## Munich, Unterföhring, Germany

## Bachelor-/Master-Thesis "Thermal Modelling of Electric Machines for eMobility"

With us you can realize the electro mobility and electrification in the automotive and truck sectors and design the technology of the future. Our goal is to support the growing mobility industry with innovative high power mechatronic technologies, from concept to mass production.

**CPM (Compact Power Motion GmbH),** is part of the **SONCEBOZ-GROUPE (CH) (www.sonceboz.com)** and consists of a small innovative team of international specialists.

The scope of our activities ranges from the development of innovative concepts through initial preliminary studies to products, ready to be manufactured. The development is mainly focused on the electrical power train and high-speed electric motors.

## Goal:

Precise modelling and characterization of the thermal behaviour of our machines for eMobility.



## Tasks:

- Modelling of the electric machine using thermal lumped parameter model
- Comparison and adjustment to 2D/3D finite element analysis
- Comparison and adjustment to measurements conducted on existing prototypes

