

عنوان مقاله:

Experimental Study on Heat Transfer from a Perforated Fin Array with Cross Perforations

محل انتشار:

دومین کنفرانس انتقال حرارت و جرم ایران (سال: 1393)

تعداد صفحات اصل مقاله: 7

نویسندگان:

H Saadat - B.S Student, Department of Mechanical Engineering, Faculty of Engineering, Islamic Azad University
Shiraz Branch, Shiraz, Iran

M. M. Tavakol - Instructor, Department of Mechanical Engineering, Faculty of Engineering, Islamic Azad University
Shiraz Branch, Shiraz, Iran

M. Yaghoubi - Professor, School of Mechanical Engineering, Shiraz University, Shiraz, Iran

خلاصه مقاله:

Experimental study is performed to analyze heat transfer characteristics as well as thermal performance of a new type of perforated fin with cross openings. For measurements, an array of these fins over a flat surface is made from aluminum and two cross circular holes are drilled in each fin. The tests are conducted in a wind tunnel which produces uniform air motion upstream of the test case. Temperature measurements are carried out by means of calibrated thermocouples system and surface temperature measurement is determined by a thermograph imager. Results of thermal structure and heat transfer are plotted for Reynolds numbers 2×10^4 - 4.6×10^4 based on the fin length

کلمات کلیدی:

Convection heat transfer, perforated fins, cross perforation, temperature measurement

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/910346>

