

Title (en)
Machine and method for stamping metal parts

Title (de)
Maschine und Verfahren zum Stanzen von Blechteilen

Title (fr)
Machine et procédé à découper de parties de toles

Publication
EP 2543450 B1 20141126 (EN)

Application
EP 11382231 A 20110708

Priority
EP 11382231 A 20110708

Abstract (en)
[origin: EP2543450A1] The invention relates to a stamping machine for metal parts with a plurality of successive die-cutting stations synchronized to shape metal parts from sheet metal coming from a coil of sheet metal supplied to the stamping machine through an inlet provided with inlet rollers for pushing the sheet metal to a first die-cutting station for progressively obtaining successive individualized sheets die-cut according to a predetermined pattern from the sheet metal, characterized in that it comprises a second die-cutting station (5) for receiving and die-cutting the individualized sheets and comprising a plurality of transfer dies (5a, 5b) arranged one after the other for shaping successive metal parts (3) with a three-dimensional configuration from the successive individualized sheets (1 c) delivered by the first die-cutting station (4), the plurality of transfer dies comprising an initial transfer die (5a) for performing an initial die-cutting of each of the individualized sheets (1c) and obtaining successive initial parts (2a), and a final transfer die (5b) for performing a final die-cutting in each of the previously die-cut parts to obtain the metal parts (3); an outlet station (6) arranged at the outlet (5c) of the second die-cutting station (5) through which the metal parts (3) shaped in the second die-cutting station (5) are extracted; a longitudinal advance and retreat device for collecting the individualized sheets (1c) from the first die-cutting station and introducing them in the second die-cutting station (5) and moving the die-cut parts (2a, 2b) towards the outlet station (6) making synchronized stops during the action of each of the transfer dies (5a, 5b) in respective die-cutting positions, and which comprises respective side bars (9a, 9b) which are longitudinally movable in a longitudinal back and forth motion provided with gripping mechanisms comprising gripping clamps (9c, 9d) for gripping respective end portions facing the gripping clamps (9c, 9d), of the individualized sheets and of the successive die-cut parts (2a, 2b) when they are moved by the advance of the side bars (9a, 9b) towards the consecutive transfer dies (5a, 5b).

IPC 8 full level
B21D 28/06 (2006.01); **B21D 28/10** (2006.01); **B21D 28/26** (2006.01)

CPC (source: EP)
B21D 28/06 (2013.01); **B21D 28/10** (2013.01); **B21D 28/26** (2013.01); **B21D 43/055** (2013.01)

Cited by
CN113634680A; CN110449482A; JP2021133368A; EP2993241B1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 2543450 A1 20130109; **EP 2543450 B1 20141126**; ES 2533390 T3 20150409; PT 2543450 E 20150309

DOCDB simple family (application)
EP 11382231 A 20110708; ES 11382231 T 20110708; PT 11382231 T 20110708