THE UNIVERSITY of ADELAIDE

Drag reduction flow control

School of Mechanical Engineering

Project description

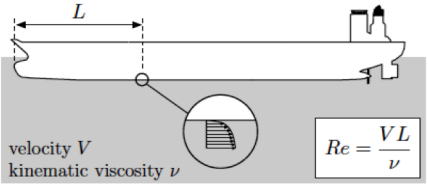
Australia's shipping industry contributes over AUD $20 billion to the economy annually. Nonetheless it is gradually becoming a struggling industry due to the high operating cost, much of which is attributed to fuel cost. Up to 90% of this fuel cost is required to overcome skin friction drag on the ship hull surface. Hence any drag reduction could potentially lead to massive savings in fuel cost.

Primary aim

To perform various known flow control methodologies to access the viability to reduce drag. To develop a new technique to achieve improved drag reduction.

Student attributes

Strongly motivated candidates with a Bachelor Degree (with honours), or Masters in Mechanical/Aerospace Engineering and who have demonstrated experience in aerodynamic research are encouraged to apply. The applicant



should have outstanding academic results to be competitive for an academic scholarship. A good knowledge of fluid mechanics particularly in aerodynamics, flight mechanics, and turbulent flows is essential. The candidate is also required to have good programming skills, particularly with MATLAB and C.

For further enquiries

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