

Method for working connected surfaces of parts by electro-erosion alloying of the preliminarily heat-treated surfaces with shaping of surface layer. The surface of steel cathode is treated by graphite electrode by means of pulsed discharges at a power of 0.4 - 4 J with formation of surface "white" layer, micro-hardness of which is higher than the micro-hardness of basic steel, and sub-layer – tempering area, which is placed under the "white" layer and has the micro-hardness lower than the micro-hardness of basic steel. After electro-erosion alloying the "white" layer is separated. Method for working connected surfaces of parts via the electro-erosion alloying of the preliminarily heat-treated surfaces with shaping of surface layer. The surface of cathode from nonferrous alloy is worked by electrode by means of pulsed discharges at a power of 0.4 - 4 J with formation of the surface tempering area, micro-hardness of which is lower than the micro-hardness of base nonferrous metal.