

Title (en)
METHOD FOR PRODUCING LIQUID PIG IRON

Title (de)
VERFAHREN ZUR HERSTELLUNG VON FLÜSSIGEM ROHEISEN

Title (fr)
PROCEDE DE PRODUCTION DE FONTE BRUTE LIQUIDE

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Application
EP 99960969 A 19991111

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Abstract (en)
[origin: WO0044947A1] The invention relates to a method for producing liquid pig iron, whereby lumpy materials containing iron oxide are reduced to sponge iron in a direct reduction zone by using a reduction gas. The sponge iron is melted down into liquid pig iron in a melt-down gasification zone while feeding carbon carriers and oxygenous gases thereto, and a generator gas containing CO and H₂ is generated. Said generator gas is drawn out of the melt-down gasification zone and is introduced as reduction gas into the direct reduction zone after a dedusting process. A partial stream of dedusted reduction gas is subjected to a gas washing process. Agglomerates containing zinc oxide and iron oxide are introduced into the direct reduction zone and/or into the melt-down gasification zone and/or dust particles containing zinc are injected into the generator gas which is drawn out of or which is to be drawn out of the melt-down gasification zone. In addition, zinc which is carried along is removed as slurry containing zinc from the reduction gas during the gas washing of the dedusted reduction gas. The inventive method makes it possible to economically utilize recyclings containing zinc which are produced in steel works.

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