Title (en)

MACHINE FOR BENDING PIPES OR SECTIONS IN PARTICULAR OF METAL, TO OBTAIN ANY SHAPE

Title (de)

VORRICHTUNG ZUM BIEGEN VON ROHREN ODER ABSCHNITTEN, INSBESONDERE AUS METALL, ZUR ERZEUGUNG EINER BELIEBIGEN FORM

Title (fr)

MACHINE DE CINTRAGE DE TUYAUX OU PROFILÉS, EN PARTICULIER EN MÉTAL, DE FAÇON À OBTENIR N'IMPORTE QUELLE FORME

Publication

EP 3377240 A1 20180926 (EN)

Application

EP 16815645 A 20161117

Priority

- IT UB20155771 A 20151120
- IB 2016056925 W 20161117

Abstract (en)

[origin: WO2017085660A1] Machine for bending metal pieces (14) comprising a matrix (2) and a counter-matrix (3), wherein the matrix (2) and the counter-matrix (3) are mounted on a work surface of the machine body (10), the matrix (2) being actuatable by first drive means, and the counter-matrix (3) being in turn actuatable by second drive means. A drive member (13) enables driving the metal piece (14) and the winding thereof around a portion of the peripheral edge (8) of the matrix (2). The machine provides for a rotary encoder associated to the rotational axis (1) of the matrix (2) and a linear encoder (5, 6) associated to the translation motion of the counter-matrix (3). The matrix (2) has a complex form, different from an arc of a circle, on said portion of the peripheral edge (8). Furthermore, a CNC control system is provided, adapted to control, during the bending of the metal piece (14), both the gear motor of the matrix (2) and that of the counter-matrix (3), by means of a system with two interpolated axes based on which said linear encoder can constantly communicate with said rotary encoder. A sensor (3) is necessarily provided that is adapted to acquire, by means of self-learning and before machining the piece, the form of the peripheral edge (8) not known to the CNC system of the machine.

IPC 8 full level

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CPC (source: EP)

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