

Title (en)  
DEVICE AND METHOD FOR THE HEAT TREATMENT OF A FLAT PRODUCT

Title (de)  
EINRICHTUNG UND VERFAHREN ZUR WÄRMEBEHANDLUNG EINES FLACHERZEUGNISSES

Title (fr)  
DISPOSITIF ET PROCÉDÉ POUR LE TRAITEMENT THERMIQUE D'UN PRODUIT PLAT

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Application  
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Abstract (en)  
[origin: WO2017144315A1] The invention relates to a device and to a method for the heat treatment of a flat product, in particular strip-shaped sheet metal. Said device comprises a nozzle device, which has a first nozzle system and a second nozzle system, wherein each nozzle system has at least one gas outlet opening, wherein the gas outlet opening in the first nozzle system is directed at the front side of the flat product and the gas outlet opening in the second nozzle system is directed at the back side of the flat product, and conveying means for leading the flat product through the nozzle device in a passage direction (D) during the heat treatment. According to the invention, each nozzle system (1) has at least three zones (3, 4a, 4b) transversely to the passage direction (D), wherein a first zone (3) is located between second zones (4a, 4b). Each zone has a gas supply (9, 10a, 10b), wherein the gas supply (9) and the at least one gas outlet opening (20) in the first zone (3) are designed for the outlet of the gas with a maximum volumetric flow rate. The second zones (4a, 4b) extend toward the first zone (3) from the longitudinal edges (6a, 6b) of the flat product (2). The gas supplies (10a, 10b) or the at least one gas outlet opening (21a, 21b) in the second zones (4a, 4b) is designed for an adjustable volumetric flow rate such that the volumetric flow rate of the gas in the second zones (4a, 4b) can be adjusted during the heat treatment in such a way that vibrations of the sheet metal are avoided or minimized during the heat treatment.

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