

Data set title: Supplementary material to extended abstract with title: Development of a Hydrogen Metal Hydride Storage Produced by Additive Manufacturing

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Involved Persons:

Tim Röver (1)

tim.roever@tuhh.de

<https://orcid.org/0000-0002-3709-339X>

Sebastian Roth (1)

sebastian.roth@tuhh.de

<https://orcid.org/0000-0002-3921-0959>

Tom Hoffmann (1)

tom.hoffmann@tuhh.de

Lars Baetcke (2)

lars.baetcke@dlr.de

<https://orcid.org/0000-0001-9173-5253>

Dirk Herzog (3)

dirk.herzog@tuhh.de

<https://orcid.org/0000-0001-7059-6151>

(1) Hamburg University of Technology (TUHH), Institute of Laser and Systems Technologies (iLAS), Harburger Schloßstraße 28, 21079 Hamburg/Germany

(2) Institute for Maritime Energy Systems, German Aerospace Center (DLR), 21502 Geesthacht, Germany

(3) Hamburg University of Technology (TUHH), Institute for Industrialization of Smart Materials, Hamburg University of Technology, 21079 Hamburg/Germany

Context: The goal of this work was to assess how the freedom of design due to laser powder bed fusion of metals (PBF-LB/M) as an additive manufacturing technique can be utilized for design and production of Hydrogen Metal Hydride Storages to achieve better functionality than conventionally manufactured ones.

The data is supplementary material to the extended abstract (reference: A0915) with the title "Development of a Hydrogen Metal Hydride Storage Produced by Additive Manufacturing" of the conference EFCF 2023: Low-Temp. Fuel Cells, Electrolysers & H2 Processing, 4 – 7 July 2023, Lucerne Switzerland.

The development of the files and a more detailed background is given by the extended abstract (forthcoming).

Contents of data set:

-AM\_HMHS\_full\_model.stmod: full CAD model of hydrogen metal hydride storage in file format that can be opened in Altair Inspire 2019.3

-CAD\_Demonstrator.ipt: adapted CAD model for print of demonstrator part by MEX/PLA (Autodesk Inventor Part-file)

-CAD\_Demonstrator.stl: adapted CAD model for print of demonstrator part by MEX/PLA (STL-file)

-Evaluation\_of\_design\_concepts.emf: image of evaluation matrix for design concepts of work

-Readme.pdf: this Readme file

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