

Title (en)
Bending machine with bending tool length adjusting mechanism

Title (de)
Biegemaschine mit Mechanismus zur Längeneinstellung des Biegewerkzeugs

Title (fr)
Machine à courber avec mécanisme de réglage de la longueur d'outil de pliage

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Abstract (en)

The present invention provides a bending machine with a bending tool length adjusting mechanism which enables the opposite ends of a bending tool group to be rounded even with a variation in the length of the bending tool group, allowing a bending piece to be processed so that an opening has a corner rounded portion in each corner portion. The bending machine carries out bending processing on a plate material using a bending tool group 3A composed of a plurality of bending tools 3 arranged in a line. The bending machine has a bending tool length adjusting mechanism 2 that adjusts the length of the bending tool group 3A. The bending tool length adjusting mechanism 2 has a traveling member 21 on which the bending tool group 3A is placed and which moves into and out of a machine main body 1. The traveling member 21 has a pair of abutting members 22, 23 against which the opposite ends of the bending tool group 3A are abutted. An abutting member moving mechanism 24 is provided which moves the abutting member 23 in a bending tool arranging direction with respect to the traveling member 21. A bending tool storage mount 25 is provided on which surplus bending tools 3 not included in the bending tool group 3A are arranged along a traveling route for the traveling member 21. An unloading pusher mechanism 26 is provided which pushes out the bending tools 3 on the traveling member 21 onto the bending tool storage mount 25. A placing pusher mechanism 27 is provided which places any number of the bending tools 3 on the bending tool storage mount 25 onto the traveling member 21 (Fig.1.).

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- [DA] JP H10291032 A 19981104 - MARU KIKAI KOGYO
- [A] JP S57149026 A 19820914 - MARU KIKAI KOGYO
- [A] EP 0577068 A1 19940105 - GOITI S COOP LTDA [ES]
- [A] EP 0105091 A2 19840411 - MARU KIKAI KOGYO [JP]
- [A] JP S63207419 A 19880826 - AMADA CO LTD
- [A] JP H05212446 A 19930824 - MURATA MACHINERY LTD
- [A] EP 0308363 A1 19890322 - BELLHEIMER METALLWERK GMBH [DE]

Cited by
CN113811403A; CN113695431A

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