INFLUENCE OF STRESSES ON MAGNETIC PROPERTIES OF 2714A TYPE AMORPHOUS ALLOYS

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The paper presents the measurement results of the influence of the thermal annealing carried out in order to obtain better parameters of the amorphous cores. Amorphous alloys were in as-quenched and annealed state. The results of investigation on influence of external stresses on magnetic characteristics of those cores have been done. First core was in as-quenched state, whereas others were annealed in 350°C for one hour, annealed in 355°C for one hour, and annealed in 360°C for one hour. Presented results confirm the high magnetoelastic sensitivity of 2714A type amorphous alloy in as-quenched and annealed states in case of influence of compressive stresses from 0 to 10 MPa. While in the case of tensile stress effect was negligible for stresses from 0 to 3 MPa.