Title (en)

Process and device for the selective heat treatment of the weld seam region of a longitudinally welded pipe.

Title (de)

Verfahren und Vorrichtung zur selektiven Wärmebehandlung des Schweissnahtbereiches eines längsnahtgeschweissten Rohres.

Title (fr)

Procédé et dispositif pour le traitement thermique sélectif de la zone d'un cordon de soudure d'un tube soudé longitudinalement.

Publication

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Application

EP 90106913 A 19900411

Priority

DE 3913973 A 19890427

Abstract (en)

[origin: EP0394754A2] The present invention relates to a process for selective solution-annealing of the weld zone (2, 3) of a longitudinally welded metal pipe (1). The process is especially suitable for pipes (1) having a diameter of less than 100 mm and a wall thickness of less than 2.5 mm, preferably less than 0.7 mm. In the course of the heat treatment, the weld (2) is first heated under a protective gas (1) to such an extent that its outer region (2.1) is fused. This can preferably be effected by an electric arc (7). Subsequently, the weld (2) is selectively held by further heating means (8), for example further arcs, infrared emitters or induction coils, for a presettable period under a protective gas (I) at least at a temperature (Tmin) required for the solution-annealing of the pipe material, but below the melting temperature (Ts) at least in the inner region (2.2) of the weld (2), and then cooled (10) under a protective gas (I). The single or multiple incipient fusion of the outer region (2.1) of the weld (2) does not reduce the quality of the heat treatment in the inner region (2.2), so that the desired corrosion resistance in the latter does not suffer. However, the partial fusion facilitates rapid introduction of heat for heating up the weld. <IMAGE>

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