

Title (en)

Method of increasing the strength of reinforcing steels

Title (de)

Verfahren zur Erhöhung der Festigkeit von Bewehrungsstählen

Title (fr)

Procédé pour augmenter la résistance des aciers à béton

Publication

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Application

EP 85116005 A 19851216

Priority

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Abstract (en)

[origin: EP0185341A2] The invention aims to reduce the use of alloys for the manufacture of reinforcing steels of higher strength, in particular of ribbed reinforcing steels which are produced as rolled wire in the form of ringed bundles on continuous high-output wire mills. A process for increasing the strength, in particular the yield strength, of reinforcing steels is to be developed while simultaneously ensuring good weldability and good plastic properties. According to the invention, the rolled wire is deformed in the end phase of the hot-rolling process within a preset time by a defined change in shape (reduction in cross-section) and, immediately after the deformation, very rapidly quenched to a temperature below the austenite recrystallisation temperature, but above the Ar1 transformation temperature, so that there is a very fine or incompletely recrystallised austenite structure at the start of the gamma - alpha -transformation.

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