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[Home](#) > CFD Simulations of Heat Transfer from Air Cooled Engines

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## CFD Simulations of Heat Transfer from Air Cooled Engines

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A numerical study of the heat transfer from an air-cooled single-cylinder engine has been undertaken using computational fluid dynamics. The variation in heat transfer from and airflow around the cylinder, which was simplified to a stack of annular fins, was observed at different values of fin pitch and length. The simulation results were compared with experimental results obtained previously at Queen's University Belfast (QUB). The CFD prediction of the circumferential temperature distributions had a similar trend to the experimental analysis, offset from the experimental results by approximately 8 degrees Kelvin.

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