## Iron and steel

### Notes.

1.- In this Chapter and, in the case of Notes (d), (e) and (f) throughout the Nomenclature, the following expressions have the meanings hereby assigned to them:

### (a) Pig iron

Iron-carbon alloys not usefully malleable, containing more than 2 % by weight of carbon and which may contain by weight one or more other elements within the following limits :

- not more than 10 % of chromium
- not more than 6 % of manganese
- not more than 3 % of phosphorus
- not more than 8 % of silicon
- a total of not more than 10 % of other elements.

# (b) Spiegeleisen

Iron-carbon alloys containing by weight more than 6 % but not more than 30 % of manganese and otherwise conforming to the specification at (a) above.

### (c) Ferro-alloys

Alloys in pigs, blocks, lumps or similar primary forms, in forms obtained by continuous casting and also in granular or powder forms, whether or not agglomerated, commonly used as an additive in the manufacture of other alloys or as de-oxidants, de-sulphurising agents or for similar uses in ferrous metallurgy and generally not usefully malleable, containing by weight 4 % or more of the element iron and one or more of the following :

- more than 10 % of chromium
- more than 30 % of manganese
- more than 3 % of phosphorus
- more than 8 % of silicon
- a total of more than 10 % of other elements, excluding carbon, subject to a maximum content of 10 % in the case of copper.

### (d) Steel

Ferrous materials other than those of heading 72.03 which (with the exception of certain types produced in the form of castings) are usefully malleable and which contain by weight 2 % or less of carbon. However, chromium steels may contain higher proportions of carbon.

#### (e) Stainless steel

Alloy steels containing, by weight, 1.2~% or less of carbon and 10.5~% or more of chromium, with or without other elements.

### (f) Other alloy steel

Steels not complying with the definition of stainless steel and containing by weight one or more of the following elements in the proportion shown:

- 0.3 % or more of aluminium
- 0.0008 % or more of boron
- 0.3 % or more of chromium
- 0.3 % or more of cobalt
- 0.4 % or more of copper
- 0.4 % or more of lead
- 1.65 % or more of manganese
- 0.08 % or more of molybdenum
- 0.3 % or more of nickel
- 0.06 % or more of niobium
- 0.6 % or more of silicon
- 0.05 % or more of titanium
- 0.3 % or more of tungsten (wolfram)
- 0.1 % or more of vanadium
- 0.05 % or more of zirconium
- 0.1 % or more of other elements (except sulphur, phosphorus, carbon and nitrogen), taken separately.

### (g) Remelting scrap ingots of iron or steel

Products roughly cast in the form of ingots without feeder-heads or hot tops, or of pigs, having obvious surface faults and not complying with the chemical composition of pig iron, spiegeleisen or ferro-alloys.

## (h) Granules

Products of which less than 90 % by weight passes through a sieve with a mesh aperture of 1 mm and of which 90 % or more by weight passes through a sieve with a mesh aperture of 5 mm.

# (ij) Semi-finished products

Continuous cast products of solid section, whether or not subjected to primary hot-rolling; and

Other products of solid section, which have not been further worked than subjected to primary hotrolling or roughly shaped by forging, including blanks for angles, shapes or sections.

These products are not presented in coils.

## (k) Flat-rolled products

Rolled products of solid rectangular (other than square) cross-section, which do not conform to the definition at (ij) above in the form of :

- coils of successively superimposed layers, or
- straight lengths, which if of a thickness less than 4.75 mm are of a width measuring at least ten times the thickness or if of a thickness of 4.75 mm or more are of a width which exceeds 150 mm and measures at least twice the thickness.

Flat-rolled products include those with patterns in relief derived directly from rolling (for example, grooves, ribs, chequers, tears, buttons, lozenges) and those which have been perforated, corrugated or polished, provided that they do not thereby assume the character of articles or products of other headings.

Flat-rolled products of a shape other than rectangular or square, of any size, are to be classified as products of a width of 600 mm or more, provided that they do not assume the character of articles or products of other headings.

### (1) Bars and rods, hot-rolled, in irregularly wound coils

Hot-rolled products in irregularly wound coils, which have a solid cross-section in the shape of circles, segments of circles, ovals, rectangles (including squares), triangles or other convex polygons (including "flattened circles" and "modified rectangles", of which two opposite sides are convex arcs, the other two sides being straight, of equal length and parallel). These products may have indentations, ribs, grooves or other deformations produced during the rolling process (reinforcing bars and rods).

### (m) Other bars and rods

Products which do not conform to any of the definitions at (ij), (k) or (l) above or to the definition of wire, which have a uniform solid cross-section along their whole length in the shape of circles, segments of circles, ovals, rectangles (including squares), triangles or other convex polygons (including "flattened circles" and "modified rectangles", of which two opposite sides are convex arcs, the other two sides being straight, of equal length and parallel). These products may:

- have indentations, ribs, grooves or other deformations produced during the rolling process (reinforcing bars and rods);
- be twisted after rolling.

### (n) Angles, shapes and sections

Products having a uniform solid cross-section along their whole length which do not conform to any of the definitions at (ij), (k), (l) or (m) above or to the definition of wire.

Chapter 72 does not include products of heading 73.01 or 73.02.

#### (o) Wire

Cold-formed products in coils, of any uniform solid cross-section along their whole length, which do not conform to the definition of flat-rolled products.

### (p) Hollow drill bars and rods

Hollow bars and rods of any cross-section, suitable for drills, of which the greatest external dimension of the cross-section exceeds 15 mm but does not exceed 52 mm, and of which the greatest internal dimension does not exceed one half of the greatest external dimension. Hollow bars and rods of iron or steel not conforming to this definition are to be classified in heading 73.04.

- 2.- Ferrous metals clad with another ferrous metal are to be classified as products of the ferrous metal predominating by weight.
- 3.- Iron or steel products obtained by electrolytic deposition, by pressure casting or by sintering are to be classified, according to their form, their composition and their appearance, in the headings of this Chapter appropriate to similar hot-rolled products.

## **Subheading Notes.**

1.- In this Chapter the following expressions have the meanings hereby assigned to them:

### (a) Alloy pig iron

Pig iron containing, by weight, one or more of the following elements in the specified proportions:

- more than 0.2 % of chromium
- more than 0.3 % of copper
- more than 0.3 % of nickel
- more than 0.1 % of any of the following elements : aluminium, molybdenum, titanium, tungsten (wolfram), vanadium.

## (b) Non-alloy free-cutting steel

Non-alloy steel containing, by weight, one or more of the following elements in the specified proportions:

- 0.08 % or more of sulphur
- 0.1 % or more of lead
- more than 0.05 % of selenium
- more than 0.01 % of tellurium
- more than 0.05 % of bismuth.

## (c) Silicon-electrical steel

Alloy steels containing by weight at least  $0.6\,\%$  but not more than  $6\,\%$  of silicon and not more than  $0.08\,\%$  of carbon. They may also contain by weight not more than  $1\,\%$  of aluminium but no other element in a proportion that would give the steel the characteristics of another alloy steel.

### (d) High speed steel

Alloy steels containing, with or without other elements, at least two of the three elements molybdenum, tungsten and vanadium with a combined content by weight of  $7\,\%$  or more,  $0.6\,\%$  or more of carbon and 3 to  $6\,\%$  of chromium.

### (e) Silico-manganese steel

Alloy steels containing by weight:

- not more than 0.7 % of carbon,
- 0.5 % or more but not more than 1.9 % of manganese, and
- 0.6 % or more but not more than 2.3 % of silicon, but no other element in a proportion that would give the steel the characteristics of another alloy steel.
- 2.- For the classification of ferro-alloys in the subheadings of heading 72.02 the following rule should be observed:

A ferro-alloy is considered as binary and classified under the relevant subheading (if it exists) if only one of the alloy elements exceeds the minimum percentage laid down in Chapter Note 1 (c); by analogy, it is considered respectively as ternary or quaternary if two or three alloy elements exceed the minimum percentage.

For the application of this rule the unspecified "other elements" referred to in Chapter Note 1 (c) must each exceed 10 % by weight.

Heading	H.S. Code	
		I PRIMARY MATERIALS; PRODUCTS IN GRANULAR OR POWDER FORM
72.01		Pig iron and spiegeleisen in pigs, blocks or other primary forms.
	7201.10	-Non-alloy pig iron containing by weight 0.5 % or less of phosphorus
	7201.20	-Non-alloy pig iron containing by weight more than 0.5 % of phosphorus
	7201.50	- Alloy pig iron; spiegeleisen
72.02		Ferro-alloys.
		- Ferro-manganese :
	7202.11	Containing by weight more than 2 % of carbon
	7202.19	Other
		- Ferro-silicon :
	7202.21	Containing by weight more than 55 % of silicon
	7202.29	Other
	7202.30	- Ferro-silico-manganese
		- Ferro-chromium :
	7202.41	Containing by weight more than 4 % of carbon
	7202.49	Other

Code 7202.50	
	- Ferro-silico-chromium
7202.60	- Ferro-nickel
7202.70	- Ferro-molybdenum
7202.80	- Ferro-tungsten and ferro-silico-tungsten
	- Other :
7202.91	Ferro-titanium and ferro-silico-titanium
7202.92	Ferro-vanadium
7202.93	Ferro-niobium
7202.99	Other
	Ferrous products obtained by direct reduction of iron ore and other spongy ferrous products, in lumps, pellets or similar forms; iron having a minimum purity by weight of 99.94 %, in lumps, pellets or similar forms.
7203.10	- Ferrous products obtained by direct reduction of iron ore
7203.90	- Other
7204.10	Ferrous waste and scrap; remelting scrap ingots of iron or steel.
7204.10	- Waste and scrap of cast iron
7204.21	- Waste and scrap of alloy steel : Of stainless steel
	Other
	- Waste and scrap of tinned iron or steel
7204.30	- Other waste and scrap :
7204.41	Turnings, shavings, chips, milling waste, sawdust, filings, trimmings and stampings, whether or not in bundles
7204.49	Other
7204.50	- Remelting scrap ingots
	Granules and powders, of pig iron, spiegeleisen, iron or steel.
7205.10	- Granules
	- Powders :
7205.21	Of alloy steel
7205.29	Other
	II IRON AND NON-ALLOY STEEL
	Iron and non-alloy steel in ingots or other primary forms (excluding iron of heading 72.03).
7206.10	- Ingots
7206.90	- Other
	7202.80 7202.91 7202.92 7202.93 7202.99 7203.10 7203.90 7204.10 7204.21 7204.29 7204.30 7204.41 7204.49 7204.50 7205.10 7205.21 7205.29

Heading	H.S. Code	
72.07		Semi-finished products of iron or non-alloy steel.
		- Containing by weight less than 0.25 % of carbon :
	7207.11	Of rectangular (including square) cross-section, the width measuring less than twice the thickness
	7207.12	Other, of rectangular (other than square) cross-section
	7207.19	Other
	7207.20	- Containing by weight 0.25 % or more of carbon
72.08		Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, hot-rolled, not clad, plated or coated.
	7208.10	- In coils, not further worked than hot-rolled, with patterns in relief
		- Other, in coils, not further worked than hot-rolled, pickled:
	7208.25	Of a thickness of 4.75 mm or more
	7208.26	Of a thickness of 3 mm or more but less than 4.75 mm
	7208.27	Of a thickness of less than 3 mm
		- Other, in coils, not further worked than hot-rolled:
	7208.36	Of a thickness exceeding 10 mm
	7208.37	Of a thickness of 4.75 mm or more but not exceeding 10 mm
	7208.38	Of a thickness of 3 mm or more but less than 4.75 mm
	7208.39	Of a thickness of less than 3 mm
	7208.40	-Not in coils, not further worked than hot-rolled, with patterns in relief
		- Other, not in coils, not further worked than hot-rolled :
	7208.51	Of a thickness exceeding 10 mm
	7208.52	Of a thickness of 4.75 mm or more but not exceeding 10 mm
	7208.53	Of a thickness of 3 mm or more but less than 4.75 mm
	7208.54	Of a thickness of less than 3 mm
	7208.90	- Other
72.09		Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, cold-rolled (cold-reduced), not clad, plated or coated.
		- In coils, not further worked than cold-rolled (cold-reduced):
	7209.15	Of a thickness of 3 mm or more
	7209.16	Of a thickness exceeding 1 mm but less than 3 mm
	7209.17	Of a thickness of 0.5 mm or more but not exceeding 1 mm
	7209.18	Of a thickness of less than 0.5 mm
		- Not in coils, not further worked than cold-rolled (cold-reduced):
	7209.25	Of a thickness of 3 mm or more
	7209.26	Of a thickness exceeding 1 mm but less than 3 mm
	7209.27	Of a thickness of 0.5 mm or more but not exceeding 1 mm

Heading	H.S. Code	
	7209.28	Of a thickness of less than 0.5 mm
	7209.90	- Other
72.10		Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, clad, plated or coated.
		- Plated or coated with tin:
	7210.11	Of a thickness of 0.5 mm or more
	7210.12	Of a thickness of less than 0.5 mm
	7210.20	- Plated or coated with lead, including terne-plate
	7210.30	- Electrolytically plated or coated with zinc
		- Otherwise plated or coated with zinc :
	7210.41	Corrugated
	7210.49	Other
	7210.50	-Plated or coated with chromium oxides or with chromium and chromium oxides
		- Plated or coated with aluminium :
	7210.61	Plated or coated with aluminium-zinc alloys
	7210.69	Other
	7210.70	- Painted, varnished or coated with plastics
	7210.90	- Other
72.11		Flat-rolled products of iron or non-alloy steel, of a width of less than 600 mm, not clad, plated or coated.
		- Not further worked than hot-rolled:
	7211.13	Rolled on four faces or in a closed box pass, of a width exceeding 150 mm and a thickness of not less than 4 mm, not in coils and without patterns in relief
	7211.14	Other, of a thickness of 4.75 mm or more
	7211.19	Other
		- Not further worked than cold-rolled (cold-reduced):
	7211.23	Containing by weight less than 0.25 % of carbon
	7211.29	Other
	7211.90	- Other
72.12		Flat-rolled products of iron or non-alloy steel, of a width of less than 600 mm, clad, plated or coated.
	7212.10	- Plated or coated with tin
	7212.20	- Electrolytically plated or coated with zinc
	7212.30	- Otherwise plated or coated with zinc
	7212.40	- Painted, varnished or coated with plastics
	7212.50	- Otherwise plated or coated
	7212.60	- Clad
		•

Heading	H.S. Code	
72.13		Bars and rods, hot-rolled, in irregularly wound coils, of iron or non-alloy steel.
	7213.10	- Containing indentations, ribs, grooves or other deformations produced during the rolling process
	7213.20	- Other, of free-cutting steel
		- Other :
	7213.91	Of circular cross-section measuring less than 14 mm in diameter
	7213.99	Other
72.14		Other bars and rods of iron or non-alloy steel, not further worked than forged, hot-rolled, hot-drawn or hot-extruded, but including those twisted after rolling.
	7214.10	- Forged
	7214.20	-Containing indentations, ribs, grooves or other deformations produced during the rolling process or twisted after rolling
	7214.30	- Other, of free-cutting steel
		- Other :
	7214.91	Of rectangular (other than square) cross-section
	7214.99	Other
72.15		Other bars and rods of iron or non-alloy steel.
	7215.10	- Of free-cutting steel, not further worked than cold-formed or cold-finished
	7215.50	- Other, not further worked than cold-formed or cold-finished
	7215.90	- Other
72.16		Angles, shapes and sections of iron or non-alloy steel.
	7216.10	- U, I or H sections, not further worked than hot-rolled, hot-drawn or extruded, of a height of less than 80 mm
		-L or T sections, not further worked than hot-rolled, hot-drawn or extruded, of a height of less than 80 mm:
	7216.21	L sections
	7216.22	T sections
		- U, I or H sections, not further worked than hot-rolled, hot-drawn or extruded of a height of 80 mm or more:
	7216.31	U sections
	7216.32	I sections
	7216.33	H sections
	7216.40	-L or T sections, not further worked than hot-rolled, hot-drawn or extruded, of a height of 80 mm or more
	7216.50	- Other angles, shapes and sections, not further worked than hot-rolled, hot-drawn or extruded

Heading	H.S. Code	
		- Angles, shapes and sections, not further worked than cold-form or cold-finished:
	7216.61	Obtained from flat-rolled products
	7216.69	Other
		- Other :
	7216.91	Cold-formed or cold-finished from flat-rolled products
	7216.99	Other
72.17		Wire of iron or non-alloy steel.
	7217.10	- Not plated or coated, whether or not polished
	7217.20	- Plated or coated with zinc
	7217.30	- Plated or coated with other base metals
	7217.90	- Other
		III STAINLESS STEEL
72.18		Stainless steel in ingots or other primary forms; semi-finish products of stainless steel.
	7218.10	- Ingots and other primary forms
		- Other :
	7218.91	Of rectangular (other than square) cross-section
	7218.99	Other
72.19		Flat-rolled products of stainless steel, of a width of 600 mm more.
		- Not further worked than hot-rolled, in coils:
	7219.11	Of a thickness exceeding 10 mm
	7219.12	Of a thickness of 4.75 mm or more but not exceeding 10 mm
	7219.13	Of a thickness of 3 mm or more but less than 4.75 mm
	7219.14	Of a thickness of less than 3 mm
		- Not further worked than hot-rolled, not in coils :
	7219.21	Of a thickness exceeding 10 mm
		_
	7219.22	Of a thickness of 4.75 mm or more but not exceeding 10 mm
	7219.22 7219.23	Of a thickness of 4.75 mm or more but not exceeding 10 mm Of a thickness of 3 mm or more but less than 4.75 mm
	7219.23	Of a thickness of 3 mm or more but less than 4.75 mm
		Of a thickness of 3 mm or more but less than 4.75 mm Of a thickness of less than 3 mm
	7219.23 7219.24	Of a thickness of 3 mm or more but less than 4.75 mm Of a thickness of less than 3 mm - Not further worked than cold-rolled (cold-reduced):
	7219.23 7219.24 7219.31	<ul> <li>Of a thickness of 3 mm or more but less than 4.75 mm</li> <li>Of a thickness of less than 3 mm</li> <li>Not further worked than cold-rolled (cold-reduced):</li> <li>Of a thickness of 4.75 mm or more</li> </ul>
	7219.23 7219.24 7219.31 7219.32	<ul> <li>Of a thickness of 3 mm or more but less than 4.75 mm</li> <li>Of a thickness of less than 3 mm</li> <li>Not further worked than cold-rolled (cold-reduced):</li> <li>Of a thickness of 4.75 mm or more</li> <li>Of a thickness of 3 mm or more but less than 4.75 mm</li> </ul>
	7219.23 7219.24 7219.31 7219.32 7219.33	<ul> <li>Of a thickness of 3 mm or more but less than 4.75 mm</li> <li>Of a thickness of less than 3 mm</li> <li>Not further worked than cold-rolled (cold-reduced):</li> <li>Of a thickness of 4.75 mm or more</li> <li>Of a thickness of 3 mm or more but less than 4.75 mm</li> <li>Of a thickness exceeding 1 mm but less than 3 mm</li> </ul>
	7219.23 7219.24 7219.31 7219.32	<ul> <li>Of a thickness of 3 mm or more but less than 4.75 mm</li> <li>Of a thickness of less than 3 mm</li> <li>Not further worked than cold-rolled (cold-reduced):</li> <li>Of a thickness of 4.75 mm or more</li> <li>Of a thickness of 3 mm or more but less than 4.75 mm</li> </ul>

Heading	H.S. Code	
72.20		Flat-rolled products of stainless steel, of a width of less than 600 mm.
		- Not further worked than hot-rolled :
	7220.11	Of a thickness of 4.75 mm or more
	7220.12	Of a thickness of less than 4.75 mm
	7220.20	- Not further worked than cold-rolled (cold-reduced)
	7220.90	- Other
72.21	7221.00	Bars and rods, hot-rolled, in irregularly wound coils, of stainless steel.
72.22		Other bars and rods of stainless steel; angles, shapes and sections of stainless steel.
		-Bars and rods, not further worked than hot-rolled, hot-drawn or extruded:
	7222.11	Of circular cross-section
	7222.19	Other
	7222.20	- Bars and rods, not further worked than cold-formed or cold-finished
	7222.30	- Other bars and rods
	7222.40	- Angles, shapes and sections
72.23	7223.00	Wire of stainless steel.
		IV OTHER ALLOY STEEL; HOLLOW DRILL BARS AND RODS, OF ALLOY OR NON-ALLOY STEEL
72.24		Other alloy steel in ingots or other primary forms; semi-finished products of other alloy steel.
	7224.10	- Ingots and other primary forms
	7224.90	- Other
72.25		Flat-rolled products of other alloy steel, of a width of 600 mm or more.
		- Of silicon-electrical steel :
	7225.11	Grain-oriented
	7225.19	Other
	7225.30	- Other, not further worked than hot-rolled, in coils
	7225.40	Other, not further worked than hot-rolled, not in coils
	7225.50	- Other, not further worked than cold-rolled (cold-reduced)
	7225 01	- Other:
	7225.91	Electrolytically plated or coated with zinc
	7225.92	Otherwise plated or coated with zinc
	7225.99	Other

Heading	H.S. Code	
72.26		Flat-rolled products of other alloy steel, of a width of less than 600 mm.
		- Of silicon-electrical steel :
	7226.11	Grain-oriented
	7226.19	Other
	7226.20	- Of high speed steel
		- Other :
	7226.91	Not further worked than hot-rolled
	7226.92	Not further worked than cold-rolled (cold-reduced)
	7226.99	Other
72.27		Bars and rods, hot-rolled, in irregularly wound coils, of other alloy steel.
	7227.10	- Of high speed steel
	7227.20	- Of silico-manganese steel
	7227.90	- Other
72.28		Other bars and rods of other alloy steel; angles, shapes and sections, of other alloy steel; hollow drill bars and rods, of alloy or non-alloy steel.
	7228.10	- Bars and rods, of high speed steel
	7228.20	- Bars and rods, of silico-manganese steel
	7228.30	- Other bars and rods, not further worked than hot-rolled, hot-drawn or extruded
	7228.40	- Other bars and rods, not further worked than forged
	7228.50	- Other bars and rods, not further worked than cold-formed or cold-finished
	7228.60	- Other bars and rods
	7228.70	- Angles, shapes and sections
	7228.80	- Hollow drill bars and rods
72.29		Wire of other alloy steel.
	7229.20	- Of silico-manganese steel
	7229.90	- Other