



FIT-4-AMANDA

Future European Fuel Cell Technology: Fit for Automatic Manufacturing and Assembly

EUROPEAN COMMISSION

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Publishable Executive Summary

The production of fuel cells and stacks is currently on the way from manual laboratory production to industrial small batch production and later on mass production.

For this purpose all major stack components as well as the general stack design including technologies and concepts have to be proven for their readiness of mass production and hence adapted and optimised to the automatic production processes if necessary.

For this step the enhancement of significant stack performances is also crucial for the success of the upcoming mass produced fuel cell stack. This optimisations were conducted and realised in terms of overall stack performance properties like power output, lifetime and efficiency but also in terms of easiness of stacking and mounting, low leakage rates etc.

As result of task 2.2 a generally optimised stack concept with its major components such as membrane electrode assembly (MEA), bipolar plates (BPP) with their flow-field structures and concepts such as sealing and restrain/compression technologies are designed and ready to performance extended test procedures for verification and validation of the components and concepts at full stack level.