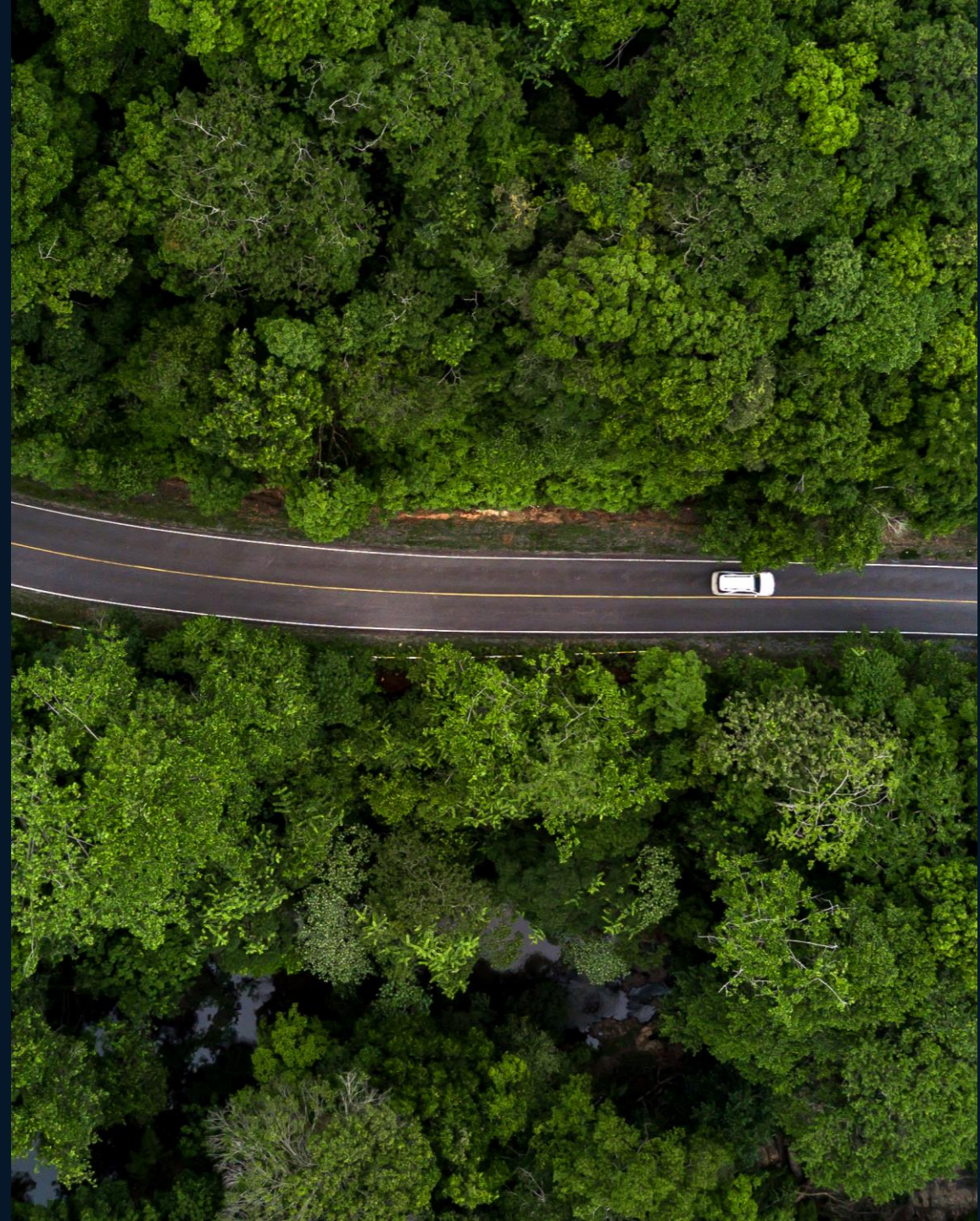


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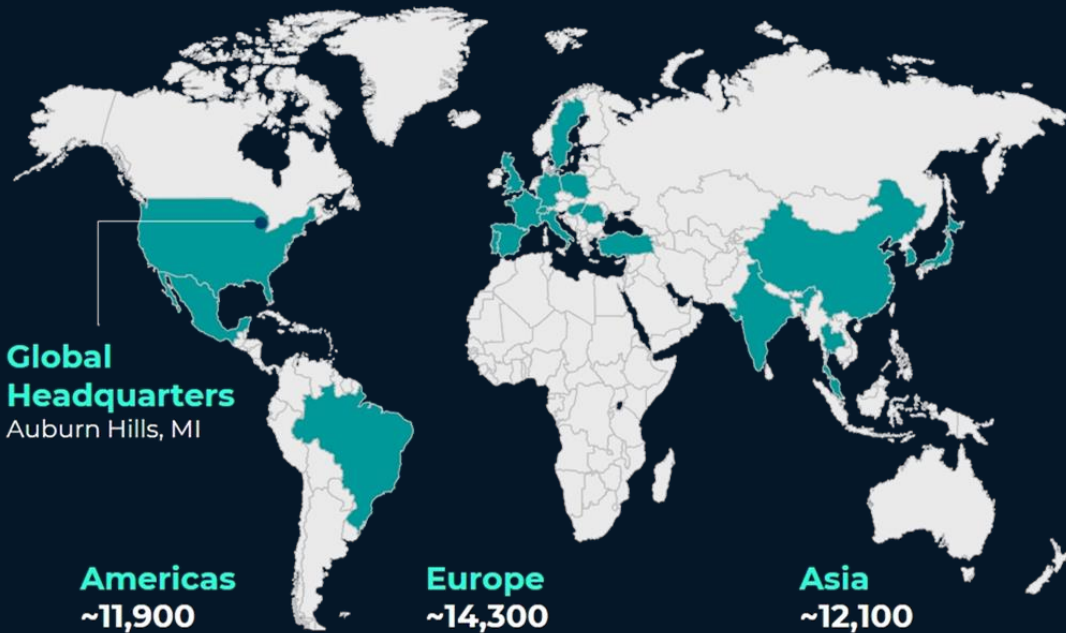
Master Thesis at BorgWarner

Meike Rönn
Systems Engineer, Coupling Dynamics and Controls

October 2024



BorgWarner Global



Americas

~11,900
Employees
27
Locations
3
Countries

Europe

~14,300
Employees
23
Locations
10
Countries

Asia

~12,100
Employees
30
Locations
6
Countries



61
Manufacturing
Locations



19
Technical
Centers



~38,300
Employees



~7,500
Engineers



Battery Systems



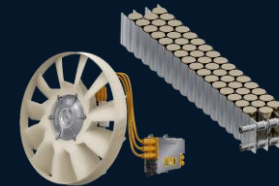
AWD + Cross Axle
Systems



Power Electronics



Electric Drive
Modules



Thermal
Management

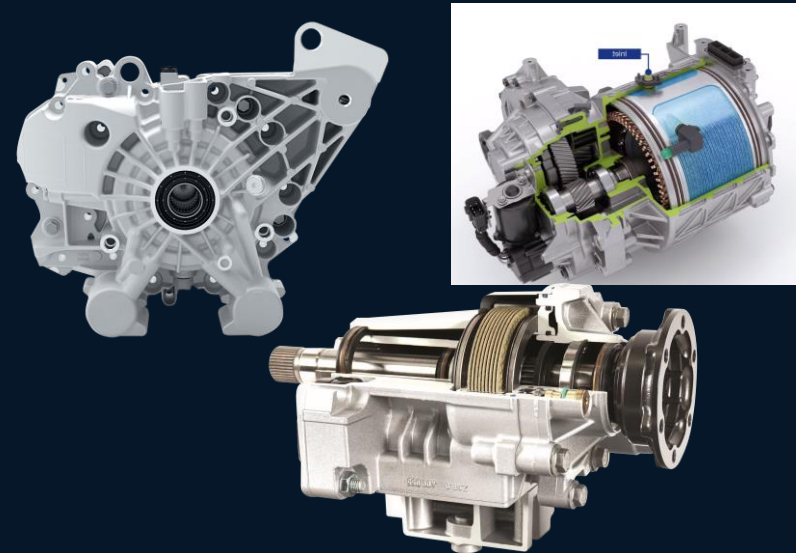


Chargers

Creating a cleaner, more energy-efficient world.

BorgWarner in Landskrona – European Tech Center

- ▶ Production site and technology site
- ▶ Designing and developing complete products from mechanics, electronics, software to validation and testing.
- ▶ Drive Train Systems
 - Actuator control, vehicle controls
 - Components for the drivetrain of a vehicle
- ▶ Power Drive Systems
 - Electric propulsion system control, transmission, vehicle control



Example: Electric Cross Differential (eXD)



eXD System **ACTIVE**

When the eXD is active it makes sure to transfer torque to the wheel with less traction,

Topics Drive Train Controls

Improve pressure estimation

- ▶ The currently available pressure estimation needs to be updated to increase accuracy

Simulation model of a BLDC motor

- ▶ Implement simulation model of BLDC motor and estimate its parameters



Thesis at BorgWarner

- ▶ 2 students, compensation for completed master thesis, lunch paid by BorgWarner.
- ▶ Come to ARKAD and talk to us!
- ▶ We also have possibilities for summer jobs during the summer.
- ▶ Contacts:
 - Arne Hörberg: ahorberg@borgwarner.com
 - Meike Rönn: mronn@borgwarner.com

More topics
(2023)



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