

## DETERMINATION ANALYSIS OF TEMPERATURE REGIMES, FUNCTIONAL CHARACTERISTICS AND SLIDING CURVES OF A HYDRODYNAMIC CLUTCH

by

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*Analysis of output quality of power transmitters is possible in position when characteristics are determined earlier. This is the reason why we focused on determination of these characteristics for a concrete power hydro-transmitter. This means that the investigation task primarily consisted of determination of functional characteristics, defining of the sliding curves and temperature regimes of a concrete hydrodynamic clutch. Results of velocity and pressure field investigations in the working space of this clutch, obtained by use of the same test setup, are the basis for determination and analysis of the functional characteristics, sliding curves and temperature regimes. In this work we also analyzed function of the hydrodynamic transmitter in assembly with an internal combustion engine, as well as a process of acceleration and deceleration of a vehicle with this assembly in it.*

**Key words:** *hydrodynamic clutch, temperature regimes, sliding curves, operating characteristics of hydrodynamic clutch*

### Introduction

Non regulate hydrodynamic clutch with the radial blades D370, produced by "14. October" from Kruševac (Serbia), for motor vehicle MTZ 100, is used as the object of research. From that purpose, original experimental equipment was developed. Task of the research: control of functional characteristics of hydrodynamic clutch D370 which is connected with diesel motor D-240T (Russian production) and establishing of sweep slide and temperature regimes. Before process of research operating characteristics hydrodynamic

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