Title (en)

METHOD FOR THE PRODUCTION OF HOT-FINISHED SEAMLESS PIPES HAVING OPTIMIZED FATIGUE PROPERTIES IN THE WELDED STATE

Title (de)

VERFAHREN ZUR HERSTELLUNG VON WARMGEFERTIGTEN NAHTLOSEN ROHREN MIT OPTIMIERTEN ERMÜDUNGSEIGENSCHAFTEN IM VERSCHWEISSTEN ZUSTAND

Title (fr)

PROCÉDÉ DE FABRICATION DE TUBES SANS SOUDURE FABRIQUÉS THERMIQUEMENT À PROPRIÉTÉS OPTIMISÉES DE FATIGUE À L'ÉTAT SOUDÉ

Publication

EP 2170540 B1 20120808 (DE)

Application

EP 08773277 A 20080626

Priority

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Abstract (en)

[origin: CA2694469A1] The invention relates to a method for the production of hot-finished, particularly hot-rolled, seamless pipes having optimized fatigue properties in the welded state, having an outside diameter of up to 711 mm and a nominal wall thickness of up to 100 mm, made of metal, in particular steel. After hot or finish rolling, a defined pipe cross-section is produced on at least one pipe end across a predetermined length, having tight tolerances for inside and outside diameters, wherein the cross-section can then be welded to the pipe end of another pipe. According to the invention, in a region a wall thickness is created in a first step at the pipe end in question, the thickness being bigger than on the remaining pipe body, wherein the outside diameter is increased and/or the inside diameter is reduced. In a second step, the required pipe cross-section is produced in said region by mechanical machining, and the transition from the machined to the unmachined region of the pipe is produced with low surface roughness and almost notch-free, and the residual wall thickness remaining in the machining region is within the required tolerances.

IPC 8 full level

B21J 5/08 (2006.01); **B21K 21/12** (2006.01)

CPC (source: EP KR US)

B21J 5/08 (2013.01 - EP KR US); **B21K 21/12** (2013.01 - EP KR US)

Cited by

DE102014102452A1; DE102014110980A1; DE102014216674A1; DE102014110980B4; US10695809B2

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DOCDB simple family (publication)

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