

Title (en)

METHOD AND DEVICE FOR DECARBURIZING STEELS MELTS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ENTKOHLUNG VON STAHLSCHELMZEN

Title (fr)

PROCEDE ET DISPOSITIF DE DECARBURATION DE MASSES D'ACIER FONDU

Publication

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Application

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Abstract (en)

[origin: WO9719197A1] The invention concerns a method of decarburizing steel melts in a closed metallurgical vessel connected to a vacuum pump and into which oxygen can be supplied by means of a lance and combustible materials by means of a feed device. The method calls for the following steps: a) the melt is poured into the vessel, the pressure reduced continuously to less than 100 mbar and oxygen blown in in order to burn off the carbon, the oxygen being blown in in predefined excess, in addition to the supplementary oxygen used during the decarburization phase; b) at the moment when the oxygen is in partial excess, metallic combustion material is supplied, distributed uniformly throughout the melt. The invention also concerns a device which includes sensors (21 and 29), located in the closable vessel, for the measurement of the melt temperature (T) and pressure (P), respectively, and which are connected via a measurement and control unit (22) to control elements (23, 25) for supplying oxygen (O₂) and metallic combustion materials (A).

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