

Title (en)

Automatic machine for bending thin and rectilinear metallic elements, especially metal wire, into a spatial configuration.

Title (de)

Automatische Maschine zum Biegen in einer räumlichen Konfiguration feiner und gerader Metallteile, insbesondere Metalldrähten.

Title (fr)

Machine automatique pour cambrer selon une configuration spatiale, des éléments métalliques minces et rectilignes, et notamment des fils métalliques.

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Application

EP 83402155 A 19831107

Priority

FR 8218697 A 19821108

Abstract (en)

1. An automatic machine for curving, according to a predetermined configuration, thin rectilinear metallic elements of constant thickness of the wire, strip or tube kind, this machine including a bending device (12) which comprises a distributor member (13) through which the element to be curved (1) may be inserted to extend beyond an outlet of said distributor member, a bending member (14) which is located downstream and in the vicinity of the outlet of the distributor member (13) and which may, by means of a first drive mechanism (24), be driven with an angular rotational movement about a first axis (Y) perpendicular to the extending direction of the element to be curved, said curving machine further comprising first driving means (5) for generating a relative stepped feeding movement between the element to be curved and the bending device (12), as well as second driving means (49) for generating a relative angular rotational movement between the bending device (12) and the element to be curved (1) about a second axis (Z) merging with the extending direction of the element to be curved, the operations of the first driving mechanism and second driving means (24, 29) being synchronized with the operation of first driving means (5), according to a predetermined cycle, said curving machine being characterized in that the bending member consists in a bending finger (14) which is associated with a second drive mechanism (23) adapted to reciprocate said bending finger along a rectilinear path (X) parallel with said first axis (Y), the bending finger being supported in a frame (22) which is mounted for rotation about said second axis (Z) and on which said second driving means (49) act.

Abstract (fr)

La présente invention concerne une machine automatique pour cambrer des éléments métalliques minces et rectilignes d'épaisseur constante du genre fils, feuillards ou tubes. Cette machine comprend un organe distributeur (13) à travers lequel un élément métallique à cambrer (1) peut être déplacé selon un mouvement d'avance par pas, un organe de pliage (14) qui est situé en aval et à proximité de la sortie de l'organe distributeur (13) et qui peut, d'une part, être animé d'un mouvement de rotation angulaire autour d'un axe (Y) perpendiculaire à la direction d'avance de l'élément métallique et, d'autre part, être déplacé selon un mouvement de va-et-vient sur une trajectoire rectiligne (X) parallèle à cet axe (Y). Selon l'invention, cette machine comprend en outre des moyens pour engendrer un mouvement de rotation angulaire relatif entre l'organe de pliage (14) et l'élément métallique (1), autour d'un deuxième axe (Z) confondu avec la direction d'avance de l'élément métallique. De préférence, ces moyens font tourner l'organe de pliage (14) autour de l'élément métallique (1) qui est immobile en rotation. Cette machine permet de produire des articles pliés selon n'importe quelle configuration spatiale à partir d'un fil, d'un feuillard ou d'un tube métallique.

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CPC (source: EP US)

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Citation (search report)

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