

The invention relates to the mechanical engineering, in particular to gearwheels-tools and processes for gearwheels-tools working for array manufacture.

The gearwheel-tool includes a gear ring (1) with modified curvilinear teeth (2), the profile of which may be concave-convex or circular and is described by parametric equations.

For working of gearwheels-tools with modified tooth profile there is proposed a process, wherein the abrasive tool executes a modified precession motion, taking into account the compensation of the array teeth profile error value, obtained by means of electrochemical erosion. Said profile error is conditioned by the fact that certain zones of the array tooth profile are subjected to the electrochemical erosion a longer time, as a result of which there is produced an additional dissolution of the material.

For the realization of such modification of the gearwheel-tool teeth profile, the abrasive tool is communicated additional movements generated by the cams of the connection mechanism, the profile of which is described by parametric equations.

Claims: 4

Fig.: 9

