

# HERCULES Task 7.1: Internal Measures

- Higher particulate total mass with higher fuel sulphur and ash content – almost linear relationship with fuel sulphur content.
- Engines operated on heavy fuel oil emit higher particulate mass than engines operated on light fuel oils.
- Variation of fuel injection pressure and injection timing shows an influence on particle emissions. Mass is less affected than particle number concentrations. Impact of these measures on 2-stroke and 4-stroke engines differs.
- Intake air humidity showed a too weak influence on particulate emissions to be called significant.
- Sampling conditions of particulate mass are important; they have to be accounted for when presenting results.