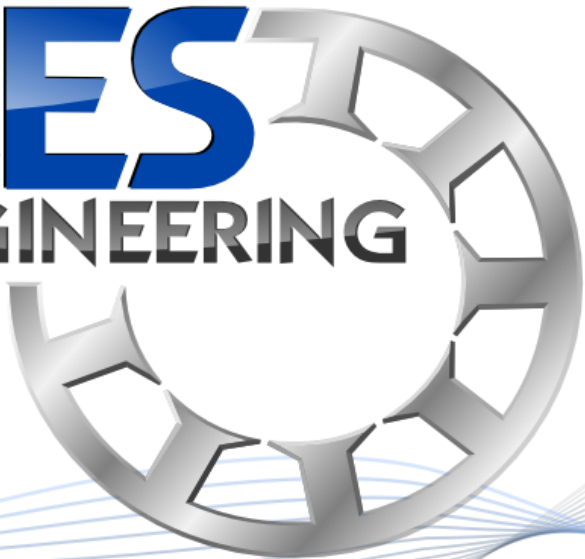


ILES
ENGINEERING



Advanced electric motor technologies



Our company's history

Our team

Dr.-Ing. Dorin ILES

Stefan PAINTNER & Maximilian PILZ

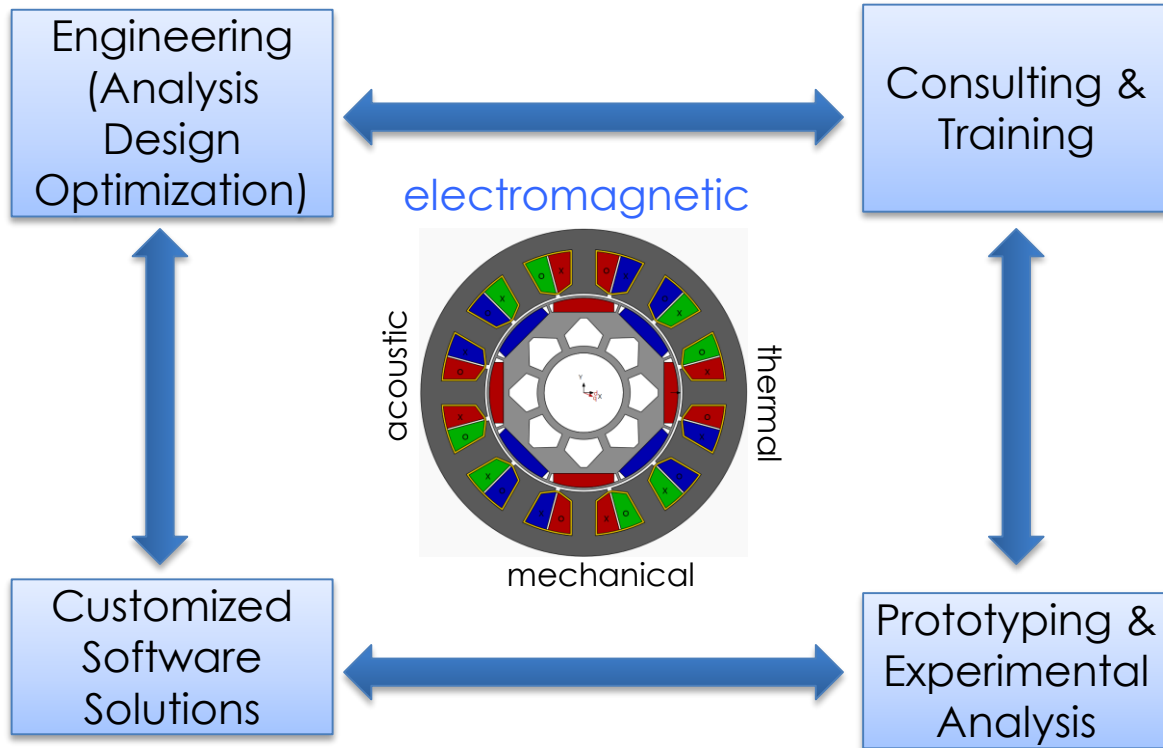
Professional and fast support
for our customers in our
expertise area

During work as professor at the
university of applied sciences
Augsburg (2010-2013) two young
engineers joined the team

Founded in the year 2008

Based on 27 years industrial practice on the field of
electromagnetic design of electric machines

Our technical skills



Our work in detail: Design & Optimization

Application support

- FE-based computation of characteristic diagrams
- Winding definition (subject to the application/inverter)

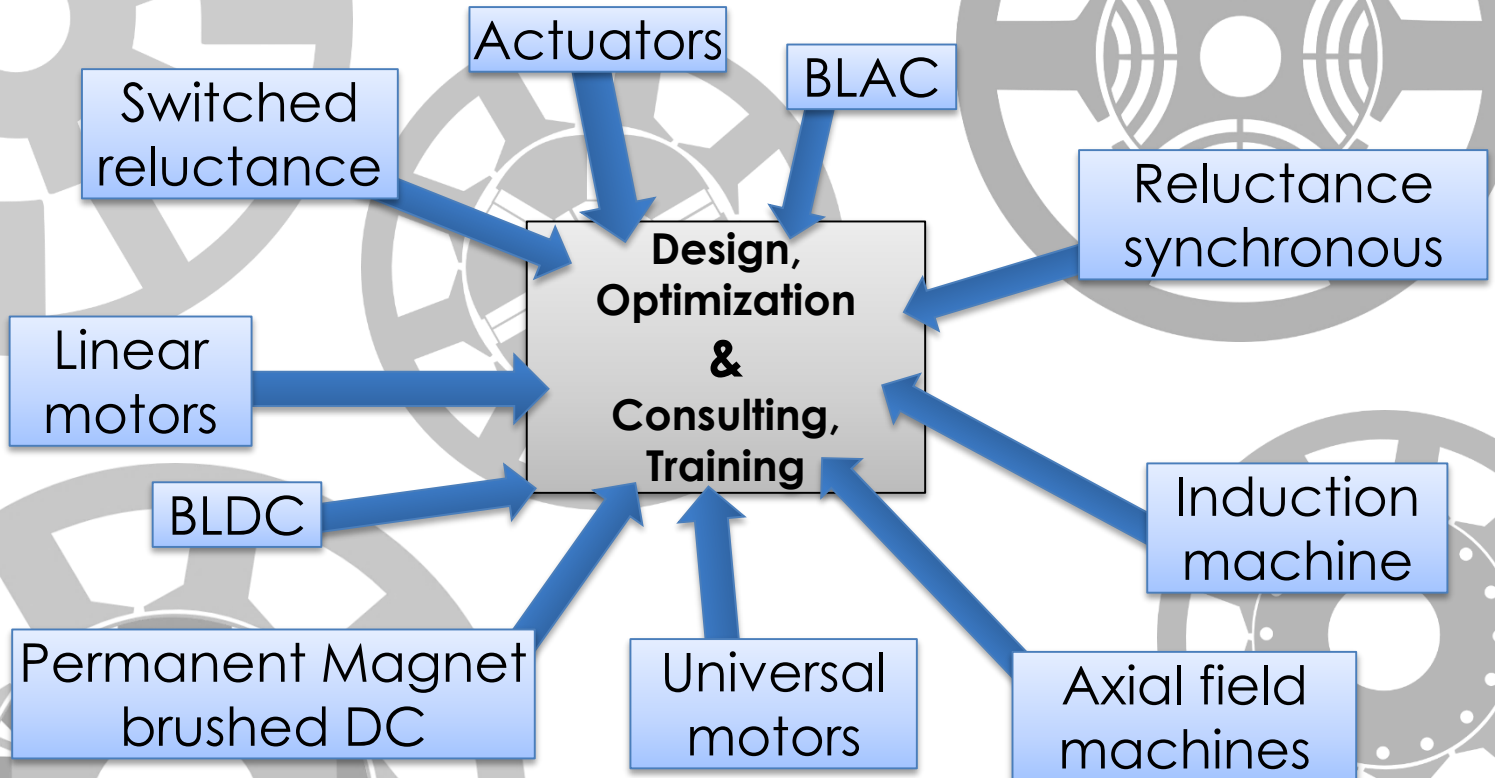
Optimization/ FE-analysis

- Use of various optimization methods
- Massive FE-analysis

Preliminary study

- Identification of best motor configuration / rotor topology
- Definition of design constraints

Our skills include all electric motor and actuator technologies



Our industry experience and references

Drives & Automation

- Standard motors
- Servo drives
- Torque motors
- Spindle drives
- Linear motors
- Planar motor
- Stepper motors

Heating, ventilating and air-conditioning systems

- Fans
- Air-conditioning systems

Medical sector

- Drives for medical devices

Automotive industry

- Actuators
- Pumps
- Steering
- Valves
- Drives for comfort and safety application
- Traction

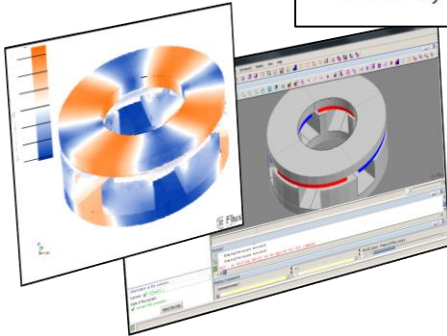
Household appliances

- Washing machine
- Dishwasher

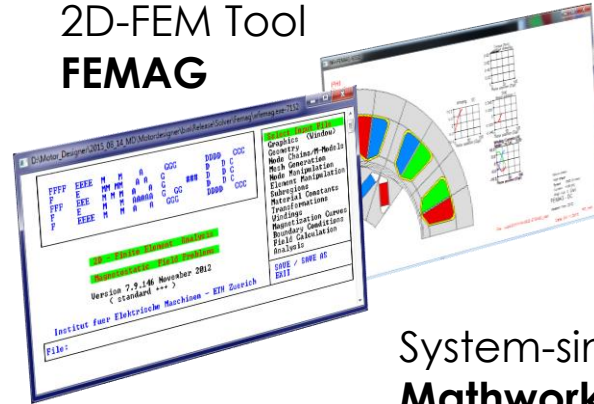
Our tools - commercial software systems

3D-FEM Tool

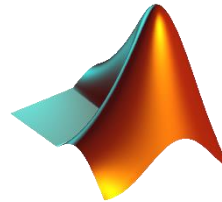
CEDRAT Flux



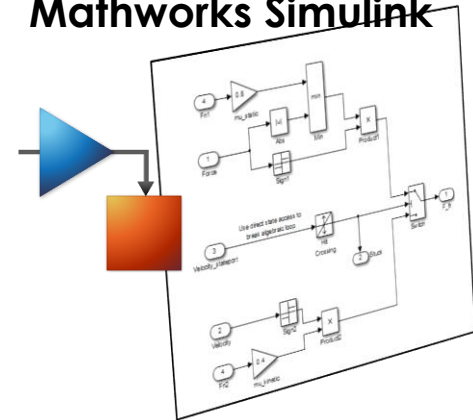
2D-FEM Tool
FEMAG



Technical computation
& scripting
Mathworks MATLAB



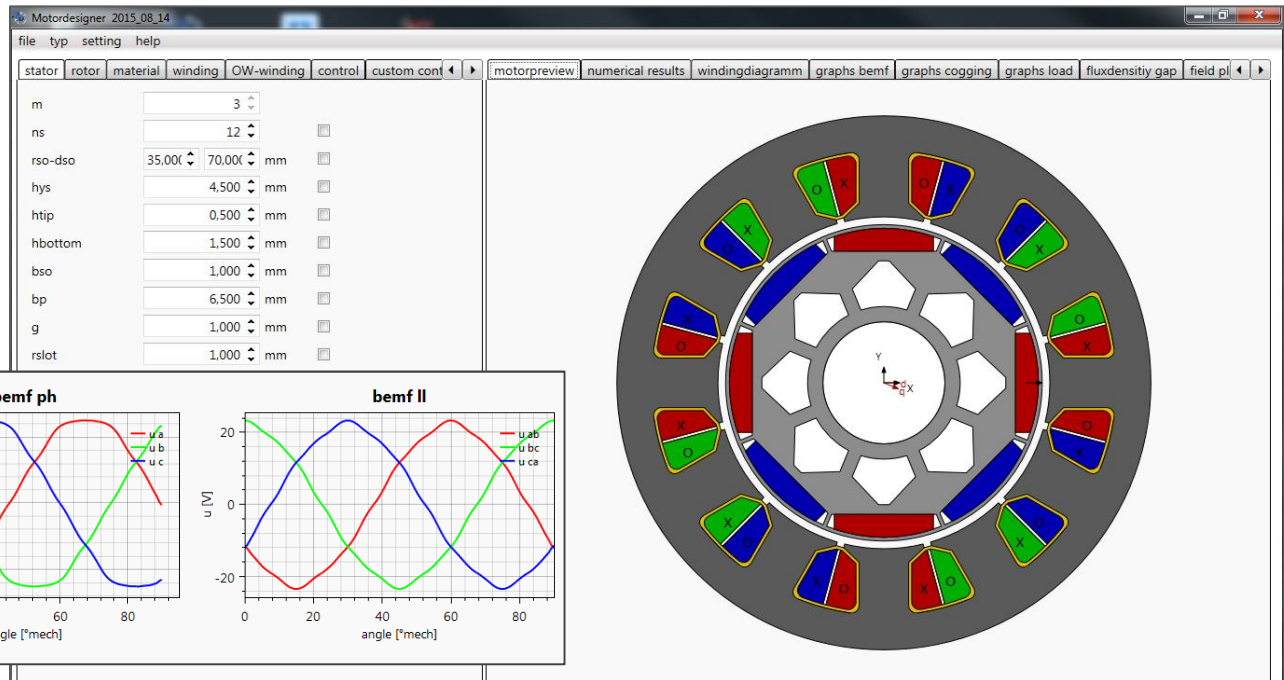
System-simulation
Mathworks Simulink



Our tools - proprietary development / house-intern



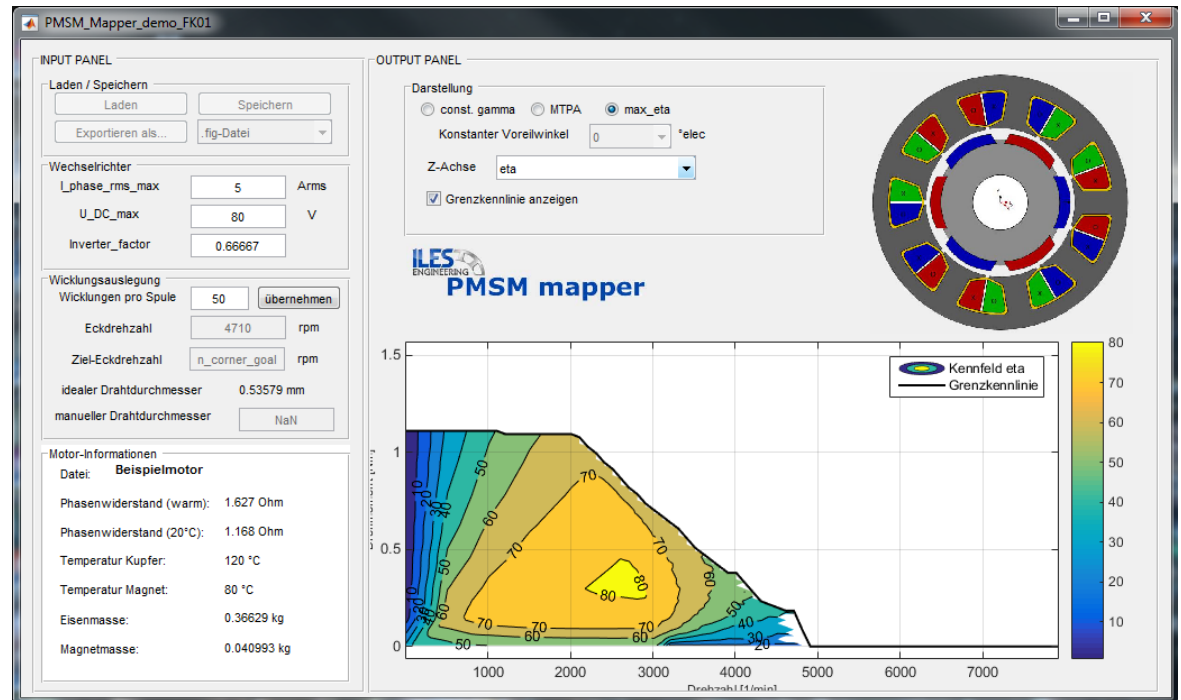
Post & Preprocessor for FE-analysis / optimization
MotorDesigner



Our tools - proprietary development / house-intern



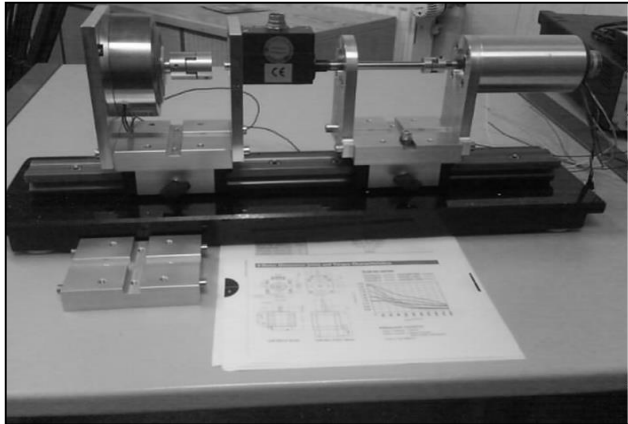
Postprocessor for characteristic diagrams



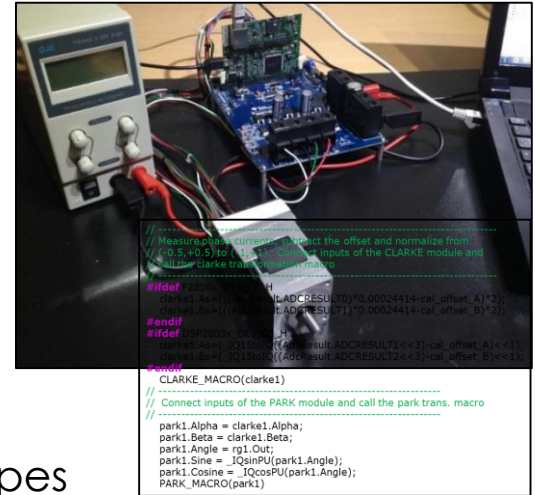
Soon as web-based application for public access

Rapid prototyping and experimental analysis

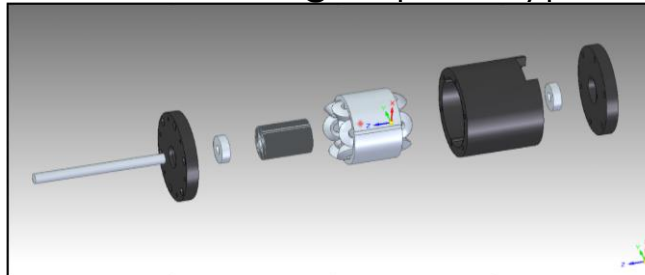
Validation of simulation and design solution



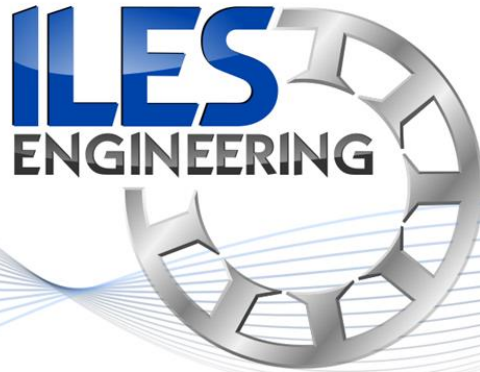
Motor control for experimental analysis



Manufacturing of prototypes



Contacts



Advanced
Electric Motor
Technologies

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