

Engine and Aftertreatment Technologies to Meet Future Global Energy Demands and Emission Regulations

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Global energy demands are growing fast while emission regulations are becoming increasingly stringent in many countries around the world. At the present time, engine and aftertreatment technologies designed to meet US EPA 2007 and Euro IV/V are in production while US EPA 2010 and Euro VI compliant technologies are under development. Seamless integration of exhaust aftertreatment technology with the engine systems will be necessary to meet these regulations. In order to optimize the process of designing new fuel efficient engine and emission compliant aftertreatment systems, it is important to pursue Analysis Led Design combined with experimental validation such that the best designs may be reached at the quickest rate and for the lowest cost. Additionally, laboratory and field testing of all technologies is necessary to evaluate system performance.