
A Stochastic Reactor Based Virtual Engine Model employing Detailed Chemistry for Kinetic Studies of In-Cylinder Combustion and Exhaust Aftertreatment

Poster location P-03

Karin Fröjd¹, Simon Bjerkborn¹, Cathleen Perlman¹, Fabian Mauss²

¹Lund Combustion Engineering, LOGE AB, Lund, Sweden,

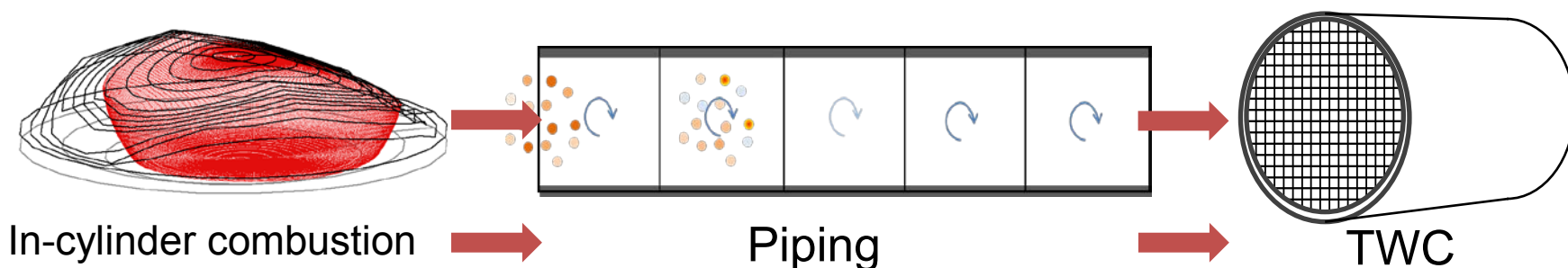
²Brandenburg University of Technology — BTU, Cottbus, Germany

kfrojd@loge.se

www.loge.se

Virtual Engine Model

A network of stochastic reactors employing *detailed chemistry* was used to study TWC conversion efficiency as function of λ oscillation frequency



Results:

- λ oscillation, 1 & 2 Hz
- TWC conversion efficiency:

	1 Hz	2 Hz
CO	44 %	68 %
NO	49 %	49 %
HC	85 %	84 %

