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+1.632e+03
+1.627e+03

Распределение температуры внутри образца

Температура, °C

Разница температур, °C

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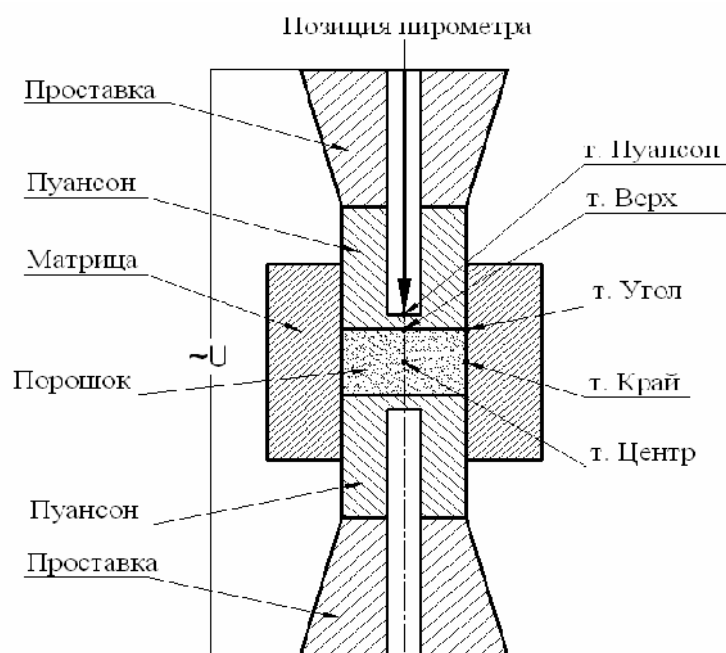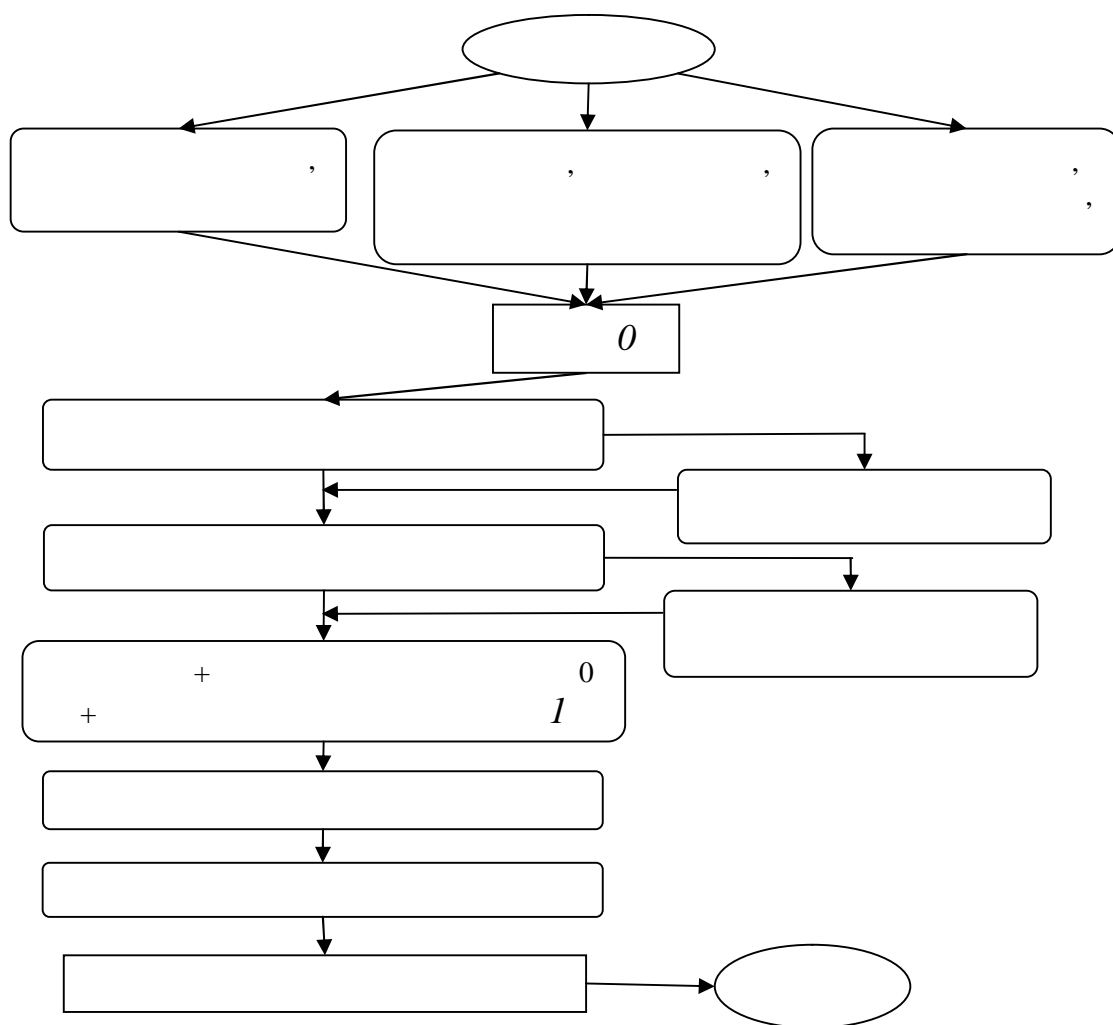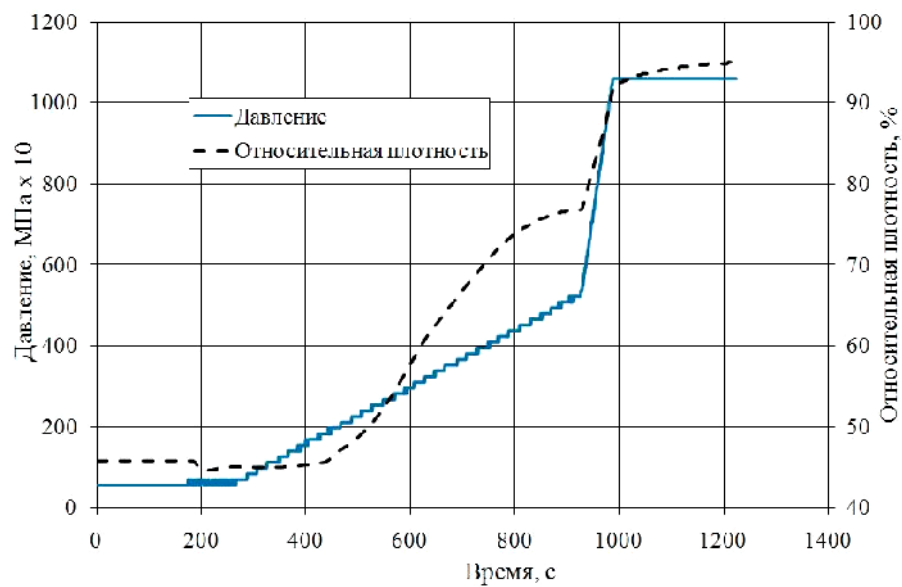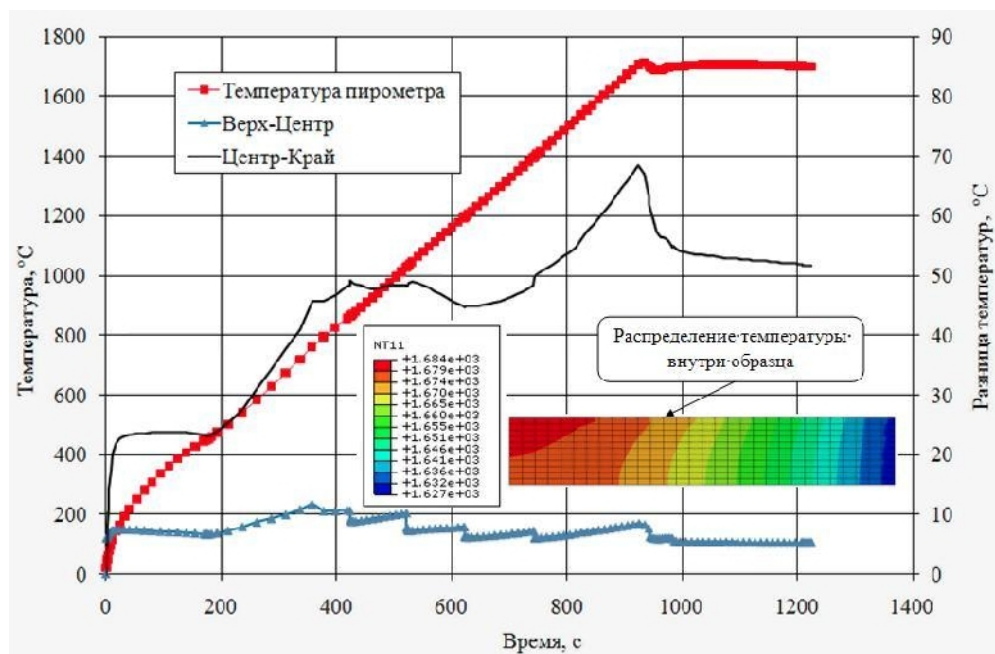
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MODELING OF HOT PRESSING OF TUNGSTEN POWDER AT HEATING BY PULSED ELECTRICAL CURRENT

The peculiarities of the temperature distribution of hot pressing of powder materials are studied. It was found that the nature of temperature distribution depends on the electrical and thermal properties of the deformed material and also material equipment, electrical and thermal contact resistances, and the design features of equipment and installation used for hot pressing, processing modes. Due to complexity of the problem the most effective one is the finite element method. Theoretical analysis based on the stepped modeling of the sintering processes by electric current is proposed The modeling of temperature distribution at heating by pulsed electrical current of powder from conducting pure tungsten was carried out.

Keywords: *powder, mathematical model, heating, electrical current, temperature distribution.*