

Title (en)

Apparatus for hydraulic expansion.

Title (de)

Vorrichtung zum hydraulischen Aufweiten.

Title (fr)

Dispositif d'expansion hydraulique.

Publication

EP 0291938 B2 19951102 (DE)

Application

EP 88107911 A 19880518

Priority

DE 3716986 A 19870521

Abstract (en)

[origin: WO8809233A1] Devices are described which are suitable for simultaneous hydraulic expansion of several longitudinal sections of a hollow shaft for the production of connections by interlocking or frictional engagement between said sections and elements fitted thereto such as cams, toothed wheels and bearing seats. The devices include pressure probes with a longitudinal hydraulic fluid channel and a radial inlet bore to each longitudinal section of the hollow shaft to be expanded and, if necessary, with a longitudinal discharge channel and a radial discharge bore to the undeformed longitudinal sections of the hollow shaft between the sections to be expanded. Sealing means are provided which seal the undeformed longitudinal sections of the hollow shaft against penetration of the hydraulic fluid from the intermediate longitudinal sections of the hollow shaft to be expanded. It is possible to fit individual sealing elements and/or expansion sleeves with intermediate spacer sleeves onto the body of a probe of uniform cross-section to permit rapid exchange of worn seals. In addition, the probe body can consist of sections screwed together axially which, when of small cross-section, accept sealing elements and, when of larger cross-section serve as spacer pieces. Examples of novel and improved seal shapes are also given.

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