

Investigation of water droplet collision with spinning turbocharger compressor wheel

Requirements:

- Literature research
 - Working principal of exhaust gas turbochargers
 - Parts and important parameters of turbochargers
 - Introduction of LP-EGR system, technical description
 - Materials and coatings of compressor wheels
- Development of investigation methods on turbocharger component testbench
- Methodology development on determination of droplet sizes
- Analysis of different intake pipe designs in simulation environment
- Introduction of the results
- Development potentials

Further requirements, suggestions:

- It is the student's responsibility to organise the consultation, and the need for it should be communicated to the lecturer/consultant at least 2-3 days in advance.
- The choice of the assessor is based on a joint decision of the student and the supervisor.
- It is recommended that documentation is written on an ongoing basis, so that useful information is not lost.