

Title (en)

Method and apparatus for forming lateral collars on sheet metal tubes.

Title (de)

Verfahren und Vorrichtung zum Aushalsen von Blechrohren.

Title (fr)

Procédé et appareil pour le formage de collerettes latérales sur des tubes en tôle.

Publication

EP 0322722 B1 19950125 (DE)

Application

EP 88121335 A 19881221

Priority

DE 3744046 A 19871224

Abstract (en)

[origin: EP0322722A2] Method and apparatus for forming lateral collars at a preferably oval lateral cutout of a sheet metal tube by means of a holding mandrel for the tube and a collar-forming die which is placed on the cutout and through which a collar-forming cone is pulled. To avoid unwanted deformations and bulging during the formation of the lateral collar, a large area of the surface of the tube (1) around the cutout rests on the holding mandrel (4), half of which is overlapped, as far as the largest diameter transverse to the lateral collar and approximately over its entire length, by a half-shell (8), in which the collar-forming die is formed. The length of the holding mandrel corresponds approximately to three times the diameter of the lateral collar (3) and is designed in such a way that, outside the opening of the lateral collar, the entire inner surface of the tube (1) rests against the holding mandrel (4), and the collar-forming die (8), of approximately the same length as the holding mandrel and functioning as a supporting shell, surrounds the said mandrel and the tube placed on it as far as the mandrel diameter lying transversely to the lateral collar, and the collar-forming cone (11) is provided with a central through hole (13) for receiving the free end of the piston rod (16) of the hydraulic cylinder (15), the said free end being couplable to the collar-forming cone (11) by means of projecting sprung radial pawls (17). <IMAGE>

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CPC (source: EP)

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Citation (examination)

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Cited by

US6021571A; US6612020B2; EP0752289A3; US5943773A; EP0792702A3; US6000263A

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