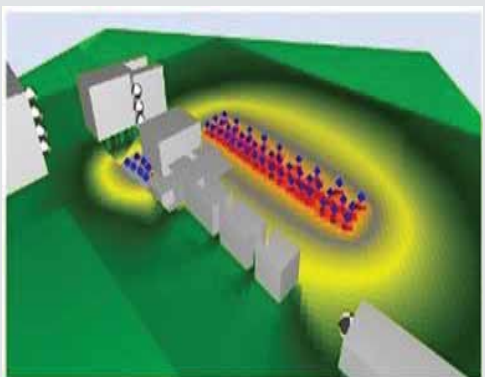
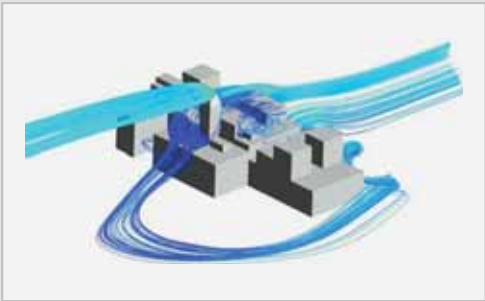
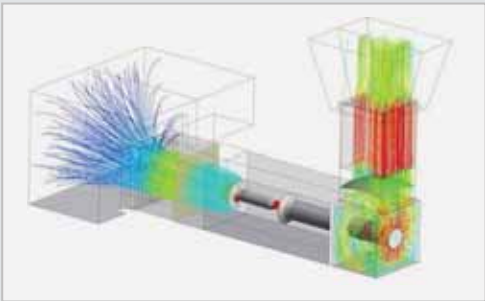
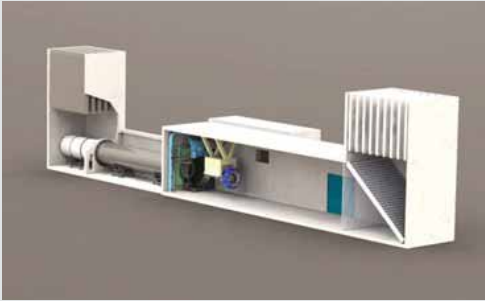




AVIATION ENGINEERING SERVICES



Services for new, refurbishment modification & upgrade of engine test facilities.

VG Engineering Inc. has a solid reputation for providing engineering services to aero-engine OEM's, MRO's and industry specialists for test facility configuration design validation for afterburning turbo-jet, turbo-fan, turbo-prop, turbo-shaft and APU engine types.

From the test cell Inlet to the exhaust, VG Engineering design and validation engineering services cover acoustic, aerodynamic, thermal, structural and mechanical analysis.

CFD Analysis - Flow, Pressure and Thermal analysis is performed by highly experienced engineers using ANSYS CFX and Fluent software operating on high performance networked computing systems. CFD analysis and simulations validate how the design will perform under real-world conditions: flow distribution and stability, system pressure drop, cooling air and heat transfer. Analysis of this data provides opportunities for design optimization. Improvements in system efficiency results in better airflow stability under varying engine power settings through homogeneous mixing of gases for uniformity of velocity and temperature through the entire system. This results in enhanced facility availability, reduces engine run time and test cell maintenance.

Flow Analysis - evaluates air flow patterns outside of the Test Cell to ensure varying wind conditions do not effect the performance of the intake system or cause exhaust gases to be re-ingested into the intake system or affect the areas surrounding the test cell or local communities.

Acoustical Analysis - covers noise and vibration that can impact the engine, test facility, surrounding buildings, employees, and local communities. From acoustical analysis sound attenuation requirements can be determined to reduce noise to acceptable levels during engine testing.

Enhanced FEA Analysis - using ANSYS Mechanical software assures structural integrity of VG Engineering designs over a wide range of vibration, pressure and thermal conditions.

Multiframe and SolidWorks software enables our engineers to create mechanical design solutions that incorporate the requirements determined through analysis and visual modelling that confirms interfaces for ease of construction and maintenance.

VG Engineering services also include: Project Management, Installation Supervision, Commissioning and Support Services.



AVIATION MANUFACTURED PRODUCTS

VG Engineering Products are Manufactured
in our Breslau, Ontario Facility



AUGMENTOR TUBE SYSTEMS | BAFFLES | TURNING VANES | FLOW SCREENS | ACOUSTIC WALL & CEILING PANELS | ACOUSTIC ENCLOSURES

