

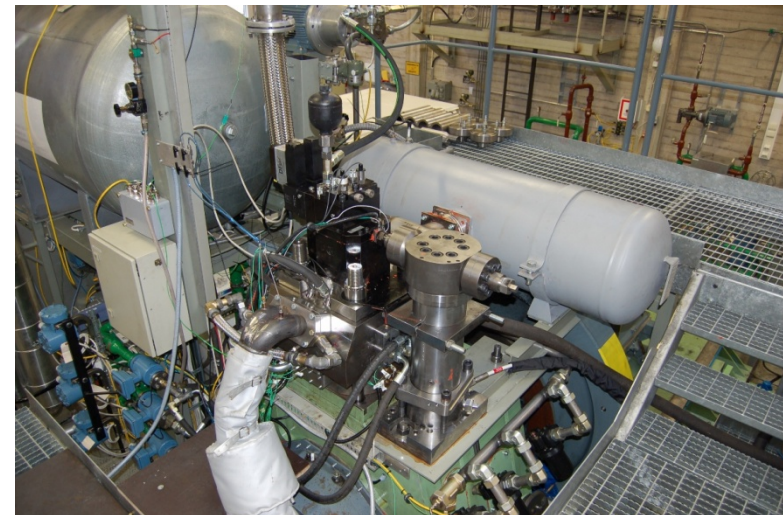
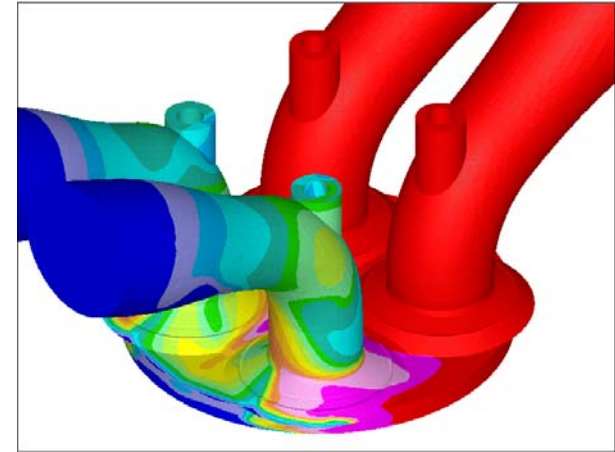
Task 1.1: Development of engines for extreme load conditions

Objectives:

To develop and test components specially designed for operation at extreme load conditions

Highlights:

- Simulations and component design completed
- Manufacturing of new high pressure parts;
 - piston,
 - cylinder head,
 - connection rod and gudgeon pin completed
- Acquiring new auxiliary parts completed: fuel injection, hydraulic valve actuation, etc.
- Preparations for engine testing at TKK;
 - new balancing for crank train,
 - new intake and exhaust piping,
 - and EVE disassembly, checking and maintenance completed



Partners: **A!**

Aalto-yliopisto

COMPONENTA


WÄRTSILÄ



HERCULES-B

Task 1.1: Development of engines for extreme load conditions

Objectives:

To develop and test components specially designed for operation at extreme load conditions

Highlights:

- Engine started in autumn 2010, but mechanical failure was discovered soon
 - New gudgeon pin and piston manufactured
 - Minor changes in parts for ensuring improved lubrication
- Engine tests are currently being run,
 - with updated start-up procedures, and
 - using partly production engine components at first, before taking all new high pressure parts in use



Partners: **A!**

Aalto-yliopisto

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