

OPTIMISATION OF THE JOINT WORK IN AGGREGATE “ICE-HDTC” ON A COMPLEX OF FORCE CRITERIA

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Abstract

The mathematical arguments of an original theory have been laid down for optimization of the joint work (JW) in aggregate “internal combustion engine” (ICE), “hydrodynamic torque convector” (HDTC) along a complex of force criteria reading the potential (force) properties of the aggregate on equally probable law of alteration of the transmission relationship in HDTC. The mathematical model has been developed as an open system, allowing taking into account every probability law (that makes sense only when ICE is in operation even in partial modes) of alteration of the transmission relationship in HDTC, characterizing the joint work of the aggregates with the various working machines (WM), in different working and road conditions.

Keywords

Hydrodynamic transmitter, internal combustion engine, optimization of the joint work, mathematical model, force criteria