Chapter 90

Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof

Notes.

1.- This Chapter does not cover :

(a) Articles of a kind used in machines, appliances or for other technical uses, of vulcanised rubber other than hard rubber (heading 40.16), of leather or of composition leather (heading 42.05) or of textile material (heading 59.11);

(b) Supporting belts or other support articles of textile material, whose intended effect on the organ to be supported or held derives solely from their elasticity (for example, maternity belts, thoracic support bandages, abdominal support bandages, supports for joints or muscles) (Section XI);

(c) Refractory goods of heading 69.03; ceramic wares for laboratory, chemical or other technical uses, of heading 69.09;

(d) Glass mirrors, not optically worked, of heading 70.09, or mirrors of base metal or of precious metal, not being optical elements (heading 83.06 or Chapter 71);

(e) Goods of heading 70.07, 70.08, 70.11, 70.14, 70.15 or 70.17;

(f) Parts of general use, as defined in Note 2 to Section XV, of base metal (Section XV) or similar goods of plastics (Chapter 39);

(g) Pumps incorporating measuring devices, of heading 84.13; weight-operated counting or checking machinery, or separately presented weights for balances (heading 84.23); lifting or handling machinery (headings 84.25 to 84.28); paper or paperboard cutting machines of all kinds (heading 84.41); fittings for adjusting work or tools on machine-tools or water-jet cutting machines, of heading 84.66, including fittings with optical devices for reading the scale (for example, "optical" dividing heads) but not those which are in themselves essentially optical instruments (for example, alignment telescopes); calculating machines (heading 84.70); valves or other appliances of heading 84.81; machines and apparatus (including apparatus for the projection or drawing of circuit patterns on sensitised semiconductor materials) of heading 84.86;

(h) Searchlights or spotlights of a kind used for cycles or motor vehicles (heading 85.12); portable electric lamps of heading 85.13; cinematographic sound recording, reproducing or re-recording apparatus (heading 85.19); sound-heads (heading 85.22); television cameras, digital cameras and video camera recorders (heading 85.25); radar apparatus, radio navigational aid apparatus or radio remote control apparatus (heading 85.26); connectors for optical fibres, optical fibre bundles or cables (heading 85.36); numerical control apparatus of heading 85.37; sealed beam lamp units of heading 85.39; optical fibre cables of heading 85.44;

(ij) Searchlights or spotlights of heading 94.05;

(k) Articles of Chapter 95;

(l) Monopods, bipods, tripods and similar articles, of heading 96.20;

(m) Capacity measures, which are to be classified according to their constituent material; or

(n) Spools, reels or similar supports (which are to be classified according to their constituent material, for example, in heading 39.23 or Section XV).

2.- Subject to Note 1 above, parts and accessories for machines, apparatus, instruments or articles of this Chapter are to be classified according to the following rules :

(a) Parts and accessories which are goods included in any of the headings of this Chapter or of Chapter 84, 85 or 91 (other than heading 84.87, 85.48 or 90.33) are in all cases to be classified in their respective headings;

(b) Other parts and accessories, if suitable for use solely or principally with a particular kind of machine, instrument or apparatus, or with a number of machines, instruments or apparatus of the same heading (including a machine, instrument or apparatus of heading 90.10, 90.13 or 90.31) are to be classified with the machines, instruments or apparatus of that kind;

(c) All other parts and accessories are to be classified in heading 90.33.

3.- The provisions of Notes 3 and 4 to Section XVI apply also to this Chapter.

4.- Heading 90.05 does not apply to telescopic sights for fitting to arms, periscopic telescopes for fitting to submarines or tanks, or to telescopes for machines, appliances, instruments or apparatus of this Chapter or Section XVI; such telescopic sights and telescopes are to be classified in heading 90.13.

5.- Measuring or checking optical instruments, appliances or machines which, but for this Note, could be classified both in heading 90.13 and in heading 90.31 are to be classified in heading 90.31.

6.- For the purposes of heading 90.21, the expression "orthopaedic appliances" means appliances for :

- Preventing or correcting bodily deformities; or

- Supporting or holding parts of the body following an illness, operation or injury.

Orthopaedic appliances include footwear and special insoles designed to correct orthopaedic conditions, provided that they are either (1) made to measure or (2) mass-produced, presented singly and not in pairs and designed to fit either foot equally.

7.- Heading 90.32 applies only to :

(a) Instruments and apparatus for automatically controlling the flow, level, pressure or other variables of liquids or gases, or for automatically controlling temperature, whether or not their operation depends on an electrical phenomenon which varies according to the factor to be automatically controlled, which are designed to bring this factor to, and maintain it at, a desired value, stabilised against disturbances, by constantly or periodically measuring its actual value; and

(b) Automatic regulators of electrical quantities, and instruments or apparatus for automatically controlling non-electrical quantities the operation of which depends on an electrical phenomenon varying according to the factor to be controlled, which are designed to bring this factor to, and maintain it at, a desired value, stabilised against disturbances, by constantly or periodically measuring its actual value.

GENERAL

(I) GENERAL CONTENT AND ARRANGEMENT OF THE CHAPTER

This Chapter covers a wide variety of instruments and apparatus which are, as a rule, characterised by their high finish and high precision. Most of them are used mainly for scientific purposes (laboratory research work, analysis, astronomy, etc.), for specialised technical or industrial purposes (measuring or checking, observation, etc.) or for medical purposes.

The Chapter includes in particular :

(A) A wide group comprising not only simple optical elements of headings 90.01 and 90.02, but also optical instruments and apparatus ranging from spectacles of heading 90.04 to more complex instruments used in astronomy, photography, cinematography or for microscopic observation.

(B) Instruments and apparatus designed for certain specifically defined uses (surveying, meteorology, drawing, calculating, etc.).

(C) Instruments and appliances for medical, surgical, dental or veterinary uses, or for related purposes (radiology, mechano-therapy, oxygen therapy, orthopaedy, prosthetics, etc.).

(D) Machines, instruments and appliances for testing materials.

(E) Laboratory instruments and appliances.

(F) A large group of measuring, checking or automatically controlling instruments and apparatus, whether or not optical or electrical and in particular those of heading 90.32 as defined in Note 7 to the Chapter.

Some of these instruments are specified in certain headings, for example, compound optical microscopes (heading 90.11), electron microscopes (heading 90.12), other instruments and apparatus are covered by more general descriptions in headings which refer to a particular science, industry, etc. (e.g., astronomical instruments of heading 90.05, surveying instruments and appliances of heading 90.15, X-ray, etc., apparatus of heading 90.22). This Chapter also includes vacuum apparatus of a kind used in medical, surgical, dental or veterinary sciences (**heading 90.18**).

There are certain exceptions to the general rule that the instruments and apparatus of this Chapter are high precision types. For example, the Chapter also covers ordinary goggles (heading 90.04), simple magnifying glasses and non-magnifying periscopes (heading 90.13), divided scales and school rules (heading 90.17) and fancy hygrometers, irrespective of their accuracy (heading 90.25).

Except for certain exclusions referred to in Note 1 to this Chapter (e.g., rubber or leather washers and gaskets, and leather diaphragms for meters), the instruments, apparatus and parts thereof falling in this Chapter may be of any material (including precious metals or metal clad with precious metal, precious or semi-precious stones (natural, synthetic or reconstructed)).

(II) INCOMPLETE OR UNFINISHED MACHINES, APPARATUS, ETC.

(See General Interpretative Rule 2 (a))

Provided they have the essential character of the complete or finished article, incomplete or unfinished machines, appliances, instruments or apparatus are classified with the corresponding complete or finished articles (for example, a photographic camera or a microscope presented without its optical elements or an electricity supply meter without its totalling device).

(III) PARTS AND ACCESSORIES

(Chapter Note 2)

Subject to Chapter Note 1, parts or accessories identifiable as suitable for use **solely or principally** with the machines, appliances, instruments or apparatus of this Chapter are classified with those machines, appliances, etc.

This general rule **does not**, however, **apply to** :

(1) Parts or accessories which in themselves constitute articles falling in any particular heading of this Chapter or of **Chapter 84**, **85** or **91** (**other than** the residual **heading 84.87**, **85.48** or **90.33**. For example, a vacuum pump for an electron microscope remains a pump of **heading 84.14**; transformers, electro-magnets, capacitors, resistors, relays, lamps or valves, etc., remain classified in **Chapter 85**; the optical elements of **heading 90.01** or **90.02** remain in the headings cited regardless of the instruments or apparatus to which they are to be fitted; a clock or watch movement is always classified in **Chapter 91**; a photographic camera falls in **heading 90.06** even if it is of a kind designed for use with another instrument (microscope, stroboscope, etc.).

(2) Parts or accessories suitable for use with several categories of machines, appliances, instruments or apparatus falling in different headings of this Chapter are classified in **heading 90.33**, **unless** they are in themselves complete instruments, etc., specified in another heading (see paragraph (1) above).

(IV) MULTI-FUNCTION OR COMPOSITE MACHINES, APPARATUS, ETC.; FUNCTIONAL UNITS

(Chapter Note 3)

Note 3 specifies that the provisions of Notes 3 and 4 to Section XVI apply also to this Chapter (see Parts (VI) and (VII) of the General Explanatory Note to Section XVI).

In general, multi-function machines are classified according to the principal function of the machine.

Multi-function machines are able to carry out different operations.

Where it is not possible to determine the principal function, and where, as provided in Note 3 to Section XVI, the context does not otherwise require, it is necessary to apply General Interpretative Rule 3 (c).

Composite machines or apparatus consisting of two or more machines or apparatus of different kinds, fitted together to form a whole, consecutively or simultaneously performing **separate** functions which are generally complementary and are described in different headings of this Chapter, are also classified according to the principal function of the composite machine or apparatus.

For the purposes of the above provisions, machines or apparatus of different kinds are taken to be **fitted together to form a whole** when incorporated one in the other or mounted one on the other, or mounted on a common base or frame or in a common housing.

Assemblies of machines or apparatus should not be taken to be fitted together to form a whole unless the machines or apparatus are designed to be permanently attached either to each other or to a common base, frame, housing, etc. This **excludes** assemblies which are of a temporary nature or are not normally built as a composite machine, apparatus, etc.

The bases, frames or housings may be provided with wheels so that the composite machines or apparatus can be moved about as required during use, **provided** they do not thereby acquire the character of an article (e.g., a vehicle) more specifically covered by a particular heading of the Nomenclature.

Floors, concrete bases, walls, partitions, ceilings, etc., even if specially fitted out to accommodate machines or apparatus should not be regarded as a common base joining such machines or apparatus to form a whole.

The provisions of Note 3 to Section XVI **need not be invoked** when the composite machines or apparatus are covered as such by a particular heading."

This Chapter covers, as functional units, for example, the electrical (including electronic) instruments or apparatus which make up an **analogue or digital telemetering system**. These are essentially the following :

(I) Apparatus at the transmitting end :

(i) **A primary detector** (transducer, transmitter, analogue-digital converter, etc.) which transforms the quantity to be measured, whatever its nature, into a proportional current, voltage or digital signal.

(ii) **A measurement amplifier, transmitter and receiver basic unit** which (if necessary) boosts this current, voltage or digital signal to the level required by the pulse or frequency-modulated transmitter.

(iii) **A pulse or frequency-modulated transmitter** which transmits an analogue or digital signal to another station.

(II) Devices at the receiving end :

(i) **A pulse, frequency-modulated or digital signal receiver** which converts the information into an analogue or digital signal.

(ii) **A measurement amplifier or converter** which, if necessary, amplifies the analogue or digital signal.

(iii) **Indicating or recording instruments** calibrated in terms of the primary quantity and equipped with a mechanical pointer or opto-electronic display.

Telemetering systems are mainly used in oil, gas and production pipelines, water, gas and sewage disposal installations and environmental monitoring systems.

Line or radio transmitters and receivers for telemetering pulses remain in their respective headings (**heading 85.17**, **85.25** or **85.27**, as the case may be) **unless** they are combined as a single unit with the instruments and apparatus referred to in (I) and (II) above or the whole forms a functional unit within the meaning of Note 3 to Chapter 90; the complete unit then falls in this Chapter.

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In addition to the exclusions mentioned in the text of the Explanatory Notes, the following are always **excluded** from this Chapter :

(a) Articles of a kind used in machines, appliances or for other technical uses, of vulcanised rubber other than hard rubber (**heading 40.16**), of leather or of composition leather (**heading 42.05**) or of textile material (**heading 59.11**).

(b) Parts of general use, as defined in Note 2 to Section XV, of base metal (**Section XV**) or similar goods of plastics (**Chapter 39**).

(c) Lifting or handling machinery (**headings 84.25** to **84.28** and **84.86**); fittings for adjusting work or tools on machine-tools or water-jet cutting machines, of **heading 84.66**, including fittings with optical devices for reading the scale (for example, "optical" dividing heads) but not those which are in themselves essentially optical instruments (for example, alignment telescopes); radar apparatus, radio navigational aid apparatus or radio remote control apparatus (**heading 85.26**).

(d) Spacecraft equipped with instruments or apparatus of this Chapter (**heading 88.02**).

(e) Toys, games, sports requisites and other articles of **Chapter 95**, and parts and accessories thereof.

(f) Capacity measures; these are classified according to their constituent material.

(g) Spools, reels or similar supports (classified according to their constituent material, for example, in **heading 39.23** or **Section XV**).