

SCOPE

This document reflects the exchange of information on the activities covered by Annex I categories 2.3 (b), 2.4 and 2.5 (b) of the IPPC Directive, i.e.

“2.3. Installations for the processing of ferrous metals:

- (b) smitheries with hammers the energy of which exceeds 50 kilojoule per hammer, where the calorific power used exceeds 20 MW

2.4. Ferrous metal foundries with a production capacity exceeding 20 tonnes per day

2.5. Installations

- (b) for the smelting, including the alloyage, of non-ferrous metals, including recovered products, (refining, foundry casting, etc.) with a melting capacity exceeding 4 tonnes per day for lead and cadmium or 20 tonnes per day for all other metals.”

In setting up the working scope for this document, the TWG considered the possible interpretation of the threshold values. The TWG compared the pre-defined IPPC scope to the actual existence of installations that meet the above descriptions, in the European Union and in the Candidate Countries. This comparison resulted in a working scope which covers the following:

- the casting of ferrous materials, e.g. grey cast iron, malleable and ductile iron, steel
- the casting of non-ferrous materials, e.g. aluminium, magnesium, copper, zinc, lead and their alloys.

Smitheries were excluded from the scope of the document since no European smitheries were reported which meet the conditions stated in Annex I 2.3 (b), i.e. “Smitheries with hammers the energy of which exceeds 50 kJ per hammer, (and) where the calorific power used exceeds 20 MW”. Accordingly, cadmium, titanium and precious metals foundries, as well as bell and art casting foundries were excluded on capacity grounds.

Continuous casting (into sheets and slabs) has already been covered in the BREF documents on iron and steel production and on non-ferrous metal industries. Therefore it is not dealt with in this document.

Smelting, alloying and the refining of non-ferrous metals are covered in the BREF document on non-ferrous metal industries and will therefore be excluded from the scope of this document. In covering non-ferrous metals in this document, the process is considered to start with the melting of ingots and internal scrap or with liquid metal.

From a process point of view, the following foundry process steps are covered by the scope of this document:

- pattern making
- raw materials storage and handling
- melting and metal treatment
- mould and core production, and moulding techniques
- casting or pouring and cooling
- shake-out
- finishing
- heat treatment.