

OPTIMIZATION CHARACTERISTICS OF ROTOR-SUPPORT SYSTEM FROM NK-14ST FREE POWER TURBINE WITH CONSIDER STATICS AND DYNAMICS PROPERTYS

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Issues of choosing supports for modernizing free power turbines, calculations and optimization of working characteristics of slide bearings are analyzed. The differential equations of rotor motion regarding its design features are presented. The results of the calculations of forced oscillations upon the system are shown and an analysis of the feasibility of improving the support of a free power turbine is given.

Gas transport machine, power turbine, supports modernization, slide bearings, optimization of working characteristics, rotor dynamics

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