

Title (en)
FURNACE AND METHOD FOR OPERATING A FURNACE

Title (de)
BRENNOFEN UND VERFAHREN ZUM BETRIEB EINES BRENNOFENS

Title (fr)
FOUR ET PROCÉDÉ POUR FAIRE FONCTIONNER UN FOUR

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Application
EP 21748537 A 20210714

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Abstract (en)
[origin: WO2022089796A1] The invention relates to a method and to a control device for operating a furnace (10), in particular an anode furnace, wherein: the furnace is constituted of a plurality of heating ducts (12) and furnace chambers (13); the furnace chambers are intended for receiving carbon-containing products, in particular anodes, and the heating ducts are intended for controlling the temperature of the furnace chambers; the furnace comprises at least one furnace unit (11); the furnace unit comprises a heating-up zone (18), a firing zone (19) and a cooling zone (20), which for their part are formed from at least one section (37, 38, 39, 40, 41, 42) comprising at least one furnace chamber; an extraction ramp (15) is arranged in a section of the heating-up zone and a burner ramp (16) is arranged in a section of the firing zone; process air is heated in the heating ducts of the firing zone by means of the burner ramp and exhaust gas from the heating ducts of the heating zone is extracted by means of the extraction ramp; operation of the ramps is controlled by means of a control device of the furnace unit; for each of at least two sections an enthalpy stream is determined by means of the control device; a difference between the respective enthalpy streams is determined as a characteristic value; the characteristic value determined in this way is compared to a pre-defined characteristic value; and a furnace condition can be determined on the basis of this comparison.

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