The benchmark report of the 48V battery pack contains a teardown documentation, technical specifications and a detailed cost analysis.

48V BATTERY PACK

**TEARDOWN REPORT**

Photos
- ~30 photos of teardown process
- ~100 photos of all components

Bill of material
- Component name & number
  - Short description, mass & dimensions

Report
- >60 slides showing all components with position in battery pack and specs (mass, dimensions...)

**COST ANALYSIS**

<table>
<thead>
<tr>
<th>Components</th>
<th>Detailed calculation</th>
<th>Rough calculation</th>
<th>Valid estimation</th>
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</thead>
<tbody>
<tr>
<td>Battery housing</td>
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<td>Module housing</td>
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<td>Battery cell</td>
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<td>BMS/BDU unit</td>
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<td>DC/DC converter</td>
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<td>Wiring harness</td>
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<td>Thermal management</td>
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<td>Terminals</td>
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</table>
FEV provides detailed documentation of the battery pack hardware

### CONTENT

#### PHOTOS

>100 Photos in high resolution

#### BILL OF MATERIAL

>50 BOM items with main specs

#### REPORT

>60 Report slides
Depending on the component type and value, we apply different approaches for cost determination with different levels of detail.

**APPRAOCH**

**DETAILED CALCULATION**

- Detailed cost breakdown

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**ROUGH CALCULATION**

- Cost breakdown
  - Raw material: 5.00 €
  - Casting: 6.00 €
  - Machining: 3.50 €
  - Sub-parts: 0.60 €
  - Assembly: 0.40 €
  - Overhead & Profit: 3.80 €

**ASSEMBLIES**

- Sub-BOM
  - Connectors: 10.00 €
  - Wires: 3.00 €
  - Isolation: 1.50 €
  - Clamps: 1.50 €

**ESTIMATION**

- Estimated cost value
  - Database
  - Price
  - Component spec
  - 1.50 €

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**SHOULD COST**

- Raw material: 19.30 €
- Casting: 5.00 €
- Machining: 6.00 €
- Sub-parts: 3.50 €
- Assembly: 0.60 €
- Overhead & Profit: 3.80 €
- Connectors: 19.50 €
- Wires: 3.00 €
- Isolation: 1.50 €
- Clamps: 1.50 €
- Assembly: 0.90 €