Title (en)

PROCESS FOR MANUFACTURING ROLLED STEEL PRODUCTS, IN PARTICULAR HELICALLY RIBBED PRESTRESSED STEEL RODS

Publication

EP 0172544 A3 19871028 (DE)

Application

EP 85110316 A 19850817

Priority

DE 3431008 A 19840823

Abstract (en)

[origin: ES8609490A1] To produce threaded steel tension members, steel is used with a C-content of 0.50 to 0.80%, preferably 0.75%, a Si-content of 0.20 to 0.50%, preferably 0.25%, and a Mn content of 0.30 to 0.80%, preferably 0.60%. Exiting from the rolling heat at the outlet side of the finishing stand after hot rolling, the tension member or rod is subjected to surface quenching by a cooling medium, preferably water, so that the steel in a rim zone R1 is transformed immediately and completely into martensite, while the heat content remaining in the core zone K1 does not effect a tempering of the martensite rim zone during the subsequent cooling beyond the range of the intermediate stage. Steel tension members of this type have a high ductility and toughness at a high yield limit and high strength, they are corrosion-resistant to a great degree and have a wear resistant surface which makes them particularly suitable for threaded tension rods in which the threads are produced either by a cold forming operation or hot rolled ribs.

IPC 1-7

C21D 8/08; C21D 1/19; E04C 5/16; E04C 5/03

IPC 8 full level

B21B 1/16 (2006.01); **C21D 1/19** (2006.01); **C21D 8/08** (2006.01); **C21D 9/00** (2006.01); **C21D 9/52** (2006.01); **E04C 5/03** (2006.01); **E04C 5/16** (2006.01)

CPC (source: EP US)

C21D 1/19 (2013.01 - EP US); **C21D 8/08** (2013.01 - EP US); Y10S 148/902 (2013.01 - EP US); Y10S 148/907 (2013.01 - EP US)

Citation (search report)

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