter) time of 50ns or less specially designed for cameras specified in 5.B.3.b.1. or 5.B.3.b.3	Light-emitting diode (LED) light sources	85395000
Plug-ins specially designed for use with framing cameras which have modular structures and that enable the performance specifications in 5.B.3.b.1. or 5.B.3.b.3	Light-emitting diode (LED) light sources	85395000
Synchronizing electronics units, rotor assemblies consisting of turbines, mirrors and bearings specially designed for cameras specified in 5.B.3.b.1. or 5.B.3.b.3	Light-emitting diode (LED) light sources	85395000
Solid-state imaging devices and image intensifiers tubes having a fast image gating (shutter) time of 50 ns or less specially designed for cameras specified in 5.B.3.c.1.	Light-emitting diode (LED) light sources	85395000
Plug-ins specially designed for use with cameras which have modular structures and that enable the performance specifications in 5.B.3.c.1.	Light-emitting diode (LED) light sources	85395000
Velocity interferometers for measuring velocities exceeding 1 km/s during time intervals of less than 10 $\mu$ s	Light-emitting diode (LED) light sources	85395000
Streak tubes for cameras specified in 5.B.3.a.2.	Other cathode-ray tubes	85406000
Framing tubes and solid-state imaging devices having a fast image gating (shutter) time of 50ns or less specially designed for cameras specified in 5.B.3.b.1. or 5.B.3.b.5	Other	85407900

Streak tubes for cameras specified in 5.B.3.a.2.	Receiver or amplifier valves and tubes	85408100
Streak tubes for cameras specified in 5.B.3.a.2.	Other	85408900
Plug-ins specially designed for use with framing cameras which have modular structures and that enable the performance specifications in 5.B.3.b.1. or 5.B.3.b.5	Other	85408900
Plug-ins specially designed for use with cameras which have modular structures and that enable the performance specifications in 5.B.3.c.1.	Other	85412900
Streak tubes for cameras specified in 5.B.3.a.2.	Other	85 41 59 00
Control units specially designed for any of the 'robots' or 'end-effectors' specified in Item 1.A.3.a.	Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	85423100
Dies, moulds, and controls specially designed for the isostatic presses	Processors and controllers, whether or combined with memories, converters, not circuits, amplifiers, clock and timing logic other circuitscircuits, or	85423100
Vibration thrusters (shaker units), with or without associated amplifiers	Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	85423100

<p>Test piece support structures and electronic units</p>	<p>Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits</p>	<p>85423100</p>
<p>Computer control and monitoring systems</p>	<p>Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits</p>	<p>85423100</p>
<p>Plug-ins specially designed for use with streak cameras which have modular structures and that enable the performance specifications in 5.B.3.a.1. or 5.B.3.a.4</p>	<p>Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits</p>	<p>85423100</p>
<p>Synchronizing electronics units, rotor assemblies consisting of turbines, mirrors and bearings specially designed for cameras specified in 5.B.3.a.1.</p>	<p>Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits</p>	<p>85423100</p>

<p>Framing tubes and solid-state imaging devices having a fast image gating (shutter) time of 50ns or less specially designed for cameras specified in 5.B.3.b.1. or 5.B.3.b.7</p>	<p>Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits</p>	<p>85423100</p>
<p>Plug-ins specially designed for use with framing cameras which have modular structures and that enable the performance specifications in 5.B.3.b.1. or 5.B.3.b.7</p>	<p>Processors and controllers, whether or combined with memories, converters, not circuits, amplifiers, clock and timing logic other circuitscircuits, or</p>	<p>85423100</p>
<p>Synchronizing electronics units, rotor assemblies consisting of turbines, mirrors and bearings specially designed for cameras specified in 5.B.3.b.1. or 5.B.3.b.7</p>	<p>Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits</p>	<p>85423100</p>
<p>Solid-state imaging devices and image intensifiers tubes having a fast image gating (shutter) time of 50 ns or less specially designed for cameras specified in 5.B.3.c.1.</p>	<p>Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits</p>	<p>85423100</p>
<p>Plug-ins specially designed for use with cameras which have modular structures and that enable the performance specifications in 5.B.3.c.1.</p>	<p>Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing</p>	<p>85423100</p>

	circuits, or other circuits	
Velocity interferometers for measuring velocities exceeding 1 km/s during time intervals of less than 10 $\mu$ s	Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	85423100
High-speed pulse generators, and pulse heads therefor	Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	85423100
Arrangements using single or multiple detonators designed to nearly simultaneously initiate an explosive surface over an area greater than 5000 mm <sup>2</sup> from a single firing signal with an initiation timing spread over the surface of less than 2.5 $\mu$ s	Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	85423100
Detonator firing sets (initiation systems, firesets), including electronically-charged, explosively-driven and optically-driven firing sets designed to drive multiple controlled detonators specified by Item 6.A.1. above	Processors and controllers, whether or not combined with memories, converters, not circuits, amplifiers, clock and timing logic other circuits, or	85423100

Modular electrical pulse generators (pulsers)	Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	85423100
Micro-firing units	Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits	85423100
Flash X-ray generators or pulsed electron accelerators	Particle accelerators	85431000
Neutron generator systems, including tubes	Particle accelerators	85431000
High-speed pulse generators, and pulse heads therefor	Signal generators	85432000
Modular electrical pulse generators (pulsers)	Signal generators	85432000
Micro-firing units	Signal generators	85432000
Lithium amalgam electrolysis cells	Machines and apparatus for electroplating, electrolysis or electrophoresis	85433000
Electrolytic cells for fluorine production	Machines and apparatus for electroplating, electrolysis or electrophoresis	85433000
Striplines to provide low inductance path to detonators	Electric cable of a cross-section exceeding 10 mm	85446010
Striplines to provide low inductance path to detonators	Electric cable of a cross-section not exceeding 10 mm	85446020
Striplines to provide low inductance path to detonators	Other	85446090

Plug-ins specially designed for use with streak cameras which have modular structures and that enable the performance specifications in 5.B.3.a.1. or 5.B.3.a.9	Other	90019000
Synchronizing electronics units, rotor assemblies consisting of turbines, mirrors and bearings specially designed for cameras specified in 5.B.3.a.1.	Other	90019000
Radiation-hardened TV cameras, or lenses therefor	Other	90029000
Plug-ins specially designed for use with streak cameras which have modular structures and that enable the performance specifications in 5.B.3.a.1. or 5.B.3.a.10	Other	90029000
Synchronizing electronics units, rotor assemblies consisting of turbines, mirrors and bearings specially designed for cameras specified in 5.B.3.a.1.	Other	90029000
Framing cameras with recording rates greater than 225,000 frames per second	Other	90065900
Framing cameras capable of 50 ns or less frame exposure time	Other	90065900
Framing tubes and solid-state imaging devices having a fast image gating (shutter) time of 50ns or less specially designed for cameras specified in 5.B.3.b.1. or 5.B.3.b.11	Other	90069900
Plug-ins specially designed for use with framing cameras which have modular structures and that enable the performance specifications in 5.B.3.b.1. or 5.B.3.b.11	Other	90069900
Synchronizing electronics units, rotor assemblies consisting of turbines, mirrors and bearings specially designed for cameras specified in 5.B.3.b.1. or 5.B.3.b.11	Other	90069900
Solid-state imaging devices and image intensifiers tubes having a fast image gating (shutter) time of 50 ns or less specially designed for cameras specified in 5.B.3.c.1.	Other	90069900
Plug-ins specially designed for use with cameras which have modular structures and that enable the performance specifications in 5.B.3.c.1.	Other	90069900
Streak cameras with writing speeds greater than 0.5 mm/ $\mu$ s	Cameras	90071000
Electronic streak cameras capable of 50 ns or less time resolution	Cameras	90071000
Streak tubes for cameras specified in 5.B.3.a.2.	Cameras	90071000
Framing cameras with recording rates greater than 225,000 frames per second	Cameras	90071000

Framing cameras capable of 50 ns or less frame exposure time	Cameras	90071000
Plug-ins specially designed for use with streak cameras which have modular structures and that enable the performance specifications in 5.B.3.a.1. or 5.B.3.a.11	For cameras	90079100
Synchronizing electronics units, rotor assemblies consisting of turbines, mirrors and bearings specially designed for cameras specified in 5.B.3.a.1.	For cameras	90079100
Framing tubes and solid-state imaging devices having a fast image gating (shutter) time of 50ns or less specially designed for cameras specified in 5.B.3.b.1. or 5.B.3.b.12	For cameras	90079100
Plug-ins specially designed for use with framing cameras which have modular structures and that enable the performance specifications in 5.B.3.b.1. or 5.B.3.b.12	For cameras	90079100
Synchronizing electronics units, rotor assemblies consisting of turbines, mirrors and bearings specially designed for cameras specified in 5.B.3.b.1. or 5.B.3.b.12	For cameras	90079100
Solid-state imaging devices and image intensifiers tubes having a fast image gating (shutter) time of 50 ns or less specially designed for cameras specified in 5.B.3.c.1.	For cameras	90079100
Plug-ins specially designed for use with cameras which have modular structures and that enable the performance specifications in 5.B.3.c.1.	For cameras	90079100
Lasers, laser amplifiers and oscillators	Other	90132090
Flash X-ray generators or pulsed electron accelerators	Other	90221990
Flash X-ray generators or pulsed electron accelerators	For other uses	90222900
All types of pressure transducers capable of measuring absolute pressures	For measuring or checking pressure	90262000
Shock pressure gauges capable of measuring pressures greater than 10 GPa, including gauges made with manganin, ytterbium, and polyvinylidene fluoride (PVDF) / polyvinyl difluoride	For measuring or checking pressure	90262000
Quartz pressure transducers for pressures greater than 10 GPa	For measuring or checking pressure	90262000
Velocity interferometers for measuring velocities exceeding 1 km/s during time intervals of less than 10 $\mu$ s	Other instruments or apparatus	90268000
Inductively coupled plasma mass spectrometers (ICP/MS)	Mass spectrometers	90 27 81 00

Glow discharge mass spectrometers (GDMS)	Mass spectrometers	90 27 81 00
Thermal ionisation mass spectrometers (TIMS)	Mass spectrometers	90 27 81 00
Electron bombardment mass spectrometers	Mass spectrometers	90 27 81 00
Mass spectrometers equipped with a microfluorination ion source designed for actinides or actinide fluorides	Mass spectrometers	90 27 81 00
Centrifugal balancing machines designed for balancing flexible rotors	Machines for balancing mechanical parts	90311000
Centrifugal balancing machines designed for balancing hollow cylindrical rotor components	Machines for balancing mechanical parts	90311000
Electrodynamic vibration test systems	Test benches	90312000
Test piece support structures and electronic units	Test benches	90312000
High-velocity gun systems	Other	93040090