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Experimental investigation and CFD analysis of Ranque—Hilsch vortex tube

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<u>HIGHLIGHTS OF THE PAPER</u>

- 1. Experimental study of vortex tube to study effect of insulation on its performance.
- 2. Development of CFD model to validate experimental data.
- 3. Validation of experimental results with CFD results as well as analytically developed correlation.
- 4. Good agreement of present results with other works on non-dimensional basis.
- 5. Genuine effort to explain the underlying physical mechanism of performance improvement using CFD results.

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