

Title (en)

Continuous annealing apparatus of steel strip and tension control system for the same.

Title (de)

Durchlaufglühlanlage für Stahlband und Vorrichtung zur Regelung des Bandzuges.

Title (fr)

Installation pour le recuit en continu de bandes en acier et dispositif de réglage de tension.

Publication

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Application

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Priority

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Abstract (en)

In a continuous process line for manufacturing a soft steel strip for drawing, etc., the present invention relates to a continuous annealing apparatus and a tension control system for the same for preventing the occurrence of heat buckling, scratching and walking of the steel strip and improving productivity and quality. In a continuous annealing furnace of a steel strip including a heating zone (22), a soaking zone (23), a primary cooling zone (24), an overaging zone (25) and a secondary cooling zone (26), the invention characterized in that a bridle roll (3) is interposed between the overaging zone (25) and the secondary cooling zone (26), and a first bridle roll and a second bridle roll and a buffer roll coming into contact with the steel strip between both of the bridle rolls are disposed on an entry side and/or delivery side. <IMAGE>

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CPC (source: EP)

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Citation (search report)

- [X] EP 0036035 A2 19810923 - KAWASAKI STEEL CO [JP]
- [X] BE 669761 A
- [A] EP 0030614 A1 19810624 - KAWASAKI STEEL CO [JP]
- [AD] EP 0031013 A1 19810701 - KAWASAKI STEEL CO [JP]
- [A] EP 0487274 A2 19920527 - SELAS CORP OF AMERICA [US]
- [A] DE 2141906 A1 19720316 - ALUSUISSE

Cited by

CN104060067A; CN103436681A; CN103866109A; FR3063737A1; CN117305573A; WO2018172658A1

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