

Title (en)

Method for producing a pin/tie-bolt

Title (de)

Verfahren zur Herstellung eines Zugbolzens

Title (fr)

Méthode de fabrication d'un boulon

Publication

**EP 2292347 B1 20120314 (EN)**

Application

**EP 10174806 A 20100901**

Priority

IT MI20091532 A 20090904

Abstract (en)

[origin: EP2292347A1] Method for producing a pin/tie-bolt (110;210) extending in the longitudinal direction (X-X), comprising the steps of: a) providing a solid workpiece (10a) made of suitable material and having a suitable length in the longitudinal direction and width/diameter in the transverse direction; wherein the length in the longitudinal direction of the initial workpiece is less than the length in the longitudinal direction of the finished pin/tie-bolt; c) compressing the solid workpiece (10b) inside a second mould (20c) associated with a second punch (30c) with formation of a workpiece (10c) having a length in the longitudinal direction elongated to the final desired size and with an internal longitudinal cavity (11c) having a suitable final depth; e) compressing in the transverse direction the workpiece (10d) inside a fourth mould (20e) with a longitudinally directed stretching and partial closing of the longitudinal internal cavity with formation of a workpiece (10e) which has a cylindrical top part (10f 1 ) closed to the final desired diameter, a hollow conical connecting collar (13e) with the final size and a hollow cylindrical middle part (10f 2 ) of larger diameter than the cylindrical top part (10f 1 ) and with the final size.

IPC 8 full level

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