The invention relates to the mechanical engineering, namely to gearwheel working.
The process for working of precession gearwheels of small dimensions includes working of the electrode part (8) with a tool electrode (5), which is communicated precession and rotary motions around the precession center O, and the electrode part (8) an axial feed motion, at the same time the axes of the tool electrode (5) and of the electrode part (8) pass through the precession center O.
The device for working of precession gearwheels of small dimensions includes a carcass (1), a tool (5), a part fixing mechanism (9) and a crank shaft (4) mounted coaxial to it. Novelty of the invention consists in that the tool (5) is made as an electrode in the form of satellite gear with two ring gears (6) and (7) of different dimensions, kinematically joined with an electric servomotor (3) by means of the crank shaft (4). The ring gear (6) of greater dimensions meshes with a gearwheel (2) rigidly fixed into the carcass (1). The ring gear (7) of smaller dimensions meshes with the electrode part (8), installed with the possibility of axial movement into the fixing mechanism (9) set in motion by a second electric servomotor. The device contains a computer control system (10) for controlling the electric servomotors, as well as the operating regimes of the device.

Claims: 2
Fig.: 4