

Title (en)

METHOD AND DEVICE FOR COATING AND SHAPING STRAND-SHAPED METALLIC MATERIAL BY DRAWING

Title (de)

VERFAHREN UND VORRICHTUNG ZUM BESCHICHTEN UND UMFORMEN VON STRANGFÖRMIGEM METALLISCHEM UMFORMGUT MITTELS ZIEHEN

Title (fr)

PROCEDE ET DISPOSITIF D'ENDUCTION ET DE DEFORMATION D'UNE MATIERE METALLIQUE EN FORME DE BARRE A DEFORMER PAR ETIRAGE

Publication

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Application

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Abstract (en)

[origin: US6430980B1] Coating and shaping of strand-shaped metallic material by drawing using lubricants in solid to liquid state is disclosed. The disclosed method and arrangement enables high-performance shaping while decisively reducing expenditure on apparatus. At the same time, sealing problems with respect to lubricant are eliminated and several technical parameters in the shaping and coating process are improved depending on the material to be shaped. The shaping stock is coated with lubricant by a double chamber arrangement comprising a low-pressure lubricant chamber followed by a high-pressure lubricant chamber and is shaped by means of working drawing dies at the outputs of the chambers. The low-pressure chamber is filled with solid to pasty lubricant by a lubricant feed and a low pressure is applied to this lubricant externally. A high lubricant pressure is built up in the high-pressure lubricant chamber by the coated shaping stock running into this chamber, and a lubricant pressure/lubricant temperature combination is adjusted in such a way that the lubricant is in solid to liquid state. The disclosed method and arrangement is applicable in particular to wire drawing.

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