

Title (en)

NOZZLE DEVICE FOR A FURNACE FOR HEAT-TREATING A FLAT STEEL PRODUCT, AND FURNACE EQUIPPED WITH SUCH A NOZZLE DEVICE

Title (de)

DÜSENEINRICHTUNG FÜR EINEN OFEN ZUM WÄRMEBEHANDELN EINES STAHLFLACHPRODUKTS UND MIT EINER SOLCHEN DÜSENEINRICHTUNG AUSGESTATTETER OFEN

Title (fr)

DISPOSITIF TUYÈRE DESTINÉ UN FOUR DE TRAITEMENT THERMIQUE D'UN PRODUIT PLAT EN ACIER, ET FOUR ÉQUIPÉ D'UN TEL DISPOSITIF TUYÈRE

Publication

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Application

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Abstract (en)

[origin: CA2856462A1] The invention relates to a nozzle device for a furnace (100) for heat-treating a flat steel product (B), comprising a central supply pipe (2, 12, 22, 32, 42) that is provided with at least one nozzle opening (6a-6k, 16-16d", 26a'-26c", 36a'-36c", 46a-46c) and one a feed connection (5, 15, 25', 25", 35, 45', 45") for connecting the nozzle device (1, 11, 21, 31, 41) to a gas supply, which feeds a gas (G1, G2, G3a, G3b, G4, G4a, G4b) flowing through the nozzle device (1, 11, 21, 31, 41) and flowing out of the at least one nozzle opening (6a-6k, 16-16d", 26a'-26c", 36a'-36c", 46a-46c) to the nozzle device (1, 11, 21, 31, 41). The invention further relates to a furnace for heat-treating a flat steel product. The nozzle device according to the invention and the furnace ensure optimally consistent results of the respective heat treatment while using simple means, which is achieved in that the nozzle device (1, 11, 21, 31, 41) comprises a first segment (LA1-LA6, LAa'-LAc", LAx-LAz) in which the effective cross section (Q, Qa, Qk) of the nozzle opening is smaller than the effective cross section in a second segment (LA1-LA6, LAa'-LAc", LAx-LAz) that, viewed in the flow direction of the gas (G1, G2, G3a, G3b, G4, G4a, G4b) flowing from the respective feed connection (5, 15, 25', 25", 35, 45', 45") through the nozzle device (1, 11, 21, 31, 41), is arranged further away from the respective feed connection (5, 15, 25', 25", 35, 45', 45").

IPC 8 full level

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