## a 2005 0158

The invention relates to processes for working metal or alloy structures by electroerosion.

The process for manufacturing metal or alloy structures by electroerosion is carried out with the help of a tool electrode (1) of cylindrical form in the following way: the tool electrode (1) is communicated a rotary and longitudinal motion. The tool electrode (1) serves as cathode and the semimanufactured article (4) in the form of metallic band, installed onto a magnetic table (5), serves as anode. During the longitudinal and rotary motion of the tool electrode (1), as a result of electric discharges, produced between the anode and cathode, onto the surface of the semimanufactured article (4) there are formed grooves. The elimination of the slag from the grooves is carried out with the help of a rotary tool and of a dielectric liquid jet.

The tool electrode (1) is made of current-conducting material in the form of cylinder, on the surface of which there are made grooves, and on the lateral parts there are coaxially installed disks (7) made of dielectric material, the diameter of each of which is equal to: d=D-2h, where D – the outer diameter of the tool electrode; h – the depth of the grooves formed on the semimanufactured article.

Process, according to another variant, consists in, that the semimanufactured article in the form of metallic band wound onto a feed roller is passed over a calibrating roller and is tied to a traction drum. The tool electrode made in the form of cassette with electroerosion threads, fixed at an equal distance between them, is installed above the calibrating roller, it is displaced the band by means of the traction drum and it is vertically displaced the tool electrode at a distance equal to the depth of grooves, which are formed onto the band as a result of electric discharges.



