

Study of Low Flux Centrifugal Compressors Stages Used In Gas Pumping Units

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Abstract

Due to the importance of using centrifugal compressor in pumping and transferring the gas, many researches were dedicated to increase the effectiveness of these compressors.

In our research, an experimental study was executed for flumes of flux stream passageway of centrifugal compressors stages used in gas transferring machines by pumping.

The study was applied on ten models and include the effect of Mach

number, ϕ_p and $\psi_{T.P}$ on the efficiency and the effect of velocities ratio

$w^* = \frac{w'_2}{w'_1}$ on the stage effectiveness.

Key Words : flumes, flux, Mach number, the stage effectiveness, centrifugal compressors

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