

Title (en)  
PROCESS AND DEVICE FOR THE HEAT TREATMENT OF LONGITUDINALLY WELDED PIPES

Publication  
**EP 0234200 B1 19901205 (DE)**

Application  
**EP 87100199 A 19870109**

Priority  
• DE 3601670 A 19860121  
• DE 3639403 A 19861118

Abstract (en)  
[origin: EP0234200A1] These pipes (1) of austenitic, ferritic or austenitic-ferritic non- rusting steels are annealed after the longitudinal seam (2) has been welded. In the process according to the invention, the pipes (1) are only partially solution-annealed in the region of the weld seam (2) and of the heat-affected zone (3) or in a region (4) going slightly beyond the former. This allows even annealing temperatures of, for example, above 1200 DEG C and long holding times, whereby optimised solution-annealing and a better equalisation of segregations of the corrosion resistance-determining elements chromium and molybdenum in the region of the weld seam can be achieved. The only partial heating of the weld seam, for example by means of focused infrared emitters, prevents deformation of the pipes under the action of gravity during the annealing, in spite of the high annealing temperature. As a result, the corrosion resistance of the weld seam (3) can approach the value of the base material. Defined alloying with nitrogen from the surrounding atmosphere can further improve the corrosion resistance. Production of high-quality thin-walled pipes which can be tested for damage is also facilitated. <IMAGE>

IPC 1-7  
**C21D 6/00**; **C21D 9/50**; **C23C 8/26**

IPC 8 full level  
**C21D 9/08** (2006.01); **C21D 6/00** (2006.01); **C21D 9/50** (2006.01); **C23C 8/26** (2006.01)

CPC (source: EP US)  
**C21D 6/002** (2013.01 - EP US); **C21D 9/50** (2013.01 - EP US); **C23C 8/26** (2013.01 - EP US)

Cited by  
EP2019149A1; US5022936A; EP0394754A3; EP0322758A1; DE102022105659A1; WO2023169629A1; DE102022105658A1; WO2023169628A1; US7977611B2

Designated contracting state (EPC)  
AT CH DE FR GB IT LI NL SE

DOCDB simple family (publication)  
**EP 0234200 A1 19870902**; **EP 0234200 B1 19901205**; BR 8700234 A 19871201; DE 3766507 D1 19910117; JP 2668870 B2 19971027; JP S62180016 A 19870807; US 4975128 A 19901204

DOCDB simple family (application)  
**EP 87100199 A 19870109**; BR 8700234 A 19870121; DE 3766507 T 19870109; JP 796587 A 19870116; US 22368388 A 19880725