

Title (en)
METHOD FOR MAKING A HOT-ROLLED STEEL STRIP FOR SWAGING

Title (de)
VERFAHREN ZUM HERSTELLEN EINES WARMGEWALZTEN STAHLBLECHES ZUM TIEFZIEHEN

Title (fr)
PROCEDE DE FABRICATION D'UNE BANDE D'ACIER LAMINEE A CHAUD POUR EMBOUTISSAGE

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Abstract (en)
[origin: WO0046411A1] The invention concerns a method for making a hot-rolled steel strip for swaging which consists in: subjecting a steel slab at temperature higher than Ac3 to a rough-rolling in the austenitic phase and subsequently to a finish-rolling, applied to steel of the Ti-IF type containing at least 0.05 wt. % of titanium and 0.015 wt. % of niobium; performing the finish-rolling partially in the low temperature region of the steel austenitic phase, without lubricating the rolls and at a thickness reduction rate ranging between 30 % and 80 %, and partially in the steel ferritic phase, with lubricated rolls and at an initial ferritic rolling temperature ranging between 860 DEG C and 800 DEG C and a final ferritic rolling temperature ranging between 750 DEG C and 600 DEG C; then winding the strip at a temperature ranging between 650 DEG C and 500 DEG C and continuously annealing it at a temperature ranging between 800 DEG C and 850 DEG C for a time interval between 30 seconds and 2 minutes. The lubricating of the rolls during the steel ferritic phase rolling is performed with an ester-based oil. The steel austenitic phase is rough-rolled and the steel is subjected to accelerated cooling down to a temperature not less than the initial finish-rolling temperature.

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