

Title (en)
APPARATUS FOR BENDING TUBES

Publication
EP 0109905 B1 19870715 (FR)

Application
EP 83402217 A 19831117

Priority
FR 8219404 A 19821119

Abstract (en)
[origin: EP0109905A1] 1. A machine for bending tubes by means of a bending head through which the tube (5) to be bent passes axially and comprising at its front part two bending rollers with parallel axes between which said tube passes, namely an inner roller (1) to which the tube remains constantly tangential and against which it bears during the bending operation, and an outer roller (3) whose axis (4) is rotatable about that (2) of the inner roller (1), the plane containing the axes of the two rollers being perpendicular to the axis of the tube (5) in the inoperative position of the outer roller (3), and means for causing said axis (4) of the outer roller (3) to pivot about that (2) of the inner roller (1), characterised in that to enable the tube to be bent according to any radii of curvature, provided that they are equal to or greater than that of the inner roller (1), the axis (4) of the outer roller (3) is provided at such a distance from that (2) of the inner roller (1) that a space is present between it and the inner roller which is very slightly greater than the diameter of the tube (5) to be bent, thereby leaving a clearance of the order of 1 mm between the outer roller (3) and the tube (5) to be bent when said outer roller (3) is in the inoperative position, in that a guide nozzle (37) is secured to its front part immediately behind the inner bending roller (1) so that it is traversed axially by the tube (5) to be bent and so that it prevents deformation thereof by reaction in the opposite direction to that intended by its bending about the inner roller (1) under the action of the outer roller (3), and in that it also comprises means (21) for cutting the tube to length once the desired pipe has been formed, and other means (33) for shaping the two ends of said pipe and fitting thereto conventional threaded connectors with which they have to be provided.

IPC 1-7
B21D 7/08; B21D 7/12

IPC 8 full level
B21D 7/08 (2006.01)

CPC (source: EP)
B21D 7/08 (2013.01)

Cited by
US5388441A; US5450739A; CN117840275A

Designated contracting state (EPC)
DE GB IT

DOCDB simple family (publication)
EP 0109905 A1 19840530; EP 0109905 B1 19870715; DE 3372447 D1 19870820; FR 2536314 A1 19840525; FR 2536314 B1 19850621

DOCDB simple family (application)
EP 83402217 A 19831117; DE 3372447 T 19831117; FR 8219404 A 19821119