
INVESTIGATING HYDRODYNAMIC LOSSES IN CENTRIFUGAL PUMPS WITH A LOW SUCTION SPECIFIC SPEED EMPLOYING HYDRODYNAMIC MODELLING METHODS

A.A. Morozov

lexa_morozov_12@mail.ru

Bauman Moscow State Technical University, Moscow, Russian Federation

Abstract

We studied the distribution of losses in the blading section of the pump and designed runners and diverters. We computed operating fluid flow parameters in a rotary vane pump with a low suction specific speed by means of hydrodynamic modelling. For this purpose we designed a 3D model of the blading section found in a pump with a low suction specific speed and computed the flow in it for a wide range of operating fluid viscosities

Keywords

Hydraulic losses, low suction specific speed, blading section optimisation

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Morozov A.A. — student, Department of Fluid Mechanics, Hydraulic Machines and Hydraulic and Pneumatic Automation, Bauman Moscow State Technical University, Moscow, Russian Federation.

Scientific advisor — A.I. Petrov, Cand. Sc. (Eng.), Assoc. Professor, Department of Fluid Mechanics, Hydraulic Machines and Hydraulic and Pneumatic Automation, Bauman Moscow State Technical University, Moscow, Russian Federation.
