

Battery Casing Follow Up Project:

Application relevant test method and investigation of relative safety performance of different material options for bottom impact protection of battery casings

Concept Study: Multi-material Battery Casing



1. Bottom Impact Protection of Battery Casings

2. Application relevant fire test procedure

3. Demonstrator(s)

Summer 2022

The Objective:

Based on the results of the finished project "Multi-material Battery Casing", conducted with 46 industrial partners, bottom impact protection was identified as a field of high interest. Within this project, a test set-up to represent real-life impacts will be created. Compared to a metal reference protection plate, different material solutions will be tested and analyzed. Ultimately, the results will show, which materials and how much material is needed to pass the requirement to obtain equivalent safety level as the reference part.

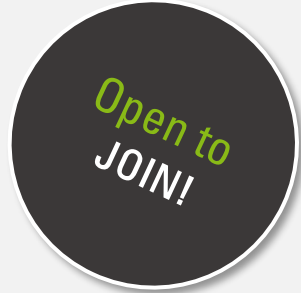
Our Content:

- Design & build test frame for oblique testing
- Experimental testing of different angles, designs (e.g. double-walled structures) and materials
- Equivalent normal testing of various material combinations
- Evaluation on yes/no pass at different energy levels
- Weight and cost analysis of protection plates including different process chains



Your Benefits:

- Comparison of different materials and combinations
- Create better understanding of performance depending on materials and thicknesses
- Transfer function between oblique and normal testing
- Weight saving / cost ratio of different solutions
- Cost sharing on highly complex test scenario while getting full results
- Networking across the common subject

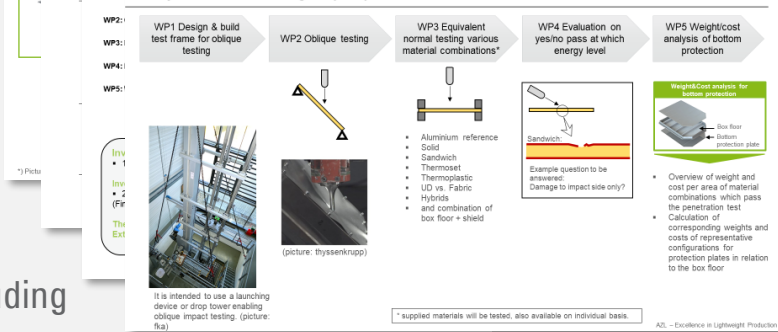


Test Method and Investigation for Bottom Impact Protection
WP5 Weight/cost analysis of Protection Plates

Test Method and Investigation for Bottom Impact Protection
WP2 Oblique testing

Foreign Object Penetration Resistance of Composite Materials
Time schedule and costs

Test Method and Investigation for Bottom Impact Protection
Project Work Packages (WP)



Participation fee (AZL Partner and former project participants)	18,900.00 €
Participation fee (external company)	21,150.00 €
Number of participants	Min. 8 companies
Duration	6 months

Please contact for information and individual offer:

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