

Title (en)

WARP KNITTING MACHINE WITH GUIDE BARS ADJUSTABLE BY MEANS OF RACKING MOTORS.

Title (de)

KETTENWIRKMASCHINE MIT MITTELS VERSATZSCHRITTMOTOREN VERSTELLBAREN LEGBARREN.

Title (fr)

MACHINE A TRICOTER SUR METIER CHAINE AVEC DES BARRES A PASSETTES REGLABLES A L'AIDE DE MOTEURS PAS A PAS.

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Application

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Priority

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Abstract (en)

[origin: WO8903443A1] In a warp knitting machine, the guide bars (1, 2, 3) can be adjusted in accordance with a pattern by means of racking motors (16, 17, 18) which obtain their racking data in the form of a given number of racking pulses from a pattern memory of a control device. In order to calculate and correct the position of the guide bars (1, 2, 3) of the warp knitting machine which is stopped in the lower position, each guide bar is connected to an indicator (20, 21, 22) of an electric proximity switch, the sensor (23, 24, 25) of which brought into contact with a measuring slide (26) which moves in the direction of racking of the guide bars. The measuring slide (26) is moved, by a measuring stepping motor (28), over the racking range of the indicator from a starting position corresponding to the zero racking position of the guide bar. A pulse sensor, which counts the steps of the measurement stepping motor (28) during this displacement until the indicator and sensor are covered, is provided. The result of the count obtained by this sensor is compared, by means of a comparator, with the number of racking pulses derived from the pattern memory which defines the displacement in accordance with the model. The difference calculated by the comparator is supplied as a correction pulse to the relevant racking motor (16, 17, 18).

Abstract (de)

In a warp knitting machine, the guide bars (1, 2, 3) can be adjusted in accordance with a pattern by means of racking motors (16, 17, 18) which obtain their racking data in the form of a given number of racking pulses from a pattern memory of a control device. In order to calculate and correct the position of the guide bars (1, 2, 3) of the warp knitting machine which is stopped in the lower position, each guide bar is connected to an indicator (20, 21, 22) of an electric proximity switch, the sensor (23, 24, 25) of which brought into contact with a measuring slide (26) which moves in the direction of racking of the guide bars. The measuring slide (26) is moved, by a measuring stepping motor (28), over the racking range of the indicator from a starting position corresponding to the zero racking position of the guide bar. A pulse sensor, which counts the steps of the measurement stepping motor (28) during this displacement until the indicator and sensor are covered, is provided. The result of the count obtained by this sensor is compared, by means of a comparator, with the number of racking pulses derived from the pattern memory which defines the displacement in accordance with the model. The difference calculated by the comparator is supplied as a correction pulse to the relevant racking motor (16, 17, 18).

Abstract (fr)

Machine à tricoter sur métier chaîne dont les barres à passettes (1, 2, 3), conformément à un modèle, peuvent être réglées à l'aide de moteurs de déplacement pas à pas (16, 17, 18) qui reçoivent les informations sur les déplacements sous la forme d'une impulsion de déplacement à partir d'une mémoire à modèles d'un appareil de commande. Pour calculer et corriger la position des barres à passettes (1, 2, 3) de la machine à tricoter arrêtée en position basse, à chaque barre à passettes est associé l'indicateur (20, 21, 22) d'un initiateur électrique d'approche, dont le capteur (23, 24, 25) est disposé contre un curseur de mesure (26) se déplaçant dans la direction du mouvement des barres à passettes, ce curseur pouvant se déplacer au moyen d'un moteur de mesure pas à pas (28) dans le domaine de déplacement de l'indicateur à partir d'une position de départ correspondant à la position zéro de la barre à passettes. Il est prévu un capteur d'impulsions ayant pour rôle de compter les pas du moteur pas à pas (28) dans ce déplacement jusqu'à ce que l'indicateur et le capteur soient recouverts, et le résultat obtenu avec ce capteur est comparé, à l'aide d'un comparateur, à l'impulsion définissant le déplacement selon le modèle et prise dans la mémoire à modèles. La différence calculée par le comparateur est communiquée en tant qu'impulsion de correction au moteur pas à pas (16, 17, 18) concerné.

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