

ECLA**EUROPEAN CLASSIFICATION****C21C**

PROCESSING OF PIG-IRON, e.g. REFINING, MANUFACTURE OF WROUGHT-IRON OR STEEL; TREATMENT IN MOLTEN STATE OF FERROUS ALLOYS ([refining metals in general C22B9/00](#))

C21C1/00

Refining of pig-iron; Cast iron

C21C1/02

- . Dephosphorising or desulfurising

C21C1/02B

- . . [\[N: Agents used for dephosphorising or desulfurising\]](#)

C21C1/04

- . Removing impurities other than carbon, phosphorus or sulfur

C21C1/06

- . Constructional features of mixers for pig-iron

C21C1/08

- . Manufacture of cast-iron

C21C1/10

- . Making spheroidal graphite cast-iron

C21C1/10B

- . . [\[N: Nodularising additive agents\]](#)

C21C3/00

Manufacture of wrought-iron or wrought-steel

C21C5/00

Manufacture of carbon-steel, e.g. plain mild steel, medium carbon steel or cast steel [\[N: or stainless steel\]](#)

C21C5/00B

- . [\[N: Manufacture of stainless steel\]](#)

C21C5/02

- . Crucible furnace process [\[N: \(C21C5/00B takes precedence\)\]](#)

C21C5/04

- . Manufacture of hearth-furnace steel, e.g. Siemens-Martin steel [\[N: \(C21C5/00B takes precedence\)\]](#)

C21C5/06

- . . Processes yielding slags of special composition

C21C5/28

- . Manufacture of steel in the converter [\[N: \(C21C5/00B takes precedence\)\]](#)

C21C5/28A

- . . [\[N: Plants therefor\]](#) [\[N9609\]](#)

C21C5/30

- . . Regulating or controlling the blowing

C21C5/30A

- . . . [\[N: Afterburning\]](#) [\[N9705\]](#)

C21C5/32

- . . . Blowing from above [\(C21C5/35 takes precedence\)](#)

C21C5/34

- . . . Blowing through the bath [\(C21C5/35 takes precedence\)](#)

C21C5/35

- . . . Blowing from above and through the bath

C21C5/36

- . . Processes yielding slags of special composition

C21C5/38

- . . Removal of waste gases or dust

C21C5/40

- . . . Offtakes or separating apparatus for converter waste gases or dust

C21C5/42

- . . Constructional features of converters

C21C5/44

- . . . Refractory linings

C21C5/44B	. . . . [N: Equipment used for making or repairing linings]
C21C5/44B2	. . . . . [N: Hot fettling; Flame gunning]
C21C5/44D	. . . . [N: Lining or repairing the taphole]
C21C5/46	. . . Details or accessories
C21C5/46B	. . . . [N: Lances or injectors]
C21C5/46B2	. . . . . [N: Refractory coated lances; Immersion lances]
C21C5/46B4	. . . . . [N: Means for handling, e.g. adjusting, changing, coupling]
C21C5/46D	. . . . [N: Supporting means]
C21C5/46D2	. . . . . [N: Trunnion bearings]
C21C5/46E	. . . . [N: Cooling arrangements]
C21C5/46G	. . . . [N: Tapholes; Opening or plugging thereof]
C21C5/46H	. . . . [N: Charging device for converters]
C21C5/46K	. . . . [N: Measuring and sampling devices]
C21C5/46L	. . . . [N: Vehicles for supporting and transporting a converter vessel]
C21C5/46M	. . . . [N: Skull removal; Cleaning of the converter mouth]
C21C5/48	. . . . Bottoms or tuyères of converters
C21C5/50	. . . . Tilting mechanisms for converters
C21C5/52	. Manufacture of steel in electric furnaces ([N: C21C5/00B takes precedence]; electric heating per se H05B)
C21C5/52A	. . [N: in a plasma heated furnace] [N9606]
C21C5/52B	. . [N: in an alternating current (AC) electric arc furnace]
C21C5/52B2	. . . [N: equipped with burners or devices for injecting gas, i.e. oxygen, or pulverulent materials into the furnace]
C21C5/52C	. . [N: in a direct current (DC) electric arc furnace]
C21C5/52D	. . [N: in an inductively heated furnace]
C21C5/52D2	. . . [N: processing a moving metal stream while exposed to an electromagnetic field, e.g. in an electromagnetic counter current channel]
C21C5/52E	. . [N: in an electrically heated multi-chamber furnace, a combination of electric furnaces or an electric furnace arranged for associated working with a non electric furnace]
C21C5/52G	. . [N: Manufacture of alloyed steels including ferro-alloys]
C21C5/52H	. . [N: Charging of the electric furnace]
C21C5/52P	. . [N: General arrangement or layout of the electric melt shop]
C21C5/54	. . Processes yielding slags of special composition
C21C5/56	. Manufacture of steel by other methods (making liquid steel by direct processes C21B13/00) [N: (C21C5/00B takes precedence)]
C21C5/56B	. . [N: starting from scrap]
C21C5/56B2	. . . [N: Preheating of scrap (apparatus for preheating scrap in general F27D13/00A)]
C21C5/56D	. . [N: operating in a continuous way]
C21C7/00	Treating molten ferrous alloys, e.g. steel, not covered by groups C21C1/00 to C21C5/00 (treating molten metals during moulding B22D1/00, B22D27/00; remelting ferrous metals C22B)

- C21C7/00A . [N: Adding metallic additives] [C9505]
- C21C7/00C . [N: Adding carbon material]
- C21C7/00D . [N: by injecting powdered material]
- C21C7/00D2 . . [N: into the falling stream of molten metal]
- C21C7/00E . [N: using exothermic reaction compositions]
- C21C7/00F . [N: using cored wires]
- C21C7/00G . [N: by introducing material into a current of streaming metal]
- C21C7/00L . [N: Treating in a ladle furnace, e.g. up-/reheating of molten steel within the ladle]
- C21C7/00P . [N: Treating and handling under pressure]
- C21C7/00S . [N: Treatment of slags covering the steel bath, e.g. for separating slag from the molten metal]
- C21C7/04 . Removing impurities by adding a treating agent
- C21C7/06 . . Deoxidising, e.g. killing
- C21C7/064 . . Dephosphorising; Desulfurising
- C21C7/064B . . . [N: Agents used for dephosphorising or desulfurising]
- C21C7/068 . . Decarburising
- C21C7/068B . . . [N: of stainless steel]
- C21C7/072 . . Treatment with gases ([C21C7/06](#), [C21C7/064](#), [C21C7/068](#) take precedence)
- C21C7/076 . . Use of slags or fluxes as treating agents ([C21C7/06](#), [C21C7/064](#), [C21C7/068](#) take precedence)
- C21C7/10 . Handling in a vacuum