



Heat Transfer Experiments on a Pulse Detonation Driven Combustor

By Nicholas C. Longo

Biblioscholar Okt 2012, 2012. Taschenbuch. Book Condition: Neu. 246x189x8 mm. This item is printed on demand - Print on Demand Neuware - Heat transfer experiments were conducted using a heat exchanger behind a pulse detonation combustor and aGarrett automotive turbocharger at the Air Force Research Lab (AFRL). The equivalence ratio and purge fraction wereheld at 1.0 and 0.9, respectively, while the frequency of operation was varied from 10 to 12 Hz in 1 Hz movements, and the fill fraction was varied from 0.5 to 0.8 in 0.1 increments. Temperature measurements were calculated using anenergy balance allowing for the calculation of heat exchanger inlet enthalpy. The heat exchanger inlet enthalpy wasestimated to be the exit enthalpy of the turbocharger it was coupled to. The representative turbine inlet enthalpy wascalculated using compressor work and radiation from the turbine. Turbine inlet and exit temperatures were also measured directly using J-type and K-type thermocouples and compared to calculated values using the heat exchangerapproach. 130 pp. Englisch.



Reviews

It is great and fantastic. Better then never, though i am quite late in start reading this one. Your life period will likely be transform once you comprehensive reading this book. -- Blanca Davis

An extremely wonderful book with lucid and perfect information. It is one of the most awesome publication i have read. Your life period will probably be enhance the instant you total looking at this pdf. -- **Prof. Dan Windler MD**