Flowmaster V7 Automotive is an industry specific fluid and thermal system simulation software tool.

Built upon the Flowmaster V7 platform, V7 Automotive combines the same proven architecture and GUI with specific automotive component libraries and advanced automotive systems modelling functionality.

A wide range of powerful solver capabilities enable users to build networks and run simulations quicker and easier than ever before. Flowmaster V7 Automotive enables thermo-fluid system designs to be optimised and validated from the very beginning of the development process. Engineers and analysts are able to find critical issues immediately and improve collaboration and communication with customers and suppliers, whilst managing their knowledge within Flowmaster.

Flowmaster V7 Automotive features a range of specific automotive systems modelling packages:

**Airside Systems:**
The Airside Systems Modelling package enables the measurement and analysis of pressure drops, air velocities and thermal performance of the cooling pack and its configuration.

**Air Conditioning:**
Using the Air Conditioning Systems Modelling package, the performance of all modern AC systems can be evaluated whilst measuring the power consumption, the effect on the coolant temperature and the effect on the cabin air conditions. New features include Geometric Heat Exchanger Modelling, Reversible Heat Pump and Super Critical AC Systems including R744a (CO2) correlations.

**Cooling Systems:**
The Cooling Systems Modelling package enables users to simulate and measure the warm-up time, thermostat response, cooling system expansion, fluid expansion and block temperature. Globally recognised drive cycles are available for transient analysis without the need for third party tools.

**Exhaust Systems:**
Engineers are able to model entire systems using the Exhaust Systems Modelling package; from the engine to rear silencer/muffler and to measure the exhaust pressures, losses, flow rates and other performance parameters. Simulation tools include Full Heat Transfer in bends and Weighting Factor for irregular bends.

**Fuel & Injection Systems:**
The Fuel & Injection Systems Modelling package enables engineers to model the entire Fuel & Injection system from tank to injector. Engineers can investigate tank filling rates, fuel pressures (high and low side), flow rates, temperatures & pressures and injector performance.

**Lubrication Systems:**
The Lubrication Systems Modelling package provides simulation tools to ensure adequate oil flow to all components such as bearings for all operating conditions, minimising friction, optimising component sizing and heat management.
About EnginSoft

EnginSoft is an engineering consultancy company with specific expertise in Process Simulation and Optimisation, specialising in engineering analysis supporting the whole design chain. We are dedicated to helping companies improve competitiveness and reliability in product and process development with particular capability in management of 3D tolerances of complex assemblies.

EnginSoft can help you understand the full implications of your part dimensions for your 3D assembly performance, ensuring robust “right first time” design.

Learn more. Contact your EnginSoft sales professional or visit us online at www.enginsoft.com