

PARTICULARITY OF THERMAL CONDITION COMPUTATION OF LRE WITH COOLING BY LIQUID OXYGEN

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In this article considered computation of thermal condition of new LRE with cooling by liquid oxygen. Substantiation of LRE cooling channel design is considered, analysis of various procedures of computation convection heat flux and heat transfer coefficient is performed. As the result distribution of chamber wall temperature (hot gas side) and coolant pressure is presented. Recommendations on lowering wall temperature and it measuring during fire tests is proposed.

LRE, cooling, heat exchange, oxygen, fire test, thermocolor paint

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