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The invention relates to the mechanical engineering, in particular to the electroerosion machining of gearwheels.
The process for electroerosion machining of gearwheels, according to the first variant, consists in that the gear ring of the gearwheel is formed by means of successive coordinated displacements of the wire tool electrode, obtained by means of a computer control program from line interpolators. Novelty of the invention consists in that the gearwheel is communicated a precession spherical-spatial motion around the precession center "O" and a rotary motion. At the same time, the wire tool electrode is communicated by means of interpolators such coordinated motions (Z_2, Y_2) and (Z_3, Y_3), providing that the generatrix of cone, obtained as a result of wear of the wire tool electrode, in the normal tooth profile plane may pass through the precession center "O".
The process, according to the second variant, consists in that the gearwheel is communicated a rotary motion around its axis. At the same time, the wire tool electrode is communicated by means of interpolators such coordinated motions (Z_2, Y_2) and (Z_3, Y_3), providing a point "F" on the generatrix of cone, obtained as a result of wear of the wire tool electrode, in the normal tooth profile plane with a precession spherical-spatial motion around the precession center "O".
The device for wire electroerosion machining of gearwheels, according to the first variant, includes a body, onto which there are installed a tool (3), a mechanism for rotation of the machined wheel (2), installed with the possibility of spherical-spatial motion around the precession center "O", and a computerized control system. Novelty consists in that the tool (3) is made in the form of wire electrode. The body is equipped with two interpolators, placed in diametrically opposite zones about the precession center "O", at the same time the interpolators include two servomotors (6), with the mutually perpendicular axes situated in the planes $Y_2O_2X_2$ and, respectively, $Y_3O_3X_3$ and kinematically joined by means of guides (4, 5) with the wire tool electrode (3).
In the device according to the second variant, the interpolators comprise a turning element, onto which there are fixed two servomotors, one of which is placed with the vertical axis of rotation and the second is placed with the horizontal axis of rotation, and is kinematically joined with a slider mounted onto the turning element. In the sliders there is kinematically fixed the wire tool electrode.

Claims: 5
Fig.: 10