Special Issue

Secondary Air Systems in Gas Turbines

Message from the Guest Editors

The are inviting submissions to a Special Issue of Energies on the subject area of “Secondary Air Systems in Gas Turbines”. In order to increase the cycle efficiency and specific work output of gas turbines, the turbine entry temperature (TET) is raised beyond the metallurgical limit of the engine components. Consequently, bleed air is taken from the compressor stages and used to cool the turbine. The intricate cooling pathways, seals, and metering devices are collectively known as the secondary air system (SAS). Effective use of the SAS is paramount: superfluous use of bleed air results in an uncompetitive engine design, whereas insufficient or ineffective cooling has a detrimental effect on engine life. Keywords

- Secondary air systems
- Cavity flows
- Rotor–stator systems
- Ingress and Egress
- Mainstream gas path interactions
- Shaft sealing technologies
- Experimental measurement
- Computational fluid dynamics (CFD)

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Deadline for manuscript submissions

closed (10 September 2021)

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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