

Title (en)

DIFFERENTIAL QUENCHING PROCESS FOR REDUCING THE DEFORMATION OF FLAT METAL PRODUCTS

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Application

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Priority

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Abstract (en)

[origin: ES8505731A1] The invention concerns a method for minimizing deformation during rapid cooling of flat metallurgical products such as sheets, strips, flattened portions, wide sections and the like. The method comprises rapidly cooling the product by means of a fluid (or mixtures of fluids) at temperature TF, comprising at least one vaporizable liquid, with modulation in a direction perpendicular to the direction of advance of the product, so as to impart different cooling speeds to the edges and the axis (case I) or to one edge and the other (case II). The technique may be completed by careful masking of the cooling in the zone for the rapid cooling action, or by controlled precooling prior to said rapid cooling. The method makes it possible to obtain the rapid cooling which is necessary e.g. in quenching operations, while at the same time minimizing the deformations or the internal stress level of flat products.

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