

The invention relates to the manufacturing engineering, in particular to the machining of gear-wheels.

The process consists in that the tool, made in the form of a disk with machined extremity to the radius R, is communicated a wobbling motion about the X, Y, Z coordinates system, characterized by the Eulerian  $\theta$  and  $\psi$  angles, another motion about the X1 and Y1 coordinates axes, in accordance with the claimed equations and an additional linear motion along the tooth at an angle  $\delta \geq 0$  about the plane formed by the X1 and Y1 axes.

At the machining cycle end the center of the tool radius R deviates from the wheel machining dividing cone with the top in the precession motion center with a value given by the equation:

$$a = l \cdot \operatorname{tg}\beta,$$

where l is the length of the dividing cone generator;  $\beta$  – the roll cone angle in the precession gear.

The result of the invention consists in increasing the precision and in extending the technological possibilities by providing for the continuous multiple contact of the teeth in the gearing and obtaining of teeth with different curvature of the profile, as well as with longitudinal modification.

Claims: 2

Fig.: 4