

The invention relates to the mechanical engineering and may be used for plastic deformation of toothed profiles on blanks of annular type.

The device for toothed profiles rolling on annular blanks contains a body, wherein there are coaxially installed a drive shaft and reference external gear-wheels, kinematically joined with knurling rollers. The body is provided with a cover, rigidly fixed thereto, into the central hole of which in bearings there is mounted the straight sector of the drive crank shaft, inside the body onto the cover there are concentrically fixed the reference gear-wheels with the formation of an annular space between them for blank placement. Into the pilot holes, made into the cover, in the region of the annular space, there are placed pushers, fixed onto the carriage, placed outside the body. Onto the inclined sector of the drive crank shaft there is installed a double-ring satellite gear, executing a precession motion, one ring thereof, having the knurling rollers fixed onto it, engages into mesh with the reference gear-wheels, and the second ring, the teeth of which are made in the form of conic rollers, engages into mesh with the central gear-wheel, which is coupled with the drive shaft and coaxially to it mounted into the body with the possibility of rotation. The lateral surface of the knurling rollers may be made in the form of a hyperboloid of revolution of one nappe.

Claims: 2

Fig.: 3