

PARAMETRIC CFD DESIGNING OF COMBUSTION CHAMBER ELEMENTS

© 2006 A. Yu Yurina, D. K. Vasilyuk, V. V. Tokarev, Yu. N. Shmotin

Joint-Stock Company Saturn, Rybinsk

The paper present a numerical and parametrical analysis of gas-turbine engine lines elements. The first part deals with the impact of the front device swirlers location and way of swirling on fuel-air mixing effectiveness in the lines. The second part offers a numerical analysis of the temperature pattern in the wake of secondary air jets and of mixing quality in the mixing area of the combustion chamber.