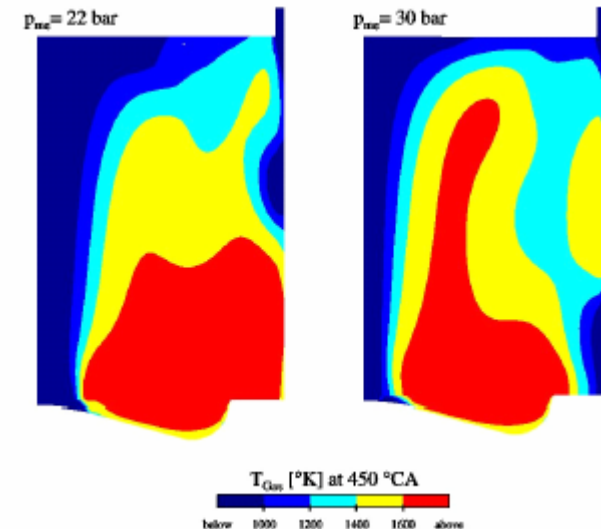**Objectives:** To investigate operation of 2-S and 4-S engines under extreme thermal and mechanical load, design new components and test them full-scale

Progress Highlights:

- Cycle simulations and parameter variations → Thermodynamic layout completed

- CFD pre-calculations complete

- New components (bearing shells, piston rings, fuel valves) design complete

- Engine design and FEM models (combustion chamber components) nearly complete

- Production of test items and prototype components in progress
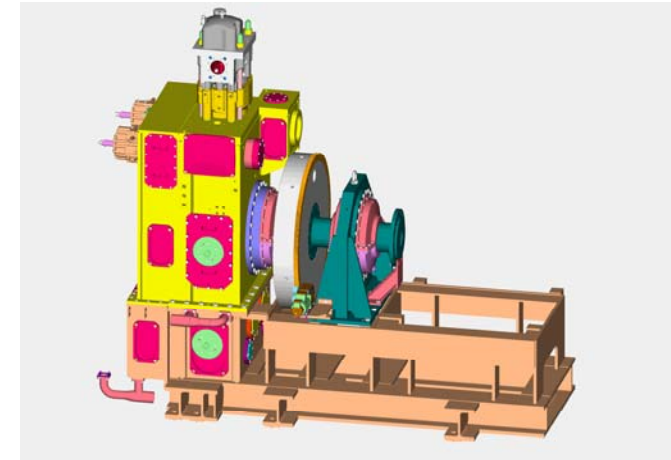
Model of the test engine for experiments

$p_{me} = 22$ bar $p_{me} = 30$ bar

T_{Gas} [°K] at 450 °CA

below   1000   1200   1400   1600   above

Partners: