

Title (en)
METHOD FOR CALCULATING THE COMBINATION OF PROPERTIES BEING ESTABLISHED FOR A DEFORMABLE LIGHTWEIGHT STEEL

Title (de)
VERFAHREN ZUR BERECHNUNG DER SICH EINSTELLENDEN EIGENSCHAFTSKOMBINATION FÜR EINEN UMFORMBAREN LEICHTBAUSTAHL

Title (fr)
PROCÉDÉ DE CALCUL DE LA COMBINAISON DE PROPRIÉTÉS QUI S'ÉTABLIT POUR UN ACIER DE CONSTRUCTION LÉGÈRE DÉFORMABLE

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Application
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Abstract (en)
[origin: WO2015158328A1] The invention relates to a method for calculating the combination of properties of phase components and of mechanical properties being established of a predefined alloy composition for a deformable lightweight steel having the elements in percent by weight C 0.02 to ≤ 1.0 , Al 2.5 to ≤ 8.0 , Si 0.0 to ≤ 1.5 , Mn ≥ 5.0 to ≤ 35.0 , Cr > 1.0 to ≤ 14.0 , total content of N, S, P ≤ 0.1 , the remainder iron and other steel-accompanying elements with some contents of Cu, Mo, Ni, and Zn of up to 1.0 wt% in total by using specific formulas on the basis of the manganese content, wherein, in the formulas, the alloy contents are used as absolute numbers without dimensions, and the calculated, dimensionless values are assigned the units MPa for Rm and Rp and % for A80. The invention further relates to a method for the further processing of a lightweight steel produced having a predefined alloy composition to form a hot-rolled strip.

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See references of WO 2015158328A1

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