

Title (en)  
Tool for bending metal sheets

Title (de)  
Werkzeug zum Biegen von Blechen

Title (fr)  
Outil de cintrage de tôles

Publication  
**EP 2353743 A1 20110810 (EN)**

Application  
**EP 11150355 A 20110107**

Priority  
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Abstract (en)  
The invention proposes the construction of a tool for bending metal sheets without requiring the lubrication of the devices involved in said tool, but only exposing one surface of the tool to a particular hardening treatment that also guarantees a very low frictional resistance; said tool includes a first body (1) with a shaped seat (2) partially in the shape of a cylinder provided with a relative axis (X), and accessible from outside through a suitable mouth (4), a second elongate body (3) having a partially cylindrical external surface and housed in said seat (2) which is suitable to almost completely surround the first body (1) and to allow its rotation around an axis of rotation coinciding with the axis of the external cylindrical surface, and with the axis (X) of the first body, and wherein the second body is provided with a V-shaped groove that extends lengthwise and is open to the outside through said mouth (4) for at least one part of the rotation of the second body (3) within said seat (2) of the first body (1), wherein the external cylindrical surface of the second body (3) is provided with one or preferably two successive distinct coatings, achieved with the "PVD" technology. In the case in which two distinct coatings are provided one over the other, the first coating, bonded to said surface, has a hardness greater than the hardness of the second coating. The first coating includes one or at the same time more than one of the following hard substances: Titanium nitride (TiN), Chromium nitride (CrN), Titanium carbonitride (TiCN), Titanium and aluminium nitride (AlTiN).

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Citation (applicant)  
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