

TF2 MEETING #19

Topic: Soak time - Brake temperature at the beginning of the individual trips of the novel cycle

Problem description: Long soak times required for the brake to reach the starting temperature of each trip result in a prolongation of the cycle. This creates logistic and practical problems. Additionally, long soak times might introduce artefacts particularly in the measurement of PM emissions as air flow is applied in order to cool down the brakes faster.

Question: Would it be possible to reduce soak times to the expense of accuracy in the initial temperature? What would be the influence of higher initial brake temperature to the overall temperature profile and thus to the emissions?

Useful Data: Run the cycle with full soak times against running it by setting a maximum soak time for trips that do not reach the temperature immediately (i.e. 10 min) and compare average and maximum cycle temperatures. Additionally, if possible record PM and PN emissions of the two different options by using the same brake materials and operating conditions.

Desirable solution: Agree on a common way to run the cycle for the emission measurement campaigns with regards to the application of soak time.