

The invention relates to the mechanical engineering, in particular to the electroerosion machining of the precession gearwheels.

The process for wire electroerosion machining of the precession gearwheels consists in that the gear ring of the precession gearwheel is formed by means of successive coordinated displacements of the wire tool electrode 3, obtained from line interpolators, controlled by a computer program. And "D" point of the precession gearwheel is in the spherical-spatial motion around the precession center "O" described by parametric equations. In another variant of the invention, the wire tool electrode 3 is communicated coordinated motions generating the tooth profile and compensating the error, caused by the wear of the wire tool electrode 3.

The device for wire electroerosion machining of the precession gearwheels includes a body, onto which there are installed a tool electrode 3, a semimanufactured wheel rotation mechanism, installed with the possibility of supplementary spherical-spatial motion around the precession center "O", a computerized control mechanism, 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 being in the planes $Y_2O_2X_2$ and $Y_3O_3X_3$ respectively, kinematically joined by the upper 4 and lower 5 guides.

Claims: 5

Fig.: 10

