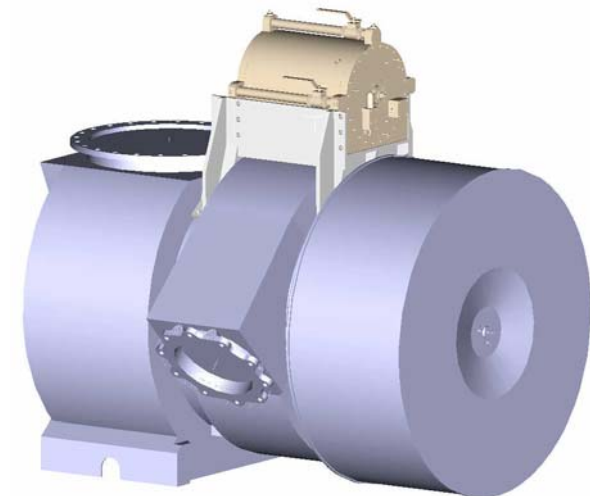


# TASK 9.1: Adaptive components

**Objectives:** Development of engine components with reduced friction and development of adaptive components – full scale tests

## Highlights:

- Friction loss mapping of W20 – full scale engine test rig complete.
- Bearing technologies – rig measurements and parameters investigated. Positive engine test results achieved with synthetic bearing overlays.
- Low friction engine components designed - produced – rig tested. Engine testing ongoing.
- Development of Injection Rate Shaping (RS) methods have reach the engine testing phase with results so far close to the predicted.
- Adaptive Components: The prototype of the tunable mass damper have accumulated more than 3000 engine operating hours with stable performance.



Turbocharger equipped with a tunable mass damper

Partners:        



I.P. HERCULES

Partners Forum, Copenhagen 5/10/2006