

Title (en)

Spot connection of sheets by cold extrusion and tools for producing this connection

Title (de)

Punktverbindung von Blechen durch Kaltfließen und Werkzeuge zur Herstellung dieser Verbindung

Title (fr)

Point d'assemblage de tôles par fluage à froid et outils pour la réalisation dudit point d'assemblage

Publication

EP 0657232 B1 19980708 (FR)

Application

EP 93402964 A 19931208

Priority

- EP 93402964 A 19931208
- FR 9207191 A 19920615

Abstract (en)

[origin: FR2692181A1] A new connection point for use with sheets during cold drawing of the type in which one cuts simultaneously into at least two superimposed sheets (23,24) with the aid of a punch and a die, two embossments in a manner that form, in each of the sheets on one face, a cavity and on the other face a protrusion, the protrusion on the first sheet (23) being inserted in the cavity (27) of the second sheet (24). The cavity of the second sheet presents, in the neighbourhood of its bottom, an expansion whilst the protrusion of the first sheet incorporates a splay lodging in the expansion in the second sheet. The cavity in the first sheet presents a series of folds extending essentially parallel from the bottom of the cavity towards the free edge. The tooling used to produce this new connection point in sheet metals is also claimed. USE/ADVANTAGE - The connection points are used in the assembly of sheet metal, notably thin aluminium sheet by cold drawing. The formation of folds at the connection point increases the local thickness thus reinforcing the point of connection enabling the technique to be used for thinner sheet than is possible with conventional connections.

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