

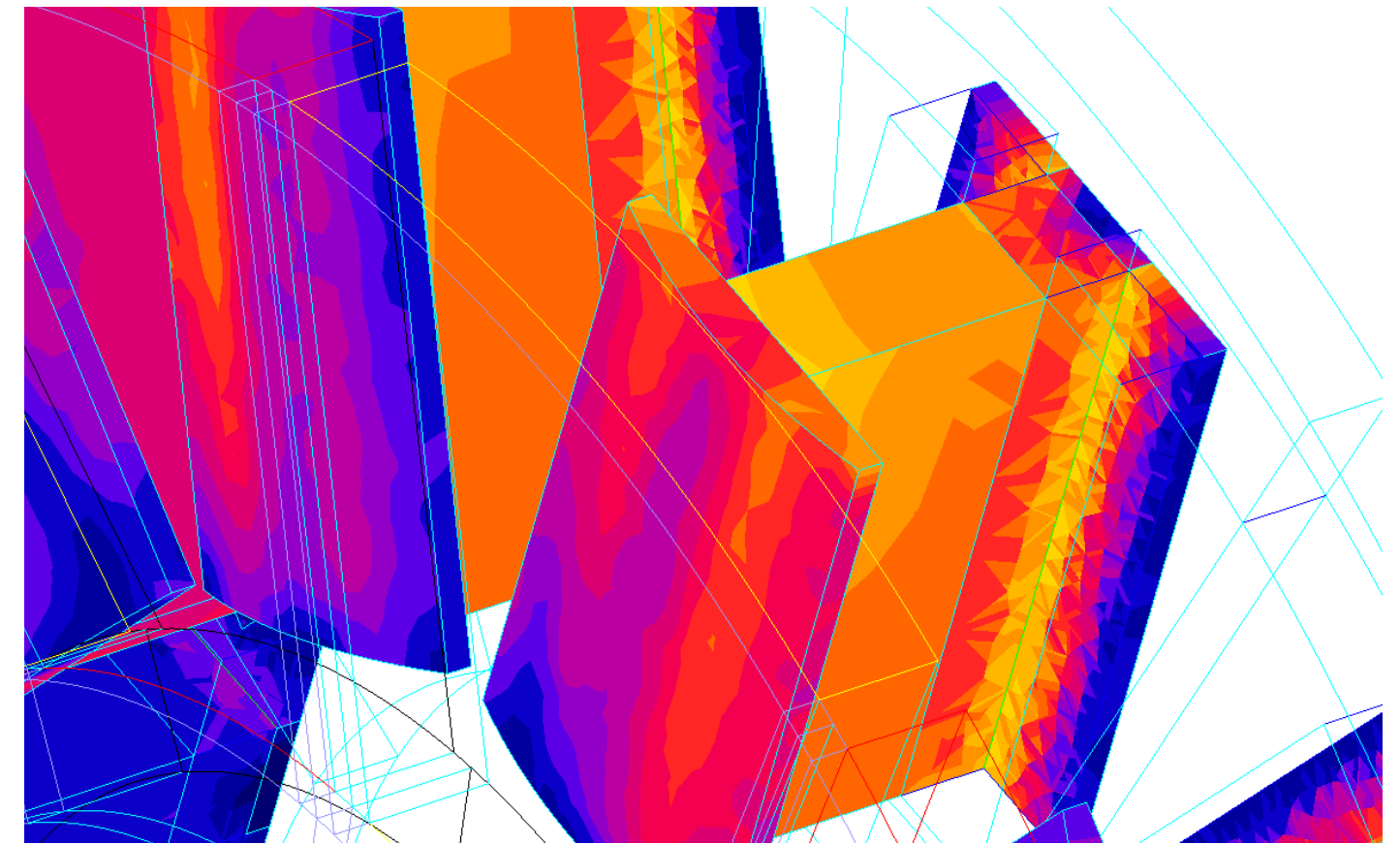
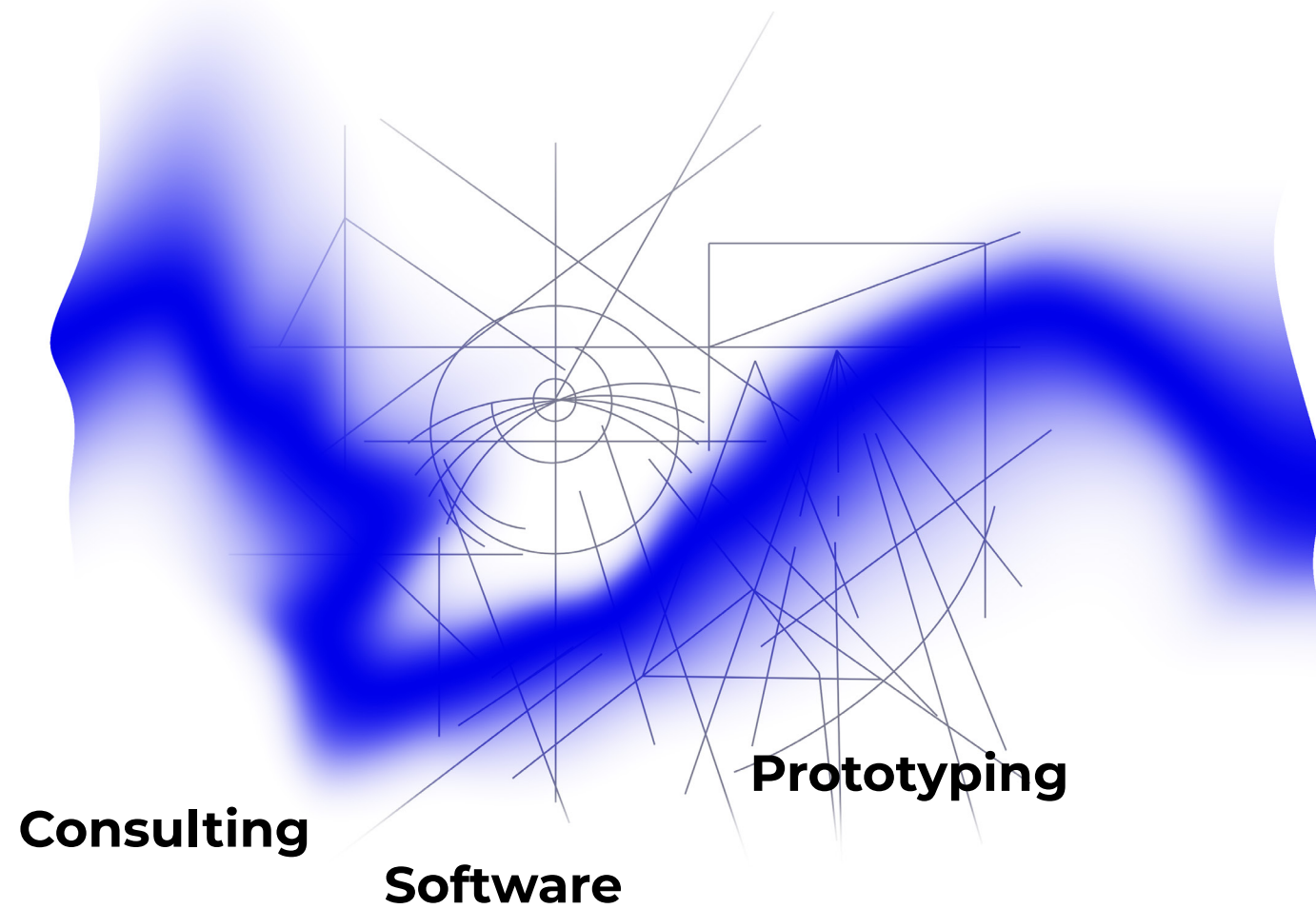
Who We Are

Spin has been involved for twenty years in advanced design and computer simulation services: we collaborate with many prominent companies, Universities and Research Institutes.

We offer consultation and create professional simulation software. Our team is proficient in several fields: mechanics, vibro acoustics, thermal magnetics, fluid-dynamics, Cfd, electronic controls, electromagnetism and management of these aspects.

We are with you step by step throughout the whole design process

We handle innovative projects



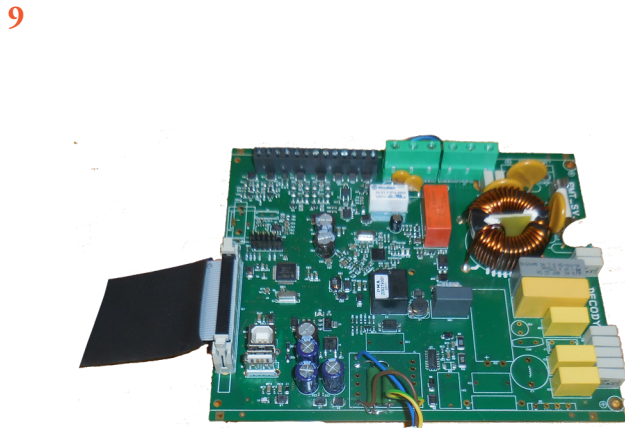
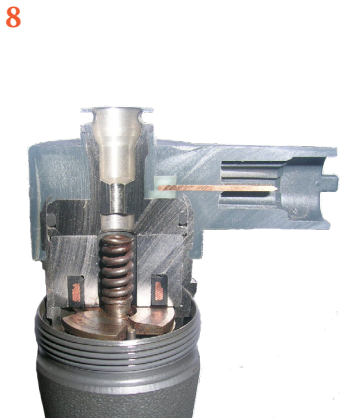
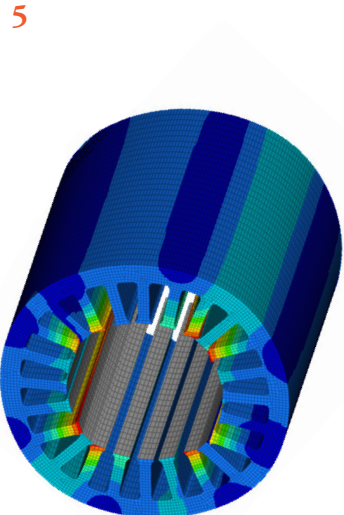
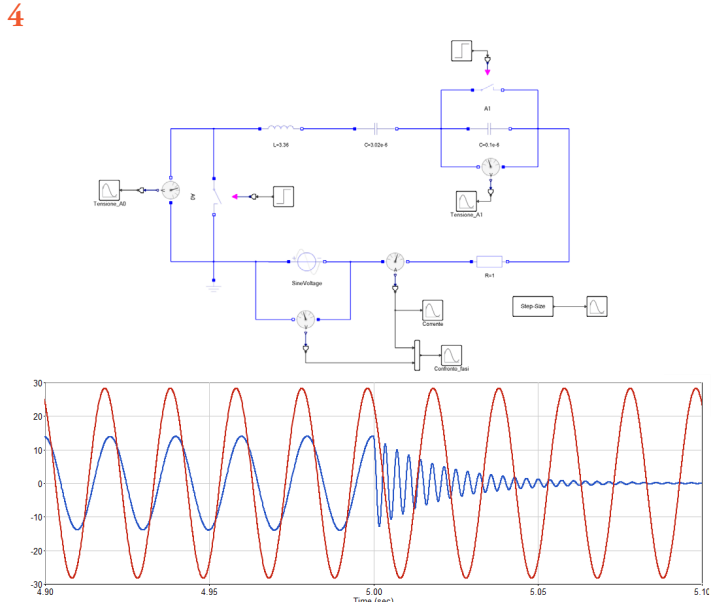
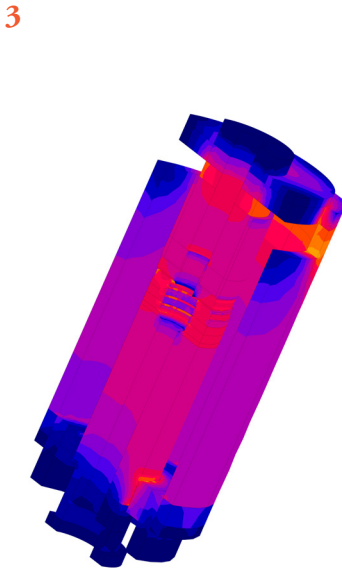
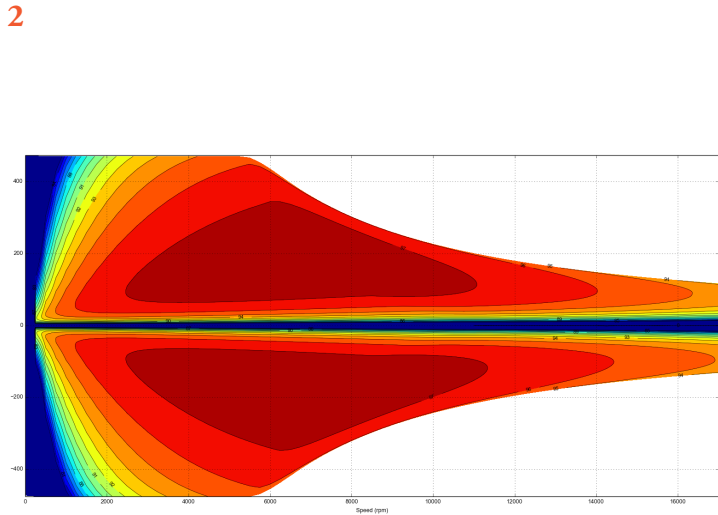
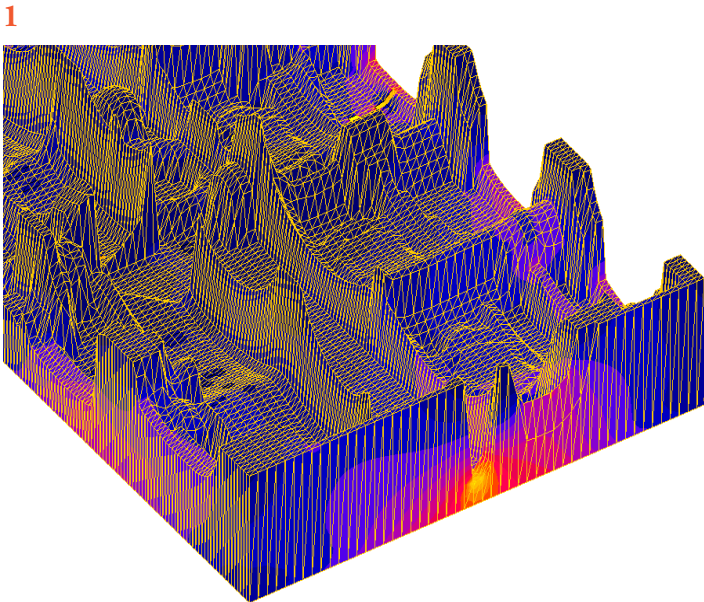
Some areas of analysis we handle:

- > Characterization of materials
- > Electric motor identification
- > Cfd - Fluid dynamics
- > Electromagnetics
- > Mechanical statics and dynamics
- > Prototyping
- > Control systems, batteries, power electronics
- > Thermal
- > Vibro acoustics

Examples of our recent activities and computation analysis on different devices and their prototypes:

Idea > Design > Optimization > Prototype

- > Electromagnetic linear actuator
- > Vehicle electrification
- > Generators
- > Electric switches
- > Magnetic levitation
- > Electric motors
- > Mechanical components
- > Pumps
- > Induction heating
- > Sensors
- > Transformers



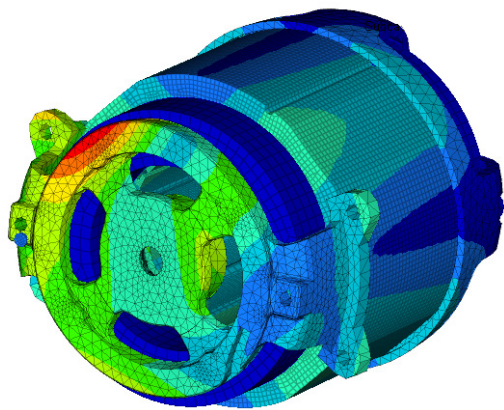
From top left to right:

- 1. Combustion motor crankcase
- 2. Efficiency map of electric motor for e-mobility
- 3. Magnetic induction in electromagnets
- 4. Electric circuit block modelling
- 5. High speed motor mechanical analysis
- 6. Combustion motor crankcase
- 7. Motor stators with concentrated winding
- 8. Electromagnetic injector
- 9. Electronic card checks
- 10. Brushless motor for traction at 30 krpm - 120 kW

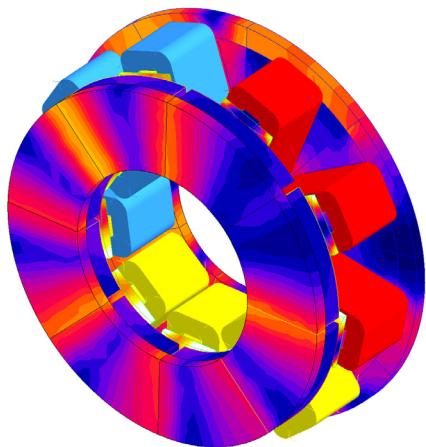
Computation software interfaces

As professional simulation software experts, we create special interfaces and customize software with specific requirements, analysis, timings and to facilitate geometries input and parameters.

1



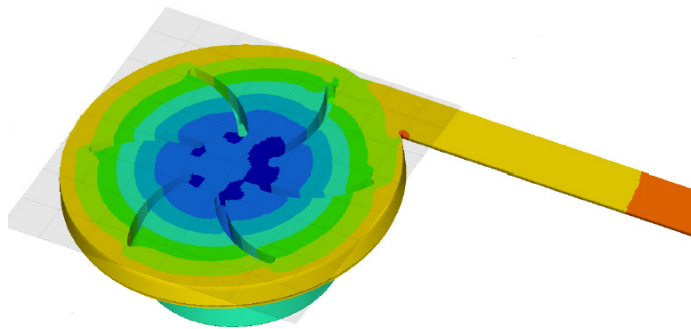
3



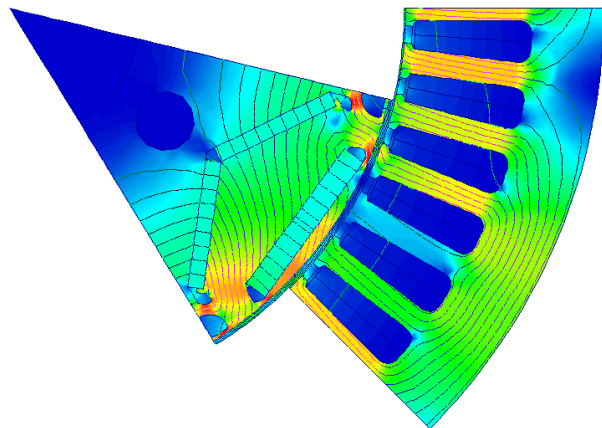
Courses and seminars

We organize scientific training courses in the electromagnetic, vibro acoustics and material optimization fields. We are present at international conferences and industrial trade shows, to present our projects and offer consultational services.

2



4



We supervise the following analysis:

- > Electric Control
- > Electromagnetic
- > Electric insulation
- > Emc-High electromagnetic frequencies
- > Cfd - Fluid dynamics
- > Mechanics
- > Optimization
- > Thermal
- > Vibro acoustics

From top left to right:
1. Vibro acoustics analysis
2. Fluid dynamic analysis of a pump
3. Assial flux electrical engine
4. Brushless engine for electric traction

Previous page:
Assial flux electrical engine

www.spinmag.it

Our projects include the development of hybrid and electric vehicles, induction heating apparatus, braking systems, naval electromagnetic systems,

actuators, cardio pumps, electric generators of different sizes, elevator motors, helicopter motors and much, much more.

Spin Applicazioni
Magnetiche srl

Via F. Corselli, 11
29122
Piacenza, PC
Italia

www.spinmag.it

info@spinmag.it
+39 0523 997 490

Who trust Us:

ABB
Audi
Biesse Group
Bitron
BMW

Bonfiglioli
Brembo
Crane
Eldor
Elica Group

Eurosets Pompe
Ferrari
Fincantieri
Gamak
Johnson Electric

Magneti Marelli
Nidec
Prysmian Group
SCM Group
Universities, Research Centres