

Title (en)
COMBUSTION OF THE CO IN SECONDARY METALLURGICAL EXHAUST GAS, WITH CALORIFIC VALUE CONTROL AND VOLUME FLOW CONTROL

Title (de)
HEIZWERT- UND VOLUMENTROMGESTEUERTE VERBRENNUNG DES CO IN SEKUNDÄRMETALLURISCHEM ABGAS

Title (fr)
COMBUSTION DU CO DANS UN GAZ D'ÉCHAPPEMENT MÉTALLURGIQUE SECONDAIRE, AVEC RÉGULATION DE LA VALEUR CALORIFIQUE ET RÉGULATION DU DÉBIT VOLUMIQUE

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Abstract (en)
[origin: WO2021105045A1] The invention relates to a method for the post-combustion of exhaust gases comprising carbon monoxide from metallurgical processes with discontinuously generated exhaust-gas volumes, the composition and/or flow rate of which varies during a period within which exhaust gas is generated, wherein the method comprises conditioning of the exhaust gas prior to the post-combustion, in such a way that at least one combustion gas and/or one additional gas is metered in feedback-controlled fashion to the exhaust gas upstream of the post-combustion, wherein the feedback control is performed in a manner dependent on the composition of the exhaust gas and in a manner dependent on the exhaust-gas volume flow. The invention furthermore relates to a post-combustion device for the post-combustion of exhaust gas during a vacuum treatment of liquid steel in a secondary metallurgical process, comprising at least one flare stack (2) at an exhaust outlet (4) of an exhaust-gas channel (5) of a vacuum pump of a secondary metallurgical plant, means for supplying combustion gas to the flare stack (2), means for feeding an inert gas into the exhaust-gas channel of the vacuum pump upstream of the flare stack (2), means for ascertaining the exhaust-gas volume flow and/or for measuring the exhaust-gas velocity within the exhaust-gas channel (5), means for analyzing the exhaust-gas composition, means for metering the combustion gas and the inert gas, and means for feedback control of the metering of the combustion gas and/or of the inert gas in a manner dependent on the exhaust-gas composition.

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