

DEVELOPMENT OF LOW EMISSION COMBUSTION TECHNOLOGIES FOR MODERN AERO GAS TURBINE ENGINES: AN OVERVIEW

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Abstract

The demand for gas turbines for civil aviation is increasing continuously as the air transportation system is changing exponentially. Large fleet of commercial aircraft and large and long-haul flight have raised the demand on high thrust engines. Therefore, focus on fuel efficiency of the engines and control on exhaust gas emissions are increasing keeping in mind the economy and environmental considerations. International Civil Aviation Organization has promulgated the emission levels for civil subsonic turbojet and turbofan engines and making it more and more stringent day by day. This paper overviews various combustor technologies which have been developed over previous decades and are under development currently for present and future aircraft to meet the low emission goals.