

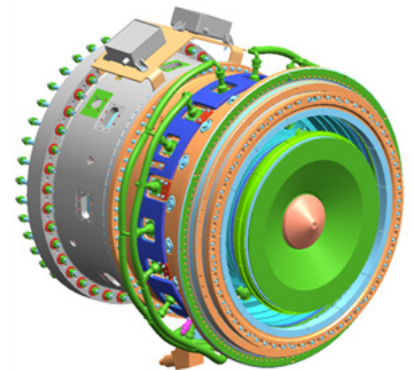
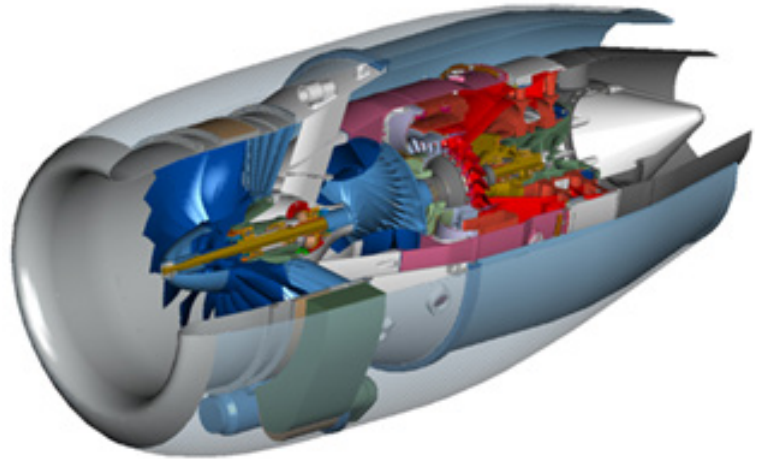
Engineering Overview

Turbine engine development is the cornerstone of Agilis Engineering.

Established in 1993, Agilis has proven experience and success with military and commercial engine development programs.

Aerothermal and mechanical rigs, engine modules and sub-modules, and engine instrumentation and assembly are key Agilis contributions to our customers' engine development activities.

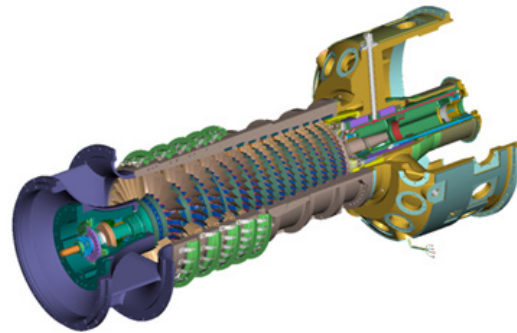
Engineering disciplines include mechanical design, structural analysis, aerodynamics, performance, systems analysis, controls development, heat transfer, secondary flow, product definition, aeromechanics and vibrations analysis, rotor dynamics, systems integration, hardware procurement, instrumentation design and application, module and engine assembly, test planning and execution, test data collection, analysis, and reporting, and program management.



Engineering Overview

Design and Analysis:

- CAD & CAM
- Thermal Analysis
- Finite Element Analysis
- Secondary Flow Analysis
- Bearing and Load Analyses
- CFD Analysis
- Aero Thermal Cycle Simulation
- Aero-Elastic Analysis
- Static and Dynamic Stresses
- Low Cycle Fatigue Analysis
- High Cycle Fatigue Analysis
- Bolted Joint Mechanics
- Fracture Mechanics
- Plastic Analysis
- Modal Analysis
- Forced Response Analysis
- Rotor Dynamics
- Performance Analysis
- Controls Development



Instrumentation, Assembly, and Test:

- Sensor Application
- Sensor Installation and Egress Drawings
- Instrumentation Egress and Termination
- Instrumentation Calibration
- Probe Design
- Data Acquisition
- Test Data Evaluation
- Assembly of Rigs and Components
- Assembly Build Lists and Operation Sheets
- Hardware Inspection
- Engine and Rig Test Support
- Flight Test Support

Agilis provides engineering support from concept optimization through hardware assembly and validation testing.
