

Title (en)
Method for straightening steel sections while at the same time minimising the internal stress

Title (de)
Verfahren zum Richten von Profilstahl bei gleichzeitiger Minimierung der Eigenspannungen

Title (fr)
Méthode de redressement de profilés métalliques en minimisant les tensions internes en même temps

Publication
EP 0967027 A3 20000705 (DE)

Application
EP 99111381 A 19990611

Priority
DE 19828784 A 19980627

Abstract (en)
[origin: EP0967027A2] A steel profile with maximum and minimum local cross sectional temperatures is clamped and cooled down. As a consequence of clamping, the lower limit temperature produces a thermal dilatation in all profile fibers which is greater than the dilatation which would be required for fiber plasticizing of the non clamped profile with the highest compressive residual stresses. A steel profile (1) with maximum and minimum local cross-sectional temperatures respectively below the Ar1 point and above a lower limit temperature θ_u is clamped at its ends (1a, 1b) and is cooled down. As a consequence of clamping, the lower limit temperature θ_u produces a thermal dilatation in all profile fibers which is greater than the dilatation which would be required for fiber plasticizing of the non clamped profile with the highest compressive residual stresses.

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• [A] EP 0362122 A1 19900404 - MANNESMANN AG [DE]
• [A] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 11 30 September 1998 (1998-09-30)

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