

STUDY OF FLOW CHARACTERISTICS IN STRAIGHT-FLOW COMBUSTION CHAMBER WITH SUDDEN EXPANSION

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An experimental study of flow characteristics in a straight-flow combustion chamber with sudden expansion has been conducted. As a result of this study, the following curves have been obtained: flow average speed and speed pulsation at the channel entry point and at the channel cross-sections along its length; variation of speed, turbulence, longitudinal-axis and transverse-axis pulsation components of speed on the channel axis as well as backflow speed variation. The calculation of flow based on solution of boundary layer equations satisfactorily coincides with the experimental data.

Characteristic, flow, speed, channel, pulsation, experimental data

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