

Title (en)

High pressure hydroforming press

Title (de)

Innenhochdruckumformungspresse

Title (fr)

Presse de formage hydraulique sous pression élevée

Publication

EP 1197274 B1 20041229 (EN)

Application

EP 01127374 A 19980416

Priority

- EP 98914753 A 19980416
- US 4395097 P 19970416

Abstract (en)

[origin: EP1197274A1] An apparatus for hydroforming a tubular metal blank has a die structure (12) having an internal die surface defining a die cavity, said die cavity being constructed and arranged to receive the tubular metal blank; a hydroforming fluid source disposed higher than said die cavity, a hydraulically driven tube-end engaging structure being movable to longitudinally compress the tubular metal blank, said tube-end engaging structure constructed and arranged to receive hydroforming fluid; and a hydraulically driven pressure intensifying structure movable in response to hydraulic fluid pressure to pressurize said hydroforming fluid provided to the interior of the tubular metal blank and thereby expand a diameter of the blank, said hydraulically driven tube-end engaging structure being movable in response to hydraulic fluid pressure to enable said tube-end engaging structure to longitudinally compress the tubular metal blank and cause metal material of the diametrically expanded tubular blank to flow longitudinally inwardly in order to replenish a wall thickness of the diametrically expanded tubular metal blank and maintain the wall thickness thereof within a predetermined range. <IMAGE>

IPC 1-7

B21D 26/02

IPC 8 full level

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CPC (source: EP)

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