

Title (en)

PROCESS AND DEVICE FOR THE SELECTIVE HEAT TREATMENT OF THE WELD SEAM REGION OF A LONGITUDINALLY WELDED PIPE

Publication

EP 0394754 A3 19921014 (DE)

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>

IPC 1-7

C21D 9/50

IPC 8 full level

C21D 9/50 (2006.01)

CPC (source: EP)

C21D 9/50 (2013.01)

Citation (search report)

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Designated contracting state (EPC)

AT CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0394754 A2 19901031; EP 0394754 A3 19921014; EP 0394754 B1 19940817; AT E110116 T1 19940915; DE 3913973 A1 19901031; DE 59006808 D1 19940922; ES 2057241 T3 19941016

DOCDB simple family (application)

EP 90106913 A 19900411; AT 90106913 T 19900411; DE 3913973 A 19890427; DE 59006808 T 19900411; ES 90106913 T 19900411