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COMPUTER AIDED ENGINEERING IN MODELING OF HYDRODYNAMIC COUPLING

Abstract

Hydrodynamic coupling is important part in a power transmission. Due to that fact, optimal as well as fast design of the impeller is concerned. In this study numerical model for calculation of the impellers main geometrical parameters is developed in the MS EXCEL software package and appropriate data are then imported in AutoDesk package INVENTOR. These data are used in CAD environment as parameters for automatic pump and turbine impellers generation.

In this paper mathematical model, numerical algorithm as well as application of developed software is presented. This method is used for design of small and medium power hydrodynamic coupling