

UTILIZATION OF COMBUSTION PRODUCTS ARISING FROM INCINERATION OF CHARGES OF SOLID ROCKET FUELS

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Received March 30, 2018

Abstract – The article focuses on the issues of utilization of combustion products arising from incineration of charges of solid rocket fuel in the course of implementation of the closed combustion method using water and non-gasifying media. The goals of processing combustion products are the following: afterburning of non-oxidized products, cooling of the high-temperature heterogeneous stream and neutralization of toxic compounds, primarily, hydrogen chloride. A comparative analysis has been performed which considers two methods for processing combustion products of solid rocket fuel, i.e. applying water or solid bulk heat carrier as cooling-neutralizing medium. The advantages and limitations of both procedures are discussed.

Keywords: utilization, gas-liquid ejector, fluidized (boiling) layer, combustion products, incineration, solid rocket fuel.