

COMBUSTION CHARACTERISTICS MANAGEMENT OF AIR-ALUMINUM FLAME IN CO-CURRENT AIR FLOW

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The report presents the results of an experimental study of combustion characteristics of an air-aluminum flame and method of management of combustion characteristics in a co-current air flow ($M = 0 \dots 0,6$).

The study reveals that geometry and characteristics of an air-aluminum flame combustion can be effectively managed by using circular vane swirlers and a diffusion nozzle ($S = 1,8 \dots 2,0$).