Numerical experiment optimization to obtain the characteristics of the centrifugal pump steps package

Boldyrev S., Boldyrev A.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© Published under licence by IOP Publishing Ltd. The numerical simulation method of turbulent flow in a running space of the working-stage in a centrifugal pump using the periodicity conditions has been formulated. The proposed method allows calculating the characteristic indices of one pump step at a lower computing resources cost. The comparison of the pump characteristics' calculation results with pilot data has been conducted.