

Title (en)
Pipe swaging device with hydraulic transmission

Title (de)
Rohrschmiedegerät mit hydraulischem Antrieb

Title (fr)
Machine à rétreindre de tuyaux à transmission hydraulique

Publication
EP 0908657 A1 19990414 (EN)

Application
EP 98118890 A 19981006

Priority
IT MI972312 A 19971013

Abstract (en)
A conventional swaging gripper (90) with two jaws (92) can be applied to the device (82) for swaging metal pipes (100). The closure movement of the jaws (92) which squeeze the pipe (100) is achieved by a hydraulic transmission comprising: a cylinder (44) within which a rod (52) is movable in both directions, one end of the rod emerging from the cylinder (44) through a suitable sealed aperture and to its other end there being coaxially fixed a sealed piston (54) which divides the interior of the cylinder (44) into a first chamber (42) and a second chamber (58) both containing an incompressible liquid, the outer end of the rod carrying means (80) for opening the jaws (92) of the pipe swaging gripper (90), applicable to the pipe swaging device (82), as a result of volume increase of the first chamber (42); a reservoir (34) also containing said incompressible liquid, the reservoir shell having a part (74) deformable elastically within a predetermined range as a result of variation in the liquid quantity within the reservoir (34); a plunger pump (30) to withdraw the liquid contained in the reservoir (34) and to feed it under pressure into the first chamber (42) of the cylinder (44) via a first conduit (36, 46, 48); a second conduit (72) which connects the second chamber (58) of the cylinder (44) to the reservoir (34); a third conduit (53) which connects the first chamber (42) to the reservoir (34) by by-passing the pump (30); manually operable shut-off means (51, 49) provided in the third conduit (53); and elastic return means (55) for returning the rod (52) into the position corresponding to minimum volume of the first chamber (42) of the cylinder (44) when the shut-off means (51, 49) in the third conduit (53) are open. <IMAGE>

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Citation (search report)
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