



FIT-4-AMANDA

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

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Publishable Executive Summary

The production of fuel cells is more and more subject of industrial production with the focus availability of mass production not only at the project partners of the Fit-4-AMandA project. Due to the fact that this EU-funded project has been working towards this goal at a very early stage, the consortium sees itself as a pioneer of this trend and can provide valuable input to the industry.

Initially, subtask 2.2, a generally optimised stack concept with its main components such as membrane electrode assembly (MEA), bipolar plates (BPP) with their flow field structures and concepts such as sealing and retention/compression technologies, was the first step. The carried-out changes and differences from old to new stack design within the several concepts are also described in the corresponding report documents.

To determine the performance of the resulting stack, extensive laboratory test series were carried out at stack level and on component level: This was partially performed at component level at the TUC (regarding single cell and MEA testing) and at the test laboratory of PM. The test results of the TUC investigations can be found in the corresponding deliverable reports. Subject of this report are the test results of PM's stack testing. The results are compared with the former state-of-the-art stack generation and exhibit an improved performance in laboratory environment as expected from calculations and pre-tests. Also, the specifications

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Project partners:

#	Partner	Partner Full Name
1	UNR	Uniresearch BV
2	PM	Proton Motor Fuel Cell GmbH
3	IRD	IRD Fuel Cells A/S
4	Aumann	Aumann Limbach-Oberfrohna GmbH
5	Fraunhofer	Fraunhofer IWU, Institute for Machine tools and Forming technology
6	TUC	Technische Universitaet Chemnitz, ALF, Department of Advanced Powertrains
7	UPS	UPS Europe SA



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