

***"Your Engineering Partner
in
Applied Mechatronics"***

Consultancy, Methodologies & Technologies

Corporate overview 2013

www.amet.it

Company Profile

AMET is a **high-tech engineering company**, established as a spin-off of the Mechatronics Laboratory of the **Politecnico di Torino** and supported by the Innovative Enterprise Incubator (I3P)



AMET's customers include primary OEMs and Tier1 suppliers into **automotive, aerospace, railway** and machineries markets

AMET supplies its customers with best-in-class services and products for the **design** and **testing** of mechatronic products

AMET's (Applied **Mechatronic** Engineering & Technologies) skills include **mechanics, electronics, automatic controls** and **software** and their integration, to assure the best overall system performance, relying onto model based methodologies and **virtual** product development tools (aka CAE)

The company applies a quality management systems compliant with ISO 9001:2008



Company Profile

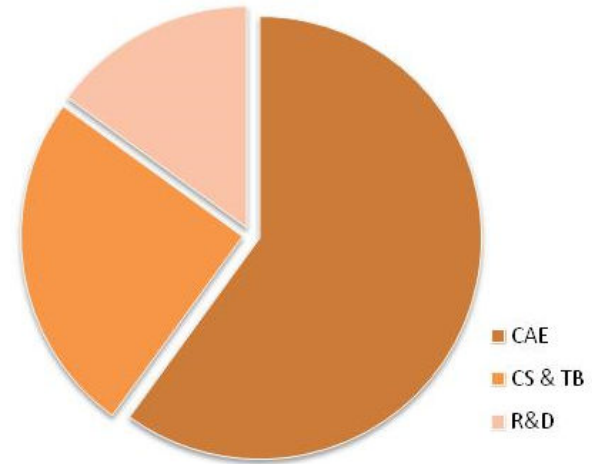
Founded: 1999

Employees: *around 40*

Revenues export turnover: *around 35 %*

Personnel expertise (PhD: 20%):

Locations: *Italy: Torino (HQ) and Benevento*
Slovak Republic: Kosice
USA: Detroit



Internationalization & Innovation

AMET is an active Partner in both *Innovation Clusters and Internationalization Projects:*



AMET has active Partnerships with both *Italian and Foreign companies:*



Activities

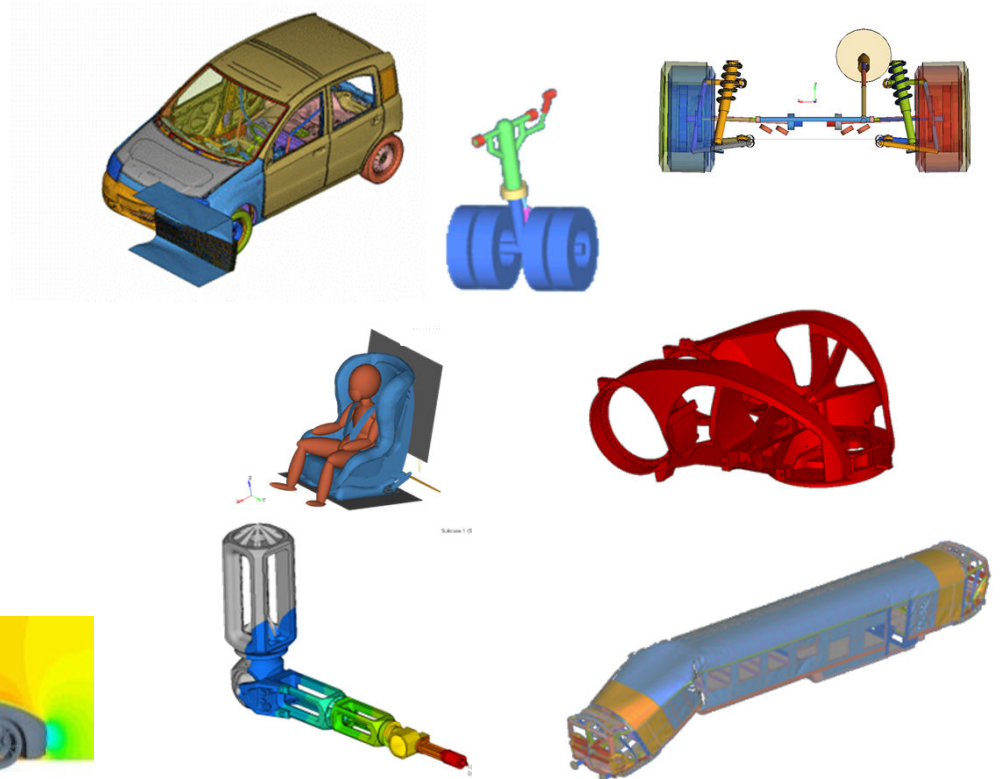
Activities:

- Engineering services:
 - numerical simulation (CAE) based virtual product development
 - automatic controls design and testing
 - consulting
- Products:
 - physical test benches:
 - vehicle closures durability testing
 - HIL testing for electronic control units validation
 - software tools

Engineering services: CAE

CAE: structural design and optimization

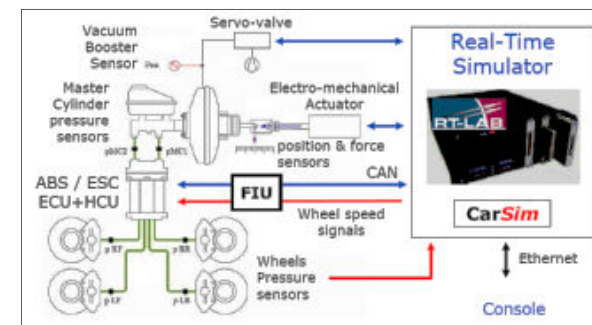
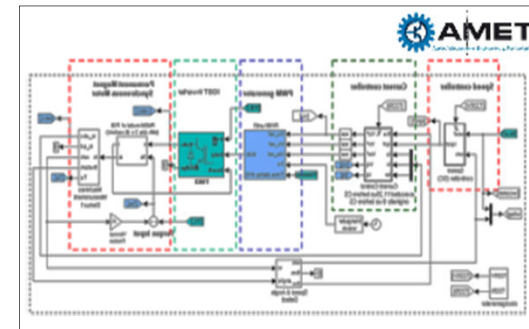
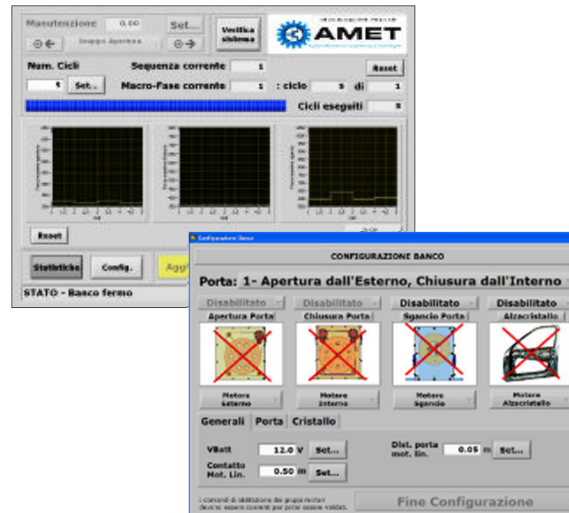
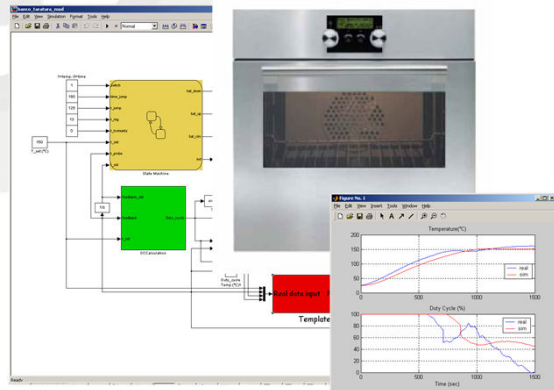
- Optimization (weight-cost-performance)
- Strength & Durability
- Passive Safety (Crash)
- Biomechanics
- Noise Vibration Harshness (NVH)
- Computational Fluid-Dynamics (CFD)
- Thermo-Mechanics
- Vehicle Dynamics



Engineering services: Automatic Control Systems

Automatic Control Systems for Embedded applications

- Model based system engineering
- Algorithms design and rapid control prototyping
- Embedded Software development
- Human Machine Interface
- Hardware-in-the-loop testing



Engineering services: Consulting

Consulting for product and process development

- Product development methodologies improvement
- Weight performance management
- Virtual / experimental testing data management
- Skills integration and innovation



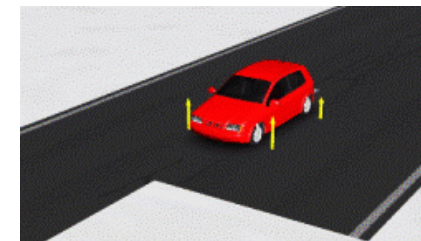
Products

Test benches

- Opening/closing closures fatigue test benches, i.e. vehicle side doors, hood, trunk lid



- Hardware-in-the-Loop test benches for embedded electronic control units testing and validation, e.g. for ABS/ESC applications



R&D and internationalization

AMET is very active into research and innovation: many collaborative projects have been developed, often with the support of public grants

To mention some among the main research areas:

- **new materials**, for instance to improve usability of high strength steels for the automotive, through numerical simulation, or to use composite materials in new projects to achieve high safety performance and save weight;
- **embedded control systems development methodologies**, for instance to improve design and verification tools, in order to achieve safer and more reliable mechatronic applications;
- **sustainable mobility**, to save energy and increase transportation sustainability;
- **smart building**, aimed to energy efficiency and comfort improvement;
- **smart and green manufacturing**, with the goal of saving energy and increasing production competitiveness

AMET is also very active in innovation and internationalization clusters

