

## Drive down development cycles with Gas Turbine Secondary Air System Simulation Software

**Towcester, United Kingdom, 21 October 2009** – Flowmaster, provider of world class system simulation software, is pleased to announce the release of Flowmaster V7.7 Gas Turbine, the latest version of the world class software solution for gas turbine thermo-fluid system simulation.

Flowmaster V7.7 Gas Turbine combines new and extended components and capabilities to enable the design and simulation of gas turbine thermo-fluid systems early in the design process, improving gas turbine performance, while reducing the overall development lifecycle.

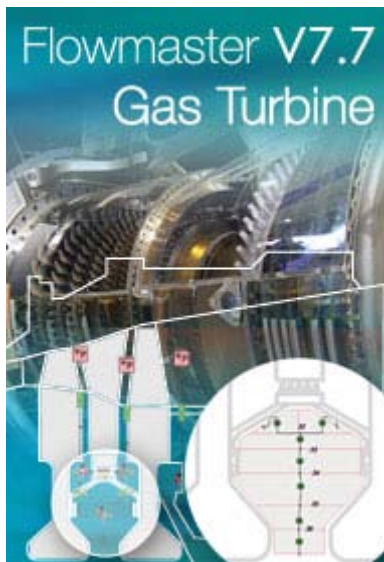
The increasing demand for energy worldwide and the growing concern that the emissions produced today will have a devastating impact on future generations, all participants in the gas turbine supply chain are under pressure to get to market faster, while adhere to ever-tightening legislative environmental regulations. To meet these industry challenges and remain competitive, manufacturers have to become more agile by not only seeking ways to improve their designs but also optimising their design tools and processes.

Flowmaster V7.7 Gas Turbine is a COTS (Commercial Off The Shelf) software tool that enables gas turbine design engineers to design and simulate gas turbine thermo-fluid systems, including the complex flow paths of Secondary Air systems from the concept phase. The Graphical User Interface, multi-user database environment and the ability to embed proprietary correlations reduces development times through accelerated model creation and efficient data reuse.

Commenting on the new version, Michael Croegaert, Gas Turbine Product Manager, said “The release of Flowmaster V7.7 Gas Turbine sees the completion of the steady state solution for secondary air capability. Building on the rotating flow simulation capabilities introduced in the previous release, we have incorporated heat transfer from cavity wall surfaces to allow airflow optimisation and provide a better understanding of the thermal effects on discs. It will also assist our users with modelling pre-swirl nozzles and impingement losses as it now reports individual velocity vectors.”

Flowmaster V7.7 Gas Turbine also incorporates Total Temperature and Total Pressure results reported in the Rotating Frame of Reference to make test data validation quicker. New components include a new Brush Seal component and an enhanced Rotating Passage component (for easy modelling of multiple flow paths). Usability improvements have been made to the Cavity that allows secondary air flow paths to be modelled from 2D geometry.

Flowmaster USA will be presenting a live webinar on the subject of "**Secondary Air simulation for Gas Turbine Applications**" on the **17<sup>th</sup> November 2009**. During this event the USA team will be describing and demonstrating the Secondary Air modelling capability in Flowmaster V7 Gas Turbine including the functionality available in this latest release.



Notes to Editor:

#### About Flowmaster

Flowmaster is an international developer of best-in-class thermo-fluid system simulation software and services, providing Computational Fluid Dynamics (CFD) simulation at a system level, giving engineers insight from the concept stage of the development process all the way through to lifecycle extension.

Flowmaster was established in 1992, with the mission of making the empirical fluid characteristic data in DS Miller's Internal Flow Systems available in the first commercial software code. Flowmaster continues to be the preferred partner of world leading engineering organisations across a broad spectrum of industries. This can be attributed to Flowmaster's ability to anticipate the needs of

industry, resulting in an open and scalable thermo-fluid simulation product range that gives customers, of all sizes, the flexibility to develop their own future-proof strategic advantage through engineering excellence, collaboration and integration.

Flowmaster Ltd is certified to BS-EN-ISO 9001:2000 & TickIT and through an established network of subsidiaries and representatives they provide sales, support and training to customers worldwide.