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ANALYSIS OF QUALITY INDICATORS INTO THE PROCESS OF ENERGY TRANSFORMATION DURING DAMPING VIBRATIONS OF ELASTIC MECHANICAL TRANSMISSION BY THE DRIVE

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Abstract

The decision of actual task of taking into account the parameters of the power part of electric drives of technological machines for improving their dynamic qualities is presented at the design stage, which will ensure the specified accuracy of the movement of working mechanisms. It is shown that when choosing the power part of the electric drive to prepare for the synthesis stages of the control system parameters, it is necessary to evaluate the processes of electromechanical energy conversion of elastic mechanical oscillations, which contributes to the maximum of the damping action of the electric drive, and will allow limiting dynamic loads in order to optimize the transient processes. References 13, figure 1, table 1.

Key words: drive, electromechanical system, thyristor converter, damping, oscillations.

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