

Title (en)

METHOD FOR FREE BENDING WITH AN ADJUSTABLE DIE

Title (de)

VERFAHREN ZUM FREIBIEGEN MIT EINEM EINSTELLBAREN GESENK

Title (fr)

PROCÉDÉ DE PLIAGE LIBRE AVEC UNE MATRICE RÉGLABLE

Publication

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Application

EP 10714838 A 20100304

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Abstract (en)

[origin: WO2010099559A1] The invention relates to an adaptive adjusting method for a bending tool assembly (1) for air bending sheet metal parts (7), wherein a die width w (12) of the snaker (3) can be varied in a direction normal to the displacement plane (6). During each bending operation, an actual thickness of the sheet metal part (7) is captured and a thickness deviation dt of the actual thickness from a target thickness is calculated. Furthermore, a correction value dw is established for the die width (12) depending on the thickness deviation dt based on a model of the bending operation, and the die width w (12) is changed by the correction value dw prior to conducting the bend forming operation. The invention further relates to a bending tool assembly (1), comprising a bending punch (2) and a snaker (3), wherein the bending punch (2) can be moved along a displacement plane (6) relative to the snaker (3). The snaker comprises a first (17) and second (18) die part, which are connected, independently from each other, detachably normal to the displacement plane (6) and longitudinally displaceably to a bench beam (5).

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