## Flow and Temperature simulation

IMA-TechSheet #103030 V2



Temperature distribution (vertical centre plane)



Oil distribution in oil chamber with different oil levels

## **Description:**

- 3-dimensional simulation model consisting of solids and flow regions
- Coupled heat and flow simulation (CHT = Conjugate Heat Transfer) consisting of temperature simulation in solids and CFD simulation in flow areas
- Parameterizable simulation model (variable geometry, material properties and operating conditions)

## **Available Test Methods:**

- Stationary simulation for the analysis of quasi-stationary operating conditions
  - Transient simulation for the analysis of transient operation (e.g. start-stop processes)

## **Simulation Results:**

- Temperature distribution in the entire sealing system
- Temperature in the contact area Visualisation of the oil flow