Simulation of operating and environmental conditions

IMA-TechSheet #103060 V2



Simulation of different test run configurations







based on temperature in the sealing gap

Description:

- Use of the simulation method "coupled heat and flow simulation" (CHT), compare IMA-TechSheet #103030
- Parameterisation of the simulation model
- Variable geometry, e.g. shaft diameter, wall thickness, etc.
- Variable material properties, e.g. thermal conductivities, oil viscosity Variable operating condition, e.g. speed, oil sump temperature, ambient temperature

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