

The Characteristic of a Centrifugal Blower and the Flow Pattern for the Shape of Tongue

by

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Abstract

A study of internal centrifugal blower is very interest in case of the problems for improving its characteristics. This report is described about effect of the tongue shape for characteristics of centrifugal blower. The experimental visualization experiment and numerical analysis for the tongue shape of 3 Types clarified the flow characteristic near the tongue of centrifugal blower. As the results, the following facts are made clear. The behavior of the flow near the tongue by the numerical analysis agrees the behavior observed by flow visualization experiments. The detailed flow phenomena near the tongue can be compared changing the flow rate using the visualization and the numerical analysis.

Keywords: Centrifugal blower, Tongue, Numerical analysis, Visualization, Flow pattern

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