

Title (en)

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

Publication

EP 0172544 B1 19900124 (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

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IPC 8 full level

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CPC (source: EP US)

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Cited by

CZ307645B6; EP0306887A1; EP0260717A1; US4923528A; DE4224222A1; EP0307680A1; EP0172544A2; WO8802031A1; WO9428182A1

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