عنوان مقاله:

Nozzle Displacement Effects on Two-Phase Ejector Performance: An Experimental Study

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خلاصه مقاله:

Experimental results of two-phase ejector operation with refrigerant R۱۳۴a as working fluid are presented in this paper. The tests carried out allowed evaluating the influence of the primary nozzle position in the mixing chamber and of operating conditions such as the thermodynamic state of the fluid at the inlet and outlet of the ejector. Various positions of the primary nozzle were tested and the operating conditions ranges were: primary inlet pressure ۸.۸-۱۴.۹ bars, subcooling ۰.۲-۵ °C and ejector outlet pressure ۳.۷-۴.۷ bars. The tests have shown an optimal position of the primary nozzle (NXP=۳۸.۱ mm) in the ejector but this position was not very sensitive to operational conditions. The performance of the ejector dropped sharply when the nozzle was placed right at the inlet of the constant-area section) in the mixing chamber. Pressures at the primary inlet and outlet had a limited impact on the entrainment ratio

کلمات کلیدی:

Experiments, phase, Two, R۱۳۴a, Ejector, NXP