

Research of modes of electropulse processing for an intensification of processes of deformation of trumpet preparations from titanic alloys

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The growing requirements to accuracy of manufacturing of details of flying devices including from titanic alloys, results in substantial growth of labour input of their manufacturing. It speaks that titanic alloys have rather low module of elasticity, high durability, resilient after removal of loading that results in necessity of performance of honing works after manufacturing from them details. Now штамповочное manufacture has progressive the equipment and new ways of punching of details from tubular preparations. However, despite of so wide circulation, opportunities of manufacturing of details from tubular preparations (TP) of titanic alloys are limited to low accuracy and insignificant degrees forming. It defines(determines) necessity of application of various ways of an intensification of processes shaping.

One of such ways is electropulse processing (EPP). For research of modes EPP the original device for test TP is developed and patented. The device allows to test trumpet preparation at various temperatures, quantitatively to estimate size of deformation, to trace dynamic process of plastic deformation.

Tubular preparations were exposed to deformation with introduction of pulses of a current, and on maximal diameter of distribution of a pipe influence of parameters of electropulse influence was estimated.

Fulfilled modes EPP will allow to make details from TP and it is essential to raise limiting opportunities of process to exclude necessity of performance of honing works due to increase of accuracy of made details.