

Title (en)  
RUST-RESISTANT CONSTRUCTIONAL STEEL AND METHOD FOR PRODUCING THE SAME

Title (de)  
NICHROSTENDER BAUSTAHL UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)  
ACIER DE CONSTRUCTION INOXYDABLE ET SON PROCEDE DE PRODUCTION

Publication  
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Application  
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Abstract (en)  
[origin: WO9931283A1] The invention relates to a method for producing rust-resistant constructional steels which can be used for sheets, strips, pipes, bars etc., in a wide range of areas of application. One preferred use for the inventive steels is the production of smooth or ribbed, weldable concrete steels, i.e. rust-resistant reinforcement steels for reinforced concrete construction. The aim of the invention is to produce rust-resistant, weldable constructional steels which can be classified as martensitic or ferritic-martensitic, which can be manufactured without annealing and cold-forming according a simplified method, and which have at least equivalent material characteristics. According to the invention, the desired characteristics of the rust-resistant constructional steels, such as resistance and strength characteristics, weldability and resistance to corrosion are obtained by means of thermomechanical treatment using the rolling heat instead of annealing and subsequent cold-forming. On cooling, the rust-resistant martensitic or ferritic-martensitic constructional steels were found to have obtained the same or better properties directly from the rolling heat as if they had been heat-treated and then cold-formed. The invention therefore provides a method for producing rust-resistant constructional or concrete steel without annealing and cold-forming, and therefore more cheaply.

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