

## Appearance and Magnitude of Dynamic Pressure in Micro-Scale of Subsonic Airflow around Symmetric Objects

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**Abstract :** The efficiency of modern transportation is severely compromised by the prevalence of turbulent drag. The high level of turbulent skin-friction occurring, e.g., on the surface of an aircraft, automobiles or the carriage of a high-speed train, is responsible for excess fuel consumption and increased carbon emissions. The environmental, political, and economic pressure to improve fuel efficiency and reduce carbon emissions associated with transportation means that reducing turbulent skin-friction drag is a pressing engineering problem. The dynamic pressure of subsonic airflow around solid objects creates lift, but also induces drag force. This paper is presenting the results of laboratory experiments, investigating appearance and magnitude of dynamic pressure in micro scale of subsonic air flow around right cylinder and symmetrical airfoil.

**Keywords :** airflow, dynamic pressure, micro scale, symmetric object

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