Leiter des Lehrstuhls: Prof. Dr.-Ing. Achim Kampker
Besuchen Sie uns: www.pem.rwth-aachen.de

Master- / Bachelor Thesis

Advanced 10-Hertz fuel cell production: Product and process innovations in the production system of a PEM fuel cell

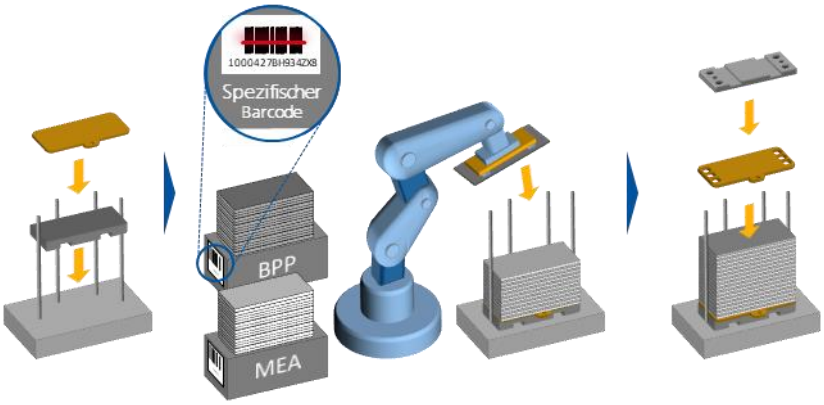

Image: PEM

Initial situation:

Aspects as a continuing scarcity of resources, growing environmental awareness among the population and stricter emission legislations are causing the growing importance of powertrain electrification. Today, the transport sector accounts for more than 30% of total CO2 emissions. The largest share, 70%, is attributable to road traffic. Automotive applications based on fuel cell technology are seen as promising alternative solutions, as they offer the advantages of a higher gravimetric energy density and shorter refuelling durations compared to battery electric vehicles. In order to use the advantages of fuel cell technology on a broad scale, however, current production systems are not capable of manufacturing the marketable product in the required volumes.

Your task:

Your task is the identification and integration of product and process innovations in the production system of fuel cells, stacks and systems for the generation of 10-Hertz production systems. This includes enabling a production system to manufacture a volume of 10 parts per second, which is necessary to achieve a considerable reduction of road-related emissions.

Your profile:

- Studies in industrial engineer-ing, mechanical engineering or comparable field of studies
- Interest in electric mobility solutions
- Motivation and commitment
- Strong communication skills
- Commitment and willingness to learn

Our offer:

- Comprehensive supervision
- Fast processing possible
- Flexibility in the formulation of a thesis topic
- Familiarization and expert insight into the future technology of electric mobility
- Collaboration in an innovative and highly relevant field of research

Are you interested?

Please send a current transcript of records, curriculum vitae and certificates to the email address below.

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