



Iveco Group (MI: IVG) is a global automotive leader active in the Commercial & Specialty Vehicles, Powertrain, and related Financial Services arenas. Each of its eight brands is a major force in its specific business: IVECO, a pioneering commercial vehicles brand that designs, manufactures, and markets heavy, medium, and light-duty trucks; FPT Industrial, a global leader in a vast array of advanced powertrain technologies in the agriculture, construction, marine, power generation, and commercial vehicles sectors; IVECO BUS and HEULIEZ, mass-transit and premium bus and coach brands; Iveco Defence Vehicles, for highly-specialised defence and civil protection equipment; ASTRA, a leader in large-scale heavy-duty quarry and construction vehicles; Magirus, the industry-reputed firefighting vehicle and equipment manufacturer; and IVECO CAPITAL, the financing arm which supports them all. Iveco Group employs approximately 34,000 people around the world and has 29 manufacturing plants and 31 R&D centres.

FPT Motorenforschung AG in Arbon has around 250 highly qualified employees working with commitment and acknowledged success. As the main innovation center for FPT Industrial, the site is involved in developing future powertrain solutions (not only in electrified powertrains, hybrids and fuel cells, but also novel engines concepts and alternative fuels) and is therefore at the forefront of a transition towards a future of alternative propulsion systems.

We would like to fill the following position as soon as possible:

Electric Drives Test Engineer

As a member of the Electric Drives Team in the Electrified Powertrain Engineering division of FPT Industrial, you will be part of a highly skilled team driven to design and engineer best-in-class electric machines and power electronics for FPT Industrial electrified powertrain product portfolio.

Your tasks

- Working in a multidisciplinary team, contribute to the instrumentation, testing, evaluation, reporting and testing coordination of the xEV related projects components (eMotors and Inverters) for FPT Industrial electrified powertrain product portfolio for hybrid and full electric
- Collaborate with components and system development teams for the definition of control system requirements, needed instrumentation and environmental conditions and configurations including safety requirements
- Collaborate closely with various internal departments / laboratories and universities
- Connect the organization to the latest technology developments and trends in industry, also monitoring market and competitors' product/methods and instrumentation portfolio
- Develop tools and methods to efficiently process the testing data in collaboration with the component's owners

- Update and maintain safety rules, consideration and implementation for LV and HV eDrives Testing (mechanical, HV, thermals, ... etc)
- Plan and supervise test series on rig (components) mainly, bench and vehicle (total system) related to Motor Control targets and developments
- Communicate results and make presentations that describe analysis and solutions
- Specify/Contribute to bench components/instrumentation technical requirements (State of Requirements) and evaluate supplier technical proposals (Sourcing and technical reviews)
- First level troubleshooting and preliminary data analysis and post-processing.

Your profile

Basic Qualifications:

- University degree in relevant engineering discipline, Electrical Engineering preferred
- 5+ years' experience in xEV powertrain testing / control systems development. Strong knowledge and understanding of testing and measurements techniques.
- Good experience in project management and coordination, test scheduling and reporting
- Hands on experience on Instrumentation/Testing and Evaluation for xEV eDrives components (eMotor, Inverter mainly)
- Strong understanding of inverter, electric machines control algorithms
- Strong knowledge of HV systems and HV safety requirements for testing
- Experience working with automotive controllers, sensors, and actuators
- Experience/knowledge of CANape / CANoe / CANalyzer, ETAS INCA, AVL Concerto, NI Diadem, Matlab/Simulink
- You have good English skills (spoken and written), German would be a plus
- You are a highly motivated self-starter and team-player with ability to manage multiple tasks

Preferred Qualifications:

- Strong knowledge on testing / evaluation of xEV eDrives and their ancillaries: key components such as eMotor, Inverter, pumps, sensors
- Strong Project Management Skills
- Experience on conventional powertrain control systems, regenerative braking integration and multi-speed automated transmission controls
- Experience with safety critical electronic product development for automotive/commercial vehicle electrified applications

Interested?

Please send your application to recruitment.arbon@cnhind.com

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