

**INFLUENCE OF WAX ASSEMBLY AND CERAMIC MOULD STATUS ON PRODUCT QUALITY
IN INVESTMENT CASTING OF JET ENGINE CRITICAL PARTS**

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Abstract

The papers presents an analysis of influence of wax assembly and ceramic mould status on product quality in investment casting of jet engine critical parts. As part of the work, was carried out computer simulations in ProCAST software. Considered several variants concerning the change of the wax assembly status, including various arrangement of single wax patterns on the wax tree, wax patterns twisting and changes in the ceramic mould, including variable wall thickness and type of coating. The simulation results were verified in tests carried out in an industrial environment.

Keywords: Investment casting, computer simulation, superalloys, turbine blades

Author did not supply full text of the paper/poster.