Title (en)

Hot forming line and method for the preparation of hot formed sheet metal products

Title (de)

Warmformlinie und Verfahren zur Herstellung von warmumgeformten Blechprodukten

Title (fr)

Ligne de moulage à chaud et procédé de fabrication de produits de tôle moulés à chaud

Publication

EP 2907881 B1 20190424 (DE)

Application

EP 15154074 A 20150206

Priority

DE 102014101539 A 20140207

Abstract (en)

[origin: CN104894352A] A thermoforming line for the production of hot-formed and press-hardened sheet metal products sinkers 6 includes a heating station (1) and a forming station (2). The heating station (1) has on a lower die (3) and an upper tool (4), between which a metal plate (6) is received for heating. The heating or Heating a metal plate (6) in the heating station (1) is carried out by indirect resistance heating. The heat is not included in the metal plate (6) generates and passes through heat conduction in the metal plate (6) itself. For this purpose, the lower tool (3) and / or the upper tool (4) on an electrical resistance heater (7) with at least one surface heating element. According to the invention, the surface heating element is a heating plate (8) having a disc body (9) of an electrically conductive material, the plate body (9) is designed as a heating conductor (11). To this end, the plate body (9) is slotted and example provided with a slot (10), which extends over the thickness d of the plate body (9).

IPC 8 full level

B21D 22/02 (2006.01); **B21D 37/16** (2006.01); **C21D 1/34** (2006.01); **C21D 1/673** (2006.01); **C21D 9/00** (2006.01); **C21D 9/46** (2006.01); **H05B 6/00** (2006.01)

CPC (source: EP US)

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Citation (opposition)

Opponent : Autotech Engineering S.L.

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