

Experimental Investigation of Effect of Orifice Diameter on Volumetric Efficiency of Two-Stage Reciprocating Air Compressor

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Abstract: *The volumetric efficiency is an important parameter commonly adopted to quantify the performance of air compressors. The present work is concerned with the design of an optimum air intake system for a single acting two stage reciprocating air compressor. The intake air system comprised of different diameter of orifice which affect the quantity, pressure of air to the compressor. The study approaches the effect of change in the intake orifice opening, affects the volumetric efficiency of air compressor. In this we used the standard procedure to find the efficiency, and it shows us the as orifice diameter increases the volumetric efficiency changes with increasing order to some extent.*

Keywords: Volumetric efficiency, orifice meter