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REVIEW SUB-COMMITTEE

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NR0355E1
(+ Annexes I to III)

O. Eng.

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COMPREHENSIVE REVIEW OF THE EXPLANATORY NOTES

POSSIBLE AMENDMENT OF THE EXPLANATORY NOTES

TO HEADINGS 84.01 TO 84.29

(Item C.1 on Agenda)

Reference documents :

NR0302E1 (RSC/26)

NR0332E2 – Annex E/11 (RSC/26 - Report)

I. BACKGROUND

1. At its 23rd Session (March 2001), the Review Sub-Committee discussed the issue of the comprehensive review of the HS Explanatory Notes, taking into account the points raised by the Secretariat in Doc. NR0150E1, in particular the scope of the updating of the existing Explanatory Notes, by :
 - deleting references to obsolete products and technology,
 - substituting references to current products and technology,
 - restructuring the Notes to make them easier to understand, and
 - supplementing the Notes to make them more complete.
2. In accordance with these discussions, amendments to the Explanatory Notes to headings 84.01 to 84.29 were prepared as a joint proposal by the Secretariat and an officer of the Swedish Administration.

Note : Shaded parts will be removed when documents are placed on the WCO documentation database available to the public.

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NR0355E1

3. At its 26th Session, the Review Sub-Committee carried out a preliminary examination of the proposed amendments and agreed to continue the discussion at its next session.

II. SECRETARIAT COMMENTS

4. The present document is a revised version of Doc. NR0302E1 prepared by the Secretariat for the 26th Session of the Review Sub-Committee.
5. With a view to facilitating the discussion, the Secretariat has set up three annexes to the present document :
- In Annex I the usual presentation of the proposed amendments and new texts is used (i.e., “delete and substitute” format).
 - In Annex II a presentation involving strikethrough and underlining is used : the proposed deletions are indicated by “strikethrough” text, whereas new texts are indicated by underlining. Texts that were merely renumbered or relettered have not been included.
 - In Annex III the comments on the suggested changes made by delegates at the Sub-Committees 26th Session are reproduced.
6. The **Swedish** “Explanatory Memorandum” and the Secretariat’s own comments (in bold) are reproduced below.

Explanatory comments for each heading

Section XVI. General.

7. ADP machines are often used to control other machines with which they form a functional unit, therefore, it is suggested to insert a reference to those machines in the General Explanatory Notes.

Chapter 84. General.

8. Correction of General EN (decreasing volume of trade in typewriters - important trade in electro-magnetic valves).

Heading 84.01.

9. The Explanatory Note was aligned on the numerical order of the subheadings.

Heading 84.05.

10. New exclusion (b); exclusion (c) amended.
11. The amendment is based on a text in the Official Journal of the **European Communities** (Explanatory Notes to the **EC** Combined Nomenclature).

12. **The Secretariat has no objections to the new proposed exclusion (b), as coke ovens are expressly mentioned in the Explanatory Note to heading 84.17. Meanwhile, it leaves to the Sub-Committee the decision on the insertion of the new generator as an example of an article classified in heading 85.43 (new exclusion (c)).**

Heading 84.12.

13. No amendment has been recommended, however it should be noted that piston steam engines (heading 84.12) have largely been replaced by steam turbines (heading 84.06).
14. **The Secretariat would ask the Review sub-Committee to indicate whether it wishes to maintain Part (F) of the Explanatory Note to heading 84.12 (page 1417), or whether it should be deleted.**

Heading 84.13.

15. New exclusions (f) and (g).
16. The amendment is based on a text in the Official Journal of the **European Communities** (Explanatory Notes to the **EC** Combined Nomenclature).
17. **The Secretariat is able to accept the two exclusions as proposed, taking into account that the described apparatus seem to clearly fulfil the conditions of apparatus classified in headings 90.18 and 90.21, respectively. If the Sub-Committee believes that more information is needed in this connection, a classification question could be presented to the HS Committee. The proposed new exclusions were placed in square brackets in the Annex to this document.**

Heading 84.14.

18. Reference to exhaust-gas turbocharger added.
19. New exclusion (a) exhaust-gas turbines.
20. The amendments are based on a text in the Official Journal of the **European Communities** (Explanatory Notes to the **EC** Combined Nomenclature).
21. **Clarifications of the special compressor, the exhaust-gas turbocharger and the exhaust-gas turbines are needed. If the Sub-Committee agrees with this approach, more information should be submitted to the Secretariat and a document will be prepared for discussion at the HS Committee's next Session. The proposed amendments have been placed in square brackets in the Annex.**

Heading 84.17.

22. The Explanatory Note was aligned on the numerical order of the subheadings.

Heading 84.22.

23. The Explanatory Note was aligned on the numerical order of the subheadings.

Heading 84.26.

24. The Explanatory Note was aligned on the numerical order of the subheadings.
25. New item (6) - tower cranes – subheading 8426.20.
26. It would appear that tower cranes are not covered by any of the crane categories mentioned in the Explanatory Note to heading 84.26. Based on information from the Internet and documents provided by the UK company Delta Tower Cranes, a short generic description of tower cranes was prepared and suggested as a new item (6), following the numerical order of the subheadings.

Heading 84.28.

27. The Explanatory Note was aligned on the numerical order of the subheadings.
28. Description of rack and pinion driven lifts added.
29. Reference to moving walkways added.
30. New items (L) - patient lifts, and (M) - stair lifts.
31. The amendment is based on a text in the Official Journal of the European Communities (Explanatory Notes to the EC Combined Nomenclature).
32. According to a Swedish manufacturer (Alimak AB), rack and pinion driven lifts form a specific category of lifts; therefore, a generic description of those lifts was prepared in co-operation with the manufacturer.

Heading 84.29.

33. The Explanatory Note was aligned on the numerical order of the subheadings.

III. CONCLUSION

34. The Sub-Committee is invited to examine the draft amendments to the Explanatory Notes to headings 84.01 to 84.29, as set out in the Annexes to this document, while take into account the comments made by delegates at its last session, as reproduced in Annex III.

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AMENDMENTS TO THE EXPLANATORY NOTES
TO BE MADE BY CORRIGENDUM

SECTION XVI.

Page 1386. General. Part (III). First sentence.

Insert “automatic data processing machines,” after “control panels,”.

CHAPTER 84.

Page 1393. General. Part (A).

1. Second paragraph. Second sentence.

Delete “electro-mechanical hand tools and”.

2. Third paragraph. Item (3).

Delete “relay operated typewriters” and substitute “valves”.

Pages 1397 to 1399. Heading 84.01. Parts (II) and (III).

Renumber present parts (II) and (III) as (III) and (II), respectively, and move the text of these parts accordingly.

Page 1405. Heading 84.05. Exclusion paragraph.

1. New exclusion (b).

Insert the following new exclusion (b) :

“(b) Town gas generators (coking ovens), as used in gasworks (**heading 84.17**).”

2. Present exclusion (b).

Delete “(**heading 85.43**)” and substitute “, and electrolytic gas generators for the generation of, e.g., nitrogen dioxide, hydrogen sulphide or prussic acid (**heading 85.43**)”.

Reletter present exclusion (b) as (c).

Page 1421. Heading 84.13. Exclusion paragraph. New exclusions (f) and (g).

Insert the following new exclusions (f) and (g) :

[“(f) Pumps (“medical suction pumps”) fitted with a suction device for drawing off secretions (**heading 90.18**).”]

["(g) Pumps designed to be worn, carried or implanted in the body, for dispensing medicine (**heading 90.21**)."]

Page 1422. Heading 84.14. Part (A). Fifth paragraph. New second sentence.

Insert the following new second sentence :

"A special type of compressor is the exhaust-gas turbocharger used in internal-combustion piston engines to increase power output."

Page 1424. Heading 84.14. Exclusion paragraph. New exclusion (a).

Insert the following new exclusion (a) :

"(a) Exhaust-gas turbines (**heading 84.11**)."

Reletter present exclusions (a) to (c) as (b) to (d), respectively.

Page 1429. Heading 84.17. Second paragraph.

1. Item 2.

Delete "and type-metal furnaces for type-founding machines".

2. Items (5) to (10).

Re-number items (5) to (9) and (10) as (6) to (10) and (5), respectively, and move the text of these items accordingly.

Page 1447. Heading 84.22. First paragraph. Items 3 to 6.

Re-number present items (3), (4), (5) and (6) as (6), (3), (4) and (5), respectively, and move the text of these items accordingly.

Pages 1458 and 1459. Heading 84.26. Sixth paragraph. New item (6).

Insert the following new item (6) :

"(6) **Tower cranes.** These cranes comprise essentially a tower of considerable height, fixed or running on rail, a main jib, horizontal or luffing (changeable jib angle), fitted with trolleys, winches, service platforms and a cab for the operator, a counterweight jib with counterweights, tie bars to support the jibs, and a slewing device, either at the top or at the bottom, to enable the crane to rotate. Tower cranes may incorporate a micro tower crane, on the top of either a special mast or a hoist mast, and a lift to facilitate the access for the operator."

Renumber present items (1), (2), (3), (4), (5), (6), (7), (8), (9) and (10) as (10), (8), (7), (9), (1), (2), (3), (4), (5) and (11), respectively, and move the text of these items accordingly.

Page 1462. Heading 84.28. Part (I).

1. Item (D). New second paragraph.

Insert the following new second paragraph :

“Rack and pinion driven lifts or hoists also belong to this category. These lifts and hoists consist of a lift cage, fitted with a motor that drives a pinion, and a mast, equipped with a toothed rack. When the pinion is engaged with the toothed rack, it permits the lift cage to move along the mast, up or down, at a controlled speed.”

2. Items (A) to (E).

Renumber present items (A), (B), (C), (D) and (E) as (C), (D), (E), (A) and (B), respectively, and move the text of these items accordingly.

Page 1463. Heading 84.28. Part (II).

1. Item (A). Last sentence.

Insert “, moving walkways” after “escalators”.

2. Items (A) to (C).

Reletter present items (A), (B) and (C) as (B), (C) and (A), respectively, and move the text of these items accordingly.

Page 1464. Heading 84.28. Part (III). New items (L) and (M).

Insert the following new items (L) and (M) :

“(L) **Patient lifts.** These are devices with a supporting structure and a seat for the raising and lowering of seated persons, e.g., in a bathroom or onto a bed. The mobile seat is fixed to the supporting structure by means of ropes or chains.

(M) **Stair lifts.** These are lifting devices, fitted with a load platform, which are fixed to banisters and are used to move disabled persons or wheelchairs with their occupant up or down stairs.”

Page 1466 to 1467. Heading 84.29. Second paragraph. Items (D) to (IJ).

Reletter present items (D), (E), (F), (G), (H) and (IJ) as (F), (G), (H), (IJ), (D) and (E), respectively, and move the text of these items accordingly.

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AMENDMENTS TO THE EXPLANATORY NOTES

TO BE MADE BY CORRIGENDUM

SECTION XVI.

Page 1386. General. Part (III). First sentence.

Accessory instruments and apparatus (e.g., manometers, thermometers, level gauges or other measuring or checking instruments, output counters, clockwork switches, control panels, automatic data processing machines, automatic regulators) presented with the machine or apparatus with which they normally belong are classified with that machine or apparatus, if they are designed to measure, check, control or regulate one specific machine or apparatus (which may be a combination of machines (see Part VI below) or a functional unit (see Part VII below)).

CHAPTER 84.

Page 1393. General. Part (A).

1. Second paragraph. Second sentence.

However, certain machines are specified in headings of Chapter 85 (e.g., ~~electro-mechanical hand tools and~~ electro-mechanical domestic appliances) while Chapter 84 on the other hand covers certain non-mechanical apparatus (e.g., steam generating boilers and their auxiliary apparatus, and filtering apparatus).

2. Third paragraph. Item (3).

(3) Machines operated electro-magnetically (e.g., electro-magnetic ~~relay operated typewriters~~ valves) or incorporating electro-magnetic devices (e.g., textile looms with electrical automatic stop motions, cranes with electro-magnetic lifting heads and lathes with electro-magnetic chucks).

Pages 1397 to 1399. Heading 84.01. Parts (II) and (III).

(III II) MACHINERY AND APPARATUS FOR ISOTOPIC SEPARATION

This group covers all mechanical, thermal or electrical apparatus and devices specially designed for the enrichment of a chemical element or of a compound of that element in one of its isotopes, or for the complete separation of the constituent isotopes.

The most important are those used for the production of heavy water (deuterium oxide) or for the enrichment of uranium in U 235.

The apparatus and devices used for the production of heavy water by enrichment of natural water include :

- (1) Special fractional distillation and rectification apparatus comprising a very large number of plates arranged in clusters and in cascade and utilising the slight difference in boiling point between heavy water and normal water to obtain head fractions which are continually more depleted in heavy water and tail fractions which are continually more enriched.

- (2) Apparatus which, by low-temperature fractional distillation of liquid hydrogen, separates the deuterium, which can then be combusted to obtain heavy water.
- (3) Apparatus for the production of heavy water or deuterium compounds, based on isotopic exchange, sometimes in the presence of catalytic agents, for example by the " dual-temperature " method or by contact of different liquid or gaseous hydrogenous phases.
- (4) Electrolytic cells intended for the production of heavy water by water electrolysis, and apparatus combining electrolysis with isotopic exchange between the hydrogen produced and the originating water itself.

For the enrichment of uranium in U 235, the following apparatus is most often used :

- (1) Special centrifuges called " gas " (uranium hexafluoride) centrifuges, whose cylindrical rotor (" bowl "), of plastic material or steel, rotates at very high speeds.
These centrifuges are treated internally against the corrosive effects of uranium hexafluoride. In practice, a very large number of units is used, arranged in cascade and operating down-current or counter-current.
- (2) Uranium isotope separators (gaseous diffusion type). In this equipment, gaseous uranium hexafluoride is separated into two fractions, with slightly different contents of uranium 235 compared to the starting gas, by diffusion through a porous membrane (" barrier ") inside a diffusion chamber (which may be tubular). By repeating the operation many times pure uranium 235 hexafluoride can be obtained.
- (3) " Nozzle " apparatus (Becker process), in which a stream of gas (uranium hexafluoride and helium or hydrogen) is injected at high speed into a highly incurved nozzle. A " paring tube " at the outlet separates the enriched fraction of uranium hexafluoride.

Calutrons for electro-magnetic separation are also classified in this heading.

(III#) FUEL ELEMENTS (CARTRIDGES) NON-IRRADIATED, FOR NUCLEAR REACTORS

Fuel elements (cartridges), non-irradiated, for nuclear reactors consist of fissile or fertile material contained in a sheath, generally of base metal (e.g., of zirconium, aluminium, magnesium, stainless steel), fitted with special attachments for handling.

Fissile fuel elements may contain natural uranium, either in the metallic state or as compounds (oxides, carbides, nitrides, etc.), uranium enriched in uranium 235 or 233 or in plutonium, either in the metallic state or as compounds, or thorium enriched in plutonium. Fertile fuel elements (for example, with thorium or depleted uranium), when placed at the periphery of the reactor to reflect neutrons, become fissile after absorbing some of the neutrons.

Fuel elements are of different types, for example :

- (1) Combustible metals or alloys thereof in the form of bars or tubes sheathed in base metal. This metallic sheath may be flanged to facilitate heat exchange, and the element may be fitted with a support and a head for convenience of insertion into and extraction from the reactor.
- (2) Dispersions of the fissile fuel in graphite in the form of bars, plates or spheres encased in graphite or consisting of other types of dispersions and cermets. These are flanged or fitted in the same way as the fuel elements (cartridges) described in (1) above.

(3) An assembly of :

- (i) A series of sandwiched plates consisting of the fissile or fertile fuel (metal or ceramic compound) coated on the outside with inert metal.
- (ii) Inert metal tubes filled with pellets of uranium dioxide or carbide.
or
- (iii) Concentric fissile metal tubes sheathed with inert metal.

All these types of fuel elements (cartridges) are fitted with supports which also serve to keep them spaced apart and fixed in place; they often have an outer casing. All the sub-elements constituting these fuel elements (cartridges) are mounted on a common base and attached to a common head.

Presented separately, these sub-elements (e.g., stainless steel sheaths filled with nuclear fuel and sealed) are classified as **parts** of fuel elements (cartridges).

Microspheres of nuclear fuel coated with layers of carbon or silicon carbide, intended for introduction into spherical or prismatic fuel elements, and spent (irradiated) fuel elements (cartridges), fall in **heading 28.44**.

Page 1405. Heading 84.05. Exclusions (b) and (c).

(b) Town gas generators (coking ovens), as used in gasworks (heading 84.17).

(c) Ozone generating and diffusing apparatus, electric, designed for non-therapeutic purposes (e.g., for industrial uses, for the ozonisation of premises), and electrolytic gas generators for the generation of, e.g., nitrogen dioxide, hydrogen sulphide or prussic acid (heading 85.43) and ozonotherapy apparatus (heading 90.19).

Page 1421. Heading 84.13. New exclusions (f) and (g).

[(f) Pumps ("medical suction pumps") fitted with a suction device for drawing off secretions (heading 90.18).]

[(g) Pumps designed to be worn, carried or implanted in the body, for dispensing medicine (heading 90.21).]

Page 1422. Heading 84.14. Part (A). Fifth paragraph.

There are several types of compressors, for example, reciprocating piston, centrifugal, axial and rotary compressors. A special type of compressor is the exhaust-gas turbocharger used in internal-combustion piston engines to increase power output.

Page 1426. Heading 84.14. New exclusion (a).

(a) Exhaust-gas turbines (heading 84.11).

Page 1429. Heading 84.17. Second paragraph.

1. Item 2.

(2) Metal-melting furnaces, including cupolas ~~and type metal furnaces for type~~
~~founding machines.~~

2. Items (5) to (10).

~~(5)~~ Bakery ovens, including biscuit ovens.

~~(6)~~ Coke ovens.

~~(7)~~ Wood carbonisation furnaces.

- (87) Rotary cement ovens and kilns and rotary plaster ovens.
- (98) Ovens and furnaces used in the glass or ceramic industries, including tunnel ovens.
- (109) Enamel baking ovens.

Page 1447. Heading 84.22. First paragraph. Items 3 to 6.

- (34) Bottle or jar closing, corking or capping machines; can closers and sealers (including those closing by soldering).
- (45) Wrapping or cartoning machines, including those with provision for forming, printing, tying, stapling, taping, glueing, closing or otherwise finishing the packing. The heading includes machines for packing filled cans or bottles into external containers (crates, boxes, etc.).
- (56) Labelling machines, including those which also print, cut and gum the labels.
- (63) Machines for aerating beverages. These are, in effect, bottle filling and closing machines with provision for supplying carbon dioxide gas simultaneously with the liquid.

Pages 1458 to 1459. Heading 84.26. Sixth paragraph.

The heading covers :

- (15) **Bridge cranes**, which consist of a powerful lifting unit suspended from a heavy cross beam or “ bridge ”, the whole moving on wide gauge rails. Similar bridge cranes used in nuclear reactors for changing or extracting the fuel elements are also classified here.
- (26) **Gantry cranes and overhead travelling cranes** in which the beam itself runs on rails fixed on walls or on suitable supporting metal structures.
- (37) **Transporter cranes**, fixed or running on rails. These are sometimes very long and normally have a cantilever extension (which may or may not be articulated) over berths or unloading areas and are equipped with a hoisting trolley or crab running along the whole length of the beam. Special types are used for handling blocks of building stone or containers and in shipbuilding.
- (48) **Mobile lifting frames** on tyred wheels, particularly for container handling. These machines may be self-propelled, **provided** they are designed to operate when stationary or, if they are able to move with their load over short distances, that they are simple portals which in most cases consist of a horizontal beam supported by two vertical members (sometimes of the telescopic type), each resting on a set of wheels.
- (59) **Straddle carriers**, which consist of a chassis of the “ straddle ” type, generally with vertical telescopic members for adjusting the height. This chassis is normally mounted on four or more tyred wheels which usually serve both as driving and steering wheels so as to permit manoeuvres within a very small radius.

Owing to their special design they are able to position themselves over a load, lift it by means of special gripping devices, transport it over short distances and then

lower it again. Some of these carriers are sufficiently wide and high to be positioned directly over transport vehicles for lifting or lowering the load.

Straddle carriers are used in factories, warehouses, dock areas, airports, etc., for handling long loads (profile shapes, tree trunks, timber, etc.) or for stacking containers.

- (6) **Tower cranes.** These cranes comprise essentially a tower of considerable height, fixed or running on rail, a main jib, horizontal or luffing (changeable jib angle), fitted with trolleys, winches, service platforms and a cab for the operator, a counterweight jib with counterweights, tie bars to support the jibs, and a slewing device, either at the top or at the bottom, to enable the crane to rotate. Tower cranes may incorporate a micro tower crane, on the top of either a special mast or a hoist mast, and a lift to facilitate the access for the operator.
- (73) **Portal or pedestal cranes**, as used in harbours, which are jib cranes supported on tall four legged pedestals which run on rails of such wide gauge as to span one or more normal railway tracks.
- (82) **Jib or derrick cranes** (but see the introduction to this Explanatory Note regarding railway breakdown cranes, crane lorries, floating cranes, etc.). Jib or derrick cranes are used for lifting loads and sometimes also moving them laterally. They consist essentially of a boom or jib which may be jointed to provide adjustable reach and to facilitate working. The hoisting cable passes over pulleys at the top of the boom and is driven by a winch. The jib or boom may be supported by a vertical support, sometimes of considerable height.
- (94) **Cableways and cable cranes**, which are installations for transporting suspended loads. They consist of one or more bearer cables supported on fixed or movable towers, and a trolley running on the cables and fitted with a mechanism for hoisting and lowering the loads. They are used for handling materials on large construction sites, dams, bridges, quarries, etc.
- (104) **Ships' derricks**, which consist of a fixed upright arm, to the base of which is pivoted a load-carrying arm which can be raised by a pulley system. (See the introduction to this Explanatory Note regarding similar machines mounted on floating pontoons, etc.)
- (1140) **Works trucks fitted with a crane**, which are designed for moving loads over short distances in factories, warehouses, dock areas or airports by means of a light crane mounted on a chassis of the works truck type, usually in the form of a box frame, with a long wheel-base and a wide track to avoid overbalancing.

Page 1462. Heading 84.28. Part (I). Items (A) to (E).

- (AD) **Lifts** are usually operated by winch and cable, or by rams worked by water, air or oil. They are used for raising or lowering a passenger cage or goods platform between vertical guide bars, and are generally fitted with counter-balance weights. The control, stopping, safety, etc., equipment, whether or not electrical, is also classified in this heading **provided** it is presented with the lift itself. The heading also includes manually operated lifts.

Rack and pinion driven lifts or hoists also belong to this category. These lifts and hoists consist of a lift cage, fitted with a motor that drives a pinion, and a mast equipped with a toothed rack. When the pinion is engaged with the toothed rack, it permits the lift cage to move along the mast, up or down, at a controlled speed.

The group also includes so-called “ ship-lifts ”, i.e., very powerful hydraulic or jack operated installations for lifting a vessel and lock basin complete from one canal level to another, and thus replacing normal locks.

- (BE) **Skip hoists** are a type of lift in which bulk material containers are hoisted up a ramp or vertical shaft. They are used for raising coal from mines, for hoisting ores, limestone, fuel, etc., into blast furnaces, lime kilns, etc.

The heading also includes skips for such skip hoists, i.e., large capacity metallic containers or bins often fitted with automatically opening bottoms. Mining skips usually incorporate a cabin for the miners mounted above the load bin.

(CA) **Certain lifting machines :**

- (1) **Lifting gins** consist of a winch mounted on a two-legged or tripod support.
 - (2) **Well drilling derricks** for hoisting the drilling tubes, etc., in petroleum wells, etc. (**other than** those mounted on lorries, etc. - see the introduction to Explanatory Note to heading 84.26).
 - (3) **Telphers** are similar in operation to overhead travelling or transporter cranes. The hoisting trolleys run (sometimes for considerable distances) on overhead rails supported on pylons.
- (DB) **Teleferics** are large winch-operated installations generally for lifting passengers or goods in the mountains. They consist of the bearer and traction cables supported on pylons, and two cabins (or grabs, containers, etc.) which ascend and descend on the bearer cable.
- (EG) **Funiculars** operate on the same principle as teleferics but the coaches run on rails. The heading in this case covers only the traction mechanism and winch; it **excludes** the coaches (**heading 86.05**) and the track (**heading 73.02** or **86.08** according to type).

Page 1463. Heading 84.28. Part (II). Items (A) to (C).

- (AG) **Pneumatic elevators and conveyors** (e.g., pneumatic tube conveyors), in which small containers (for documents, small machined parts, etc.) or bulk materials (grain, straw, hay, sawdust, pulverised coal, etc.) are forced along a tube by an air current (including similar machines for transporting and cleaning grain).
- (BA) **Elevators** used for raising a constant stream of goods or persons vertically or obliquely. They consist essentially of a series of carriers of various types, attached at intervals to a jointed mechanism which turns as a continuous chain. They include bucket lifts for pulverised or granular materials, platform elevators for crates, parcels, etc., finger-tray elevators for sacks, barrels, bales of straw, sheaves, etc., escalators, moving walkways and continuous multiple-cage lifts for passengers, etc.
- (CB) **Conveyors** are used for moving goods, usually in a horizontal direction, sometimes over very long distances (in mines, quarries, etc.). They include :
- (1) **Conveyors operated by continuously-moving carrying or pushing elements**, e.g., bucket, tray or pan type conveyors; scraper or screw conveyors (in which the materials are forced along a trough by a push plate or worm respectively); band, belt, apron, slat, chain, etc., conveyors.

- (2) **Conveyors consisting of a train of motor-driven rollers** (e.g., as used for feeding steel into cogging mills). The heading also covers roller conveyors, not power-driven, usually mounted on bearings (e.g., horizontal roller runways for manoeuvring crates, etc., and gravity roller conveyors), but it **excludes** similar equipment without rollers, e.g., straight, curved or spiral sliding chutes (**heading 73.08, 73.25 or 73.26** according to type).
- (3) **Vibrator or shaker conveyors** operated by vibratory or reciprocating movements of the trough supporting the goods.

Page 1464. Heading 84.28. Part (III). New items (L) and (M).

(L) **Patient lifts.** These are devices with a supporting structure and a seat for the raising and lowering of seated persons, e.g., in a bathroom or onto a bed. The mobile seat is fixed to the supporting structure by means of ropes or chains.

(M) **Stair lifts.** These are lifting devices, fitted with a load platform, which are fixed to banisters and are used to move disabled persons or wheelchairs with their occupant up or down stairs.

Page 1466 to 1467. Heading 84.29. Second paragraph. Items (D) to (I).

(D) **Tamping machines** as used in road making, for packing rail-road ballast, etc. (but see paragraph (a) of the introduction to Explanatory Note to heading 84.30 regarding machines mounted on vehicles of Chapter 86).

(E) **Self-propelled road rollers** as used in road building or other public works (e.g., for levelling the ground or rolling the road surface).

These machines are fitted with heavy cast iron or steel cylinders of large diameter, smooth or studded with metal feet which press into the soil ("sheep's-foot" rollers), or with wheels and heavy grade solid or pneumatic tyres.

(F) **Mechanical shovels (boom, jib or cable type)** which dig into the soil, above or below machine level, by means of an excavating bucket, grab, etc., operated either directly from the end of a boom or jib (shovel excavators, drag shovels, etc.) or, to increase the working range, on a cable or by means of a hydraulic jack suspended from the jib (draglines). In long range **excavators** (slackline draglines), the bucket is operated on a cable running between two movable structures set some distance apart.

(G) **Multi-bucket excavators** in which the digging buckets are fitted on endless chains or on rotating wheels. These machines often incorporate conveyors for discharging the excavated soil, and they are mounted on wheeled or track-laying chassis. Special models are designed for digging or cleaning out trenches, drainage channels, ditches for use in open-cast (open-pit) mines, etc.

(H) **Self-propelled shovel loaders.** These are wheeled or crawler machines with a front-mounted bucket which pick up material through motion of the machine, transport and discharge it.

Some "shovel-loaders" are able to dig into the soil. This is achieved as the bucket, when in the horizontal position, is capable of being lowered below the level of the wheels or tracks.

(LJG) **Loader-transporters** used in mines. These machines, the main function of which is handling and not transport, are equipped with a front-mounted bucket which picks up bulk materials and discharges them into the body of the machine.

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OBSERVATIONS OF THE REVIEW SUB-COMMITTEE

SECTION XVI.

Page 1386. General. Part (III).

United States

- General study currently being carried out by this administration on "automatic data processing machines". Consequently, the US Delegate asked the RSC to postpone the discussion of the amendment of the General Notes to Section XVI.

Heading 84.05.

Page 1405. Exclusions.

Switzerland

- Editorial amendment to the French version :
Exclusion (c) : insert ", par exemple," after "servant à la production".

Canada

- Need additional information about the "electrolytic gas generators" referred to in exclusion (c).

US

- Need additional information about the need for exclusions (b) and (c).

Heading 84.12.

Page 1417. Part (F).

Canada and Switzerland

- Supported deletion of Part (F) of the Explanatory Note to heading 84.12, as indicated in paragraph 14 of the working document.

Heading 84.13.

Page 1421. Exclusions.

Japan

- Need additional information on the machines referred to in the two new exclusions (f) and (g).

Brazil

- Submit the question of where to classify pumps designed to be worn, carried or implanted in the human body, for dispensing medicine to the HS Committee.

Heading 84.14.

Page 1422. Part (A). Fifth paragraph.

United States

- Comments about the proposed new second sentence may be submitted subsequently.

Heading 84.18.

United States

- May submit a proposal for the creation of a subheading Explanatory Note to govern the classification of household-type, combined refrigerator/freezers with separate outer doors.
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