

The invention relates to mechanical engineering, namely to plastic metal working and can be used to increase the bearing capacity of the bevel gears.

The device for hardening the teeth of bevel gears, according to the invention, comprises a movable drive disk (1) and a fixed body (2), on which is mounted a hardening mechanism with loading elements (3), made in the form of gear sectors. In the loading elements (3) are made spherical cavities (11), at the same time the elements (3) are movably mounted along the perimeter of a disk (4), placed on the body (2) by means of balls (6), with the possibility of rotation around a central mandrel (5). On the disk (4) is placed a bevel gear (12) to strengthen its teeth, limited from axial movement by two disks (13 and 14), equipped with elastic elements (15) and driven in the axial direction by the movable disk (1), which communicates with high-pressure cavities (8), made in an annular block (7), fixed on the body (2), at the same time on the inner side surface of the block (7) are made through holes, coaxial with the spherical cavities (11), for sliding pistons (9 and 10), which, on one side, communicate with the cavities (8), and on the opposite side - with the loading elements (3).

Claims: 1

Fig.: 2

