

Experimental Study on Friction Factor of Oscillating Flow Through a Regenerator

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Abstract : This paper presents an experimental work to characterize the dynamic operation of a metal regenerator crossed by dry compressible air alternating flow. Unsteady dynamic measurements concern the pressure, velocity and temperature of the gas at the ends and inside the channels of the regenerator. The regenerators are tested under isothermal conditions and thermal axial temperature gradient.

Keywords : friction factor, oscillating flow, regenerator, stirling machine

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