

عنوان مقاله:

Designing and Manufacturing the Multiple Jets Simulator and Experimental Investigation of the Multiple Jets in Crossflow

محل انتشار:

فصلنامه فرایندهای نوین در ساخت و تولید, دوره 3, شماره 4 (سال: 1393)

تعداد صفحات اصل مقاله: 20

نویسندگان:

Saeed Toolani - Department of Mechanical Engineering, Najafabad Branch, Islamic Azad University, Najafabad, Iran

Mohamad Hojaji - Department of Mechanical Engineering, Najafabad Branch, Islamic Azad University, Najafabad, Iran

خلاصه مقاله:

Designing and manufacturing the multiple jets simulator and experimental investigation of the multiple jets in crossflow at low velocity ratios have been studied Together with design and build a low-speed wind tunnel. A specific rake is used to determine the flow field pressure and changes in static pressure measured by pressure taps in the near field of the jets. There are generally three regions on the pressure distributions whose details depend on the velocity ratio. Study the flow field and surface pressure distribution at low velocity ratios shows that by the increase the velocity ratio, the total pressure of the jet stream decreases sharply. The effects of increasing the number of jet injection nozzles showed that the influence on the jet stream in the vertical plane is significant. However, the influence of Normal multiple jets on the plate is reduced. It also increases the number of nozzles reduced the pressure coefficient .rather than the single-jet injection

کلمات کلیدی: Counter rotating vortex pair, Jet in crossflow, Jet simulator, Wake, Wind tunnel, Velocity ratio

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/1291581

