Super B company presentation
Super B, a Koolen Industries company

UIC Workshop on Energy Efficiency
February, 2019 Rotterdam
Super B develops and produces lithium batteries ranging from small starter batteries for motorcycles to energy storage for recreational vehicles, industries applications or residential storage.

Super B at a glance

- Provider of Lithium-Iron phosphate modules and systems for a variety of applications
- Strong IP with various patents/patents pending and license across various applications and chemistries
- Over 10 years expert employees with extensive battery and technology expertise and close cooperation with Technical University of Twente for R&D
- Steady, top-line growth with own development and production
- Strong foothold in existing customer base of over 500 customers all over the world

Focused market approach

- Transport
- Industrial
- Energy storage

Manufacturing facilities in Hengelo, The Netherlands
The Super B life cycle

2007
Super-B was founded

Development of first starter batteries

2010
Moved to new location with production capacity

Quickly extended portfolio

2011
Second move to new location

Launch 100Ah and 160Ah traction batteries

2012
First fully electric Amsterdam canal boat powered by Super B

2016
Massive market share in Recreational vehicles and leisure marine

2017
Aston Martin Racing claim 24H of Le Mans victory using Super B batteries

First emission free Vendée Globe participant ever (using Super B)

Red Bull KTM Factory Racing Team’s Sam Sunderland takes overall win in Abu Dhabi Desert Challenge using Super B batteries

Lotus chooses Super B as standard OEM fitment to almost all of their vehicles.

Leading RV OEM’s Rapido & Trigano declare to work exclusively with Super B

2018
Launch Epsilon

New Facility: Expolaan, Hengelo

Red Bull KTM Factory Racing Team’s Sam Sunderland takes overall win in Abu Dhabi Desert Challenge using Super B batteries

Launch SMART Starter & 210Ah

2019
Extra office space at Demmersweg 3, Hengelo

Launch other new batteries & energy containers
The role of Infrastructure Managers in traction energy transition

Local and System solutions
Challenges

Reduce the use of diesel traction

Solutions

- Hybrid trains
  - Long history (Steam, diesel, electric combinations)
- All Electric
  - Traction
  - Charge stations
  - Battery Exchange
  - Combinations
- Energy Control
  - Sensoring
  - Cloud Connection
  - Smart Energy Management
Product portfolio

- Super B’s core competence is high quality Advanced Energy Storage, served with Lithium Iron Phosphate (LFP) technology, the safest and most durable Lithium Ion technology.
  - Super B has a standard portfolio (for distribution), custom batteries (for OEMs) and accessories.
  - The portfolio ranges from small motorcycle starter batteries to large 800V energy battery systems.

**Starter batteries**

**Traction batteries**
100E, 160E, Epsilon

Capacity: 30Wh - 2000Wh per battery, and system designs >1MWh.
Product portfolio

- Container sized solutions
  - 200 kWh – 2000 kWh
  - 100 KW – 3000 KW

- All systems
  - Local energy & hardware management
  - Cloud energy & hardware management
Technical Roadmap Super B Product Portfolio expansion 2019

Focused expansion and improvement of product portfolio:

- New Cell introductions 210E & 180E
- New traction module SB12V105Ah
- Improved Battery Interface Modules
- Energy Storage 1 kWh – 2 MWh
- Smart management for hardware and energy
Super B’s high-performing products are already in use in a wide range of applications and solutions (1/1)

<table>
<thead>
<tr>
<th>Transport</th>
<th>Fire &amp; rescue</th>
<th>Maritime</th>
<th>Electrical vehicle installations</th>
<th>Starter batteries</th>
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Super B’s high-performing products are already in use in a wide range of applications and solutions (2/2)

**Industrial**

- Service vehicles
- Material handling

**Energy storage**

- UPS for data centers
- Tugboat/ferries

**Street cleaning equipment manufacturer**

**Access equipment manufacturer**

**Utility boat manufacturer**
Thank you