

## Scope

The scope of this work on Ferrous Metal Processing is closely linked to the scope of the earlier work on Primary and Secondary Iron and Steel which covered the iron and steel production to the casting process. Starting with the semi-finished products ingots, slabs, blooms and billets obtained from ingot casting or continuous casting the further manufacturing steps, like hot rolling, cold rolling and drawing, hot dip metal coating and the related pre- and after treatment of the shaped steel products, will be covered.

Section 2.3 a of Annex I to Directive 96/61/EC only explicitly names hot rolling mills (> 20 t/h), but cold rolling mills and associated processes, like pickling and degreasing, will also be covered.

Section 2.3 c of the Annex refers to protective smelt metal coats (>2 t/h). No distinction is made between continuous hot dip coating of steel and the hot dip coating of fabricated steel products. Therefore batch hot dip coating of steel fabricates, known as general galvanizing, is part of the work.

Smitheries and ferrous metal foundries (Section 2.3 b and 2.4 of Annex I) are not included in this work and neither are electroplating nor organic coating of steel.

Main operational steps regarding *continuous processing* that will be covered are:

- Reheating and heat treatment of input materials, like slabs, blooms, billets and ingots.
- Surface rectification and preparation processes:  
scarfing, grinding, descaling, degreasing, pickling
- Shaping of steel: rough milling, hot rolling, cold rolling, drawing.
- Processes yielding in special material or product qualities:  
annealing, temper rolling/skin pass rolling
- Hot dip metal coating and finishing.

Regarding *batch hot dip coating* of fabricated steel products the following operational steps will be addressed:

- Surface preparation of fabricated steel: degreasing, rinsing, pickling, fluxing, drying.
- Coating with molten metal.
- After treatment/finishing: cooling, greasing.

This BREF document consists of 4 Parts (A – D). Parts A to C cover the different industrial sub-sectors of the Ferrous Metals Processing sector: A, Hot and Cold Forming; B, Continuous Coating; C, Batch Galvanizing. This structure was chosen because of the differences in nature and scale of the activities covered by the term FMP.

Part D does not cover an industrial sub-sector. It comprises the technical descriptions of a number of environmental measures which are techniques to be considered in the determination of BAT in more than one sub-sector. This was done to avoid repetition of technical descriptions in the three Chapters 4. These descriptions have to be viewed always in connection with the more specific information, referring to the application in individual sub-sectors, which is given in the relevant Chapter 4.