## 74.03 - Refined copper and copper alloys, unwrought.

- Refined copper:

7403.11 -- Cathodes and sections of cathodes

7403.12 -- Wire-bars

7403.13 -- Billets

7403.19 -- Other

- Copper alloys:

7403.21 -- Copper-zinc base alloys (brass)

7403.22 -- Copper-tin base alloys (bronze)

7403.29 -- Other copper alloys (other than master alloys of heading 74.05)

This heading covers unwrought refined copper and copper alloys as defined in Chapter Notes  $\mathbf{1}$  (a) and  $\mathbf{1}$  (b) respectively.

Refined copper containing at least 99.85 % by weight of copper is obtained by electrolytic refining, electrolytic extraction, chemical refining or fire refining. Other refined copper (containing at least 97.5 % by weight of copper) is normally produced by alloying the above-mentioned refined copper with one or more other elements up to the maximum content limits as shown in the table in Chapter Note 1 (a).

Refined copper is cast into ingots or ingot-bars for remelting (e.g., for alloying purposes) or into wire-bars, slabs for rolling, billets (including those of circular cross-section) and similar forms for rolling, extruding, drawing or forging into plates, sheets, strip, wire, tubes and other products.

**Electrolytically refined copper** is sometimes presented in the form of cathodes consisting of plates or sheets with two loops attached by which the original starting sheets were suspended in the electrolytic refining tank, or with the loops cut off, or cut into sections.

Refined copper may also be in the form of **shot** mainly used for alloying purposes and sometimes for grinding into powder. Copper powders and flakes are, however, classified in **heading 74.06**.

This heading further covers cast and sintered slabs, bars, rods and ingots, etc., **provided** they have not been worked after production otherwise than by simple trimming or de-scaling (to remove the set or top surface consisting largely of cuprous oxide) or by shaving, chipping, grinding, etc., to eliminate setting or other casting defects or which have been machined on one surface for inspection purposes (quality control).

Sintered products are obtained from copper powder or copper alloy powders or from copper powder mixed with other metal powders, by pressing (compacting) and sintering (heating to an appropriate temperature below the fusion point of the metals). In the sintered state the products are porous and of low strength and are normally rolled, extruded, forged, etc., to achieve useful density. These rolled, etc., products are excluded (e.g., headings 74.07, 74.09).

The heading also includes wire-bars and billets with their ends tapered or otherwise worked simply to facilitate their entry into machines for converting them into, for example, wire drawing stock (wire-rod) or tubes.

 ${\bf Subject} \ \ {\bf to} \ \ {\bf the} \ \ {\bf above-mentioned} \ \ {\bf concerning} \ \ {\bf working} \ \ {\bf after} \ \ {\bf production}, \ {\bf the} \ \ {\bf cast} \ \ {\bf bars} \ \ {\bf and} \ \ {\bf rods} \ \ {\bf of} \ \ {\bf this} \ \ {\bf heading} \ \ {\bf may} \ \ {\bf include}, \ {\bf in} \ \ {\bf particular}:$ 

- (1) Products (sometimes known as "jets"), accurately cast in special moulds, of round, square or hexagonal section and usually not exceeding 1 m in length.
- (2) Longer products obtained by the continuous casting process in which molten metal is poured continuously into a water-cooled mould where it is rapidly solidified.

Both the "jets" and the continuously cast bars are often used for the same purposes as rolled, drawn or extruded bars.