

## SECTION C — CHEMISTRY; METALLURGY

### C21 METALLURGY OF IRON

#### C21B MANUFACTURE OF IRON OR STEEL (preliminary treatment of ferrous ores or scrap C22B 1/00)

##### Note(s)

This subclass covers :

- the production of iron or steel from source materials, e.g. the production of pig-iron;
- apparatus specially adapted therefor, e.g. blast furnaces, air heaters (furnaces in general F27).

##### Subclass index

##### MAKING PIG-IRON

In blast furnaces.....	5/00, 7/00, 9/00
Other processes.....	11/00
General features.....	3/00

MAKING IRON.....13/00, 15/00

MAKING LIQUID STEEL BY DIRECT PROCESSES.....13/00

<b>3/00</b>	<b>General features in the manufacture of pig-iron</b> (mixers for pig-iron C21C 1/06) [1, 2006.01]	9/02	• Brick hot-blast stoves [1, 2006.01]
3/02	• by applying additives, e.g. fluxing agents [1, 2006.01]	9/04	• • with combustion shaft [1, 2006.01]
3/04	• Recovery of by-products, e.g. slag [1, 2006.01]	9/06	• • Linings [1, 2006.01]
3/06	• • Treatment of liquid slag [1, 2006.01]	9/08	• Iron hot-blast stoves [1, 2006.01]
3/08	• • • Cooling slag [1, 2006.01]	9/10	• Other details, e.g. blast mains [1, 2006.01]
3/10	• • • Slag pots; Slag cars [1, 2006.01]	9/12	• • Hot-blast valves or slides for blast furnaces [1, 2006.01]
<b>5/00</b>	<b>Making pig-iron in the blast furnace [1, 2006.01]</b>	9/14	• Preheating the combustion air [1, 2006.01]
5/02	• Making special pig-iron, e.g. by applying additives, e.g. oxides of other metals [1, 2006.01]	9/16	• Cooling or drying the hot-blast [1, 2006.01]
5/04	• Making slag of special composition [1, 2006.01]	<b>11/00</b>	<b>Making pig-iron other than in blast furnaces [1, 2006.01]</b>
5/06	• using top gas in the blast furnace process [1, 2006.01]	11/02	• in low shaft furnaces [1, 2006.01]
<b>7/00</b>	<b>Blast furnaces [1, 2006.01]</b>	11/06	• in rotary kilns [1, 2006.01]
7/02	• Internal forms [1, 2006.01]	11/08	• in hearth-type furnaces [1, 2006.01]
7/04	• with special refractories [1, 2006.01]	11/10	• in electric furnaces [1, 2006.01]
7/06	• • Linings for furnaces [1, 2006.01]	<b>13/00</b>	<b>Making spongy iron or liquid steel, by direct processes [1, 2006.01]</b>
7/08	• Top armourings [1, 2006.01]	13/02	• in shaft furnaces [1, 2006.01]
7/10	• Cooling; Devices therefor [1, 2006.01]	13/04	• in retorts [1, 2006.01]
7/12	• Opening or sealing the tap holes [1, 2006.01]	13/06	• in multi-storied furnaces [1, 2006.01]
7/14	• Discharging devices, e.g. for slag [1, 2006.01]	13/08	• in rotary furnaces [1, 2006.01]
7/16	• Tuyères [1, 2006.01]	13/10	• in hearth-type furnaces [1, 2006.01]
7/18	• Bell-and-hopper arrangements [1, 2006.01]	13/12	• in electric furnaces [1, 2006.01]
7/20	• • with appliances for distributing the burden [1, 2006.01]	13/14	• Multi-stage processes [1, 2006.01]
7/22	• Dust arresters [1, 2006.01]	<b>15/00</b>	<b>Other processes for the manufacture of iron from iron compounds (by electrolysis C25C 1/06) [1, 2006.01]</b>
7/24	• Test rods or other checking devices [1, 2006.01]	15/02	• Metallothermic processes, e.g. thermit reduction [1, 2006.01]
<b>9/00</b>	<b>Stoves for heating the blast in blast furnaces [1, 2006.01]</b>	15/04	• from iron carbonyl [1, 2006.01]