MD.33.	
Title	Process for machining of gearwheels consists
Authors	Sergiu Mazuru, Maxim Vaculenco, Serghei Scaticailov, Ion Bostan
Institution	Technical University of Moldova
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Description EN

The invention relates to the mechanical engineering, in particular to the gear-wheel working. The process for working the precession engagement teeth consists in that a tool is imparted a motion, imitating the real operating conditions by coordinated displacement with respect to the mobile system of coordinates (X1, Y1, Z1) and the fixed system of coordinates (X, Y, Z), the origin of coordinates of which coincides with the center of spacespherical motion,

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the Z1 axis forming with the Z axis a nutation angle and describing a conic plane with the vertex in the center of space-spherical motion. The tool, made in the form of profile disk along the edges, with a radius R is imparted an additional linear motion along the tooth, at an angle d>0 with the plane formed by the axes X1 and, Y1. At the beginning of working, the center of disk profiling with the radius R is installed onto the pitch cone for wheel working with the vertex in the center of space-spherical motion, the axis of rotation of the tool is placed perpendicular to the axis of rotation of the blank and the disk axis is placed symmetrically about the Z1 axis. At the end of the working course, the center of the tool radius R is deflected from the pitch cone for wheel working with the vertex in the center of space-spherical motion with a predetermined value. The tool is made in the form of profile disks inclined at an angle greater than the nutation angle O and is composed abrasive disks.

Class no.

