

## Title (en)

Production of hot-rolled steel strip from continuously cast slabs.

## Title (de)

Herstellung von warmgewalztem Stahlband aus stranggegossenen Brammen.

## Title (fr)

Production de bandes laminées à chaud à partir de brames coulées en continu.

## Publication

**EP 0264459 A1 19880427 (DE)**

## Application

**EP 86114160 A 19861013**

## Priority

EP 86114160 A 19861013

## Abstract (en)

1. Method for the production of hot-rolled steel strip from starting material continuously cast already in strip shape, in which method partial pieces (4a or 4b) of equal length are initially severed from the cast strand (4) rigidified after the casting, these partial pieces (4a, 4b) are then transferred one after the other with stretched length into a furnace (5) and stored in this as well as brought to and maintained at rolling temperature, in which method a greater number of cast strand partial pieces (4a and 4b) is preliminarily produced and stored until the beginning of rolling and individual cast strand partial pieces (4a and 4b) are introduced one after the other at rolling temperature into a rolling mill for rolling-down and in which method the continuous casting (1) is continuously continued also during the rolling operation as well as the cast strand partial pieces (4a and 4b) then formed introduced into the furnace for storage until rolling, characterised thereby, that the cast strand partial pieces (4a and 4b) severed from the cast strand (4) are exclusively introduced directly into the furnace (5) and stored therein subject to transverse transport (6), that the furnace (5) is in that case operated substantially without additional energy supply and the cast strand partial pieces (4a and 4b) are stored therein over a period which corresponds to a multiple of, for example four times their casting time, that the rolling of each individual cast strand partial piece (4a and 4b) is however carried out in a time unit which corresponds to only a fraction, for example one fifth of its casting time and that the rolling is carried out discontinuously and the rolling operation is in that case each time interrupted by an interval time over a period which corresponds to the difference between a casting time and a rolling time.

## Abstract (de)

Zum Herstellen von warmgewalztem Stahlband l2 aus bereits bandförmig stranggegossenem Vormaterial 4 werden von dem nach dem Gießen erstarrten Gußstrang 4 zunächst Teilstücke 4a, 4b gleicher Länge abgetrennt (3). Dann werden diese Teilstücke nacheinander in einen Ofen 5 geführt und in diesem gespeichert sowie auf Walztemperatur gehalten. Schließlich werden die Gußstrang-Teilstücke 4a, 4b nacheinander mit Walztemperatur zum Auswalzen in ein Walzwerk 9 eingeführt. Es ist dabei vorgesehen, daß die Gußstrang-Teilstücke 4a, 4b mit gestreckter Länge in den Ofen 5 eingeführt und bis zur Walzung darin gespeichert werden. Dabei wird bis zum eigentlichen Walzbeginn eine größere Anzahl von Gußstrang-Teilstücken vorproduziert und gespeichert. Das Stranggießen wird auch während des Walzbetriebes kontinuierlich fortgesetzt, und die dabei gebildeten Gußstrang-Teilstücke 4a, 4b werden in den Ofen 5 eingeführt und darin wiederum bis zur Walzung gespeichert. Montagezeiten am Walzwerk 9 bspw. Walzenwechsel werden in die Pausenzeiten der Walzzyklen gelegt, wobei gegebenenfalls die Pausenzeiten zweier Walzzyklen unmittelbar hintereinandergesetzt werden. Die währenddessen gebildeten Gußstrang-Teilstücke 4b werden zusätzlich in den Ofen 5 eingeführt und darin gespeichert (l5).

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## Citation (search report)

- [Y] DE 3310867 A1 19841004 - MANNESMANN AG [DE]
- [A] DE 3422922 C1 19850620 - KORTEC AG, et al
- [A] GB 2129723 A 19840523 - MANNESMANN AG
- [Y] PATENT ABSTRACTS OF JAPAN, Band 6, Nr. 249 (M-177)[1127], 8. Dezember 1982; & JP-A-57 146 402 (KAWASAKI SEITETSU K.K.) 09-09-1982
- [A] PATENT ABSTRACTS OF JAPAN, Band 7, Nr. 55 (M-198)[1200], 5. März 1983; & JP-A-57 202 907 (SHIN NIPPON SEITETSU K.K.) 13-12-1982
- [A] PATENT ABSTRACTS OF JAPAN, Band 7, Nr. 95 (M-209)[1240], 21. April 1983; & JP-A-58 20 301 (SHIN NIPPON SEITETSU K.K.) 05-02-1983

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