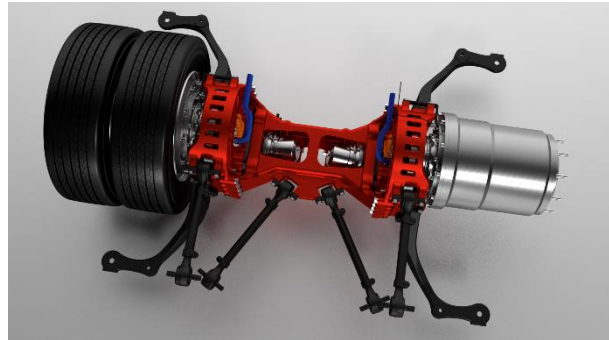


## Internship/Graduation Assignment:

### Mechanical design of high-power inverter for electrification of commercial vehicles

Founded in the Netherlands e-Traction offers superior technology in e-mobility and related services that is based on solid expertise and experience. Since 1981 the key focus has been to commercialize and integrate innovative and state of the art e-mobility solutions.

We developed a unique electric in-wheel powertrain technology which offers the essence of pure direct drive power. With our sustainable technology only a bare minimum of components is required to reach the highest efficiency level. The simplicity of our drivetrain is the ultimate sophistication.



#### Assignment description:

Electric motors for our commercial vehicle drive trains are powered by high power inverters. These are developed in house at e-Traction by an experienced design team. In order to lower the break even point for electrification we strive for state of the art efficiency and low investments for our customers. A smart design that fulfills requirements without redundant parts is one of the ways how we achieve this. Next to our experience we would like your fresh inputs! In this assignment you can work on initial layout and design of our inverter.

#### The assignment consists of:

- Learning about inverter technology and design
- Investigating layout options
- Designing and detailing the high power inverter
- Learn about the use of tools like FMEA and cost-function analysis

#### Profile:

- / Bachelor or Master level engineering internship

Do you not fit the exact profile above, but you do love the topic? Please write us and we can look into mutual opportunities!

For more information regarding this assignment, contact Jorrit Heusinkveld, T. +31 (0)55 521 11 11 – [j.heusinkveld@e-traction.com](mailto:j.heusinkveld@e-traction.com)