

Super B company presentation

Super B, a Koolen Industries company

UIC Workshop on Energy Efficiency
February, 2019 Rotterdam



Company
Super B

Customer
Challenges

Product
Portfolio

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

MORE POWER, LESS WEIGHT

LONG LIFETIME

STABILITY AND RELIABILITY

LOW SELF-DISCHARGE

FAST CHARGING

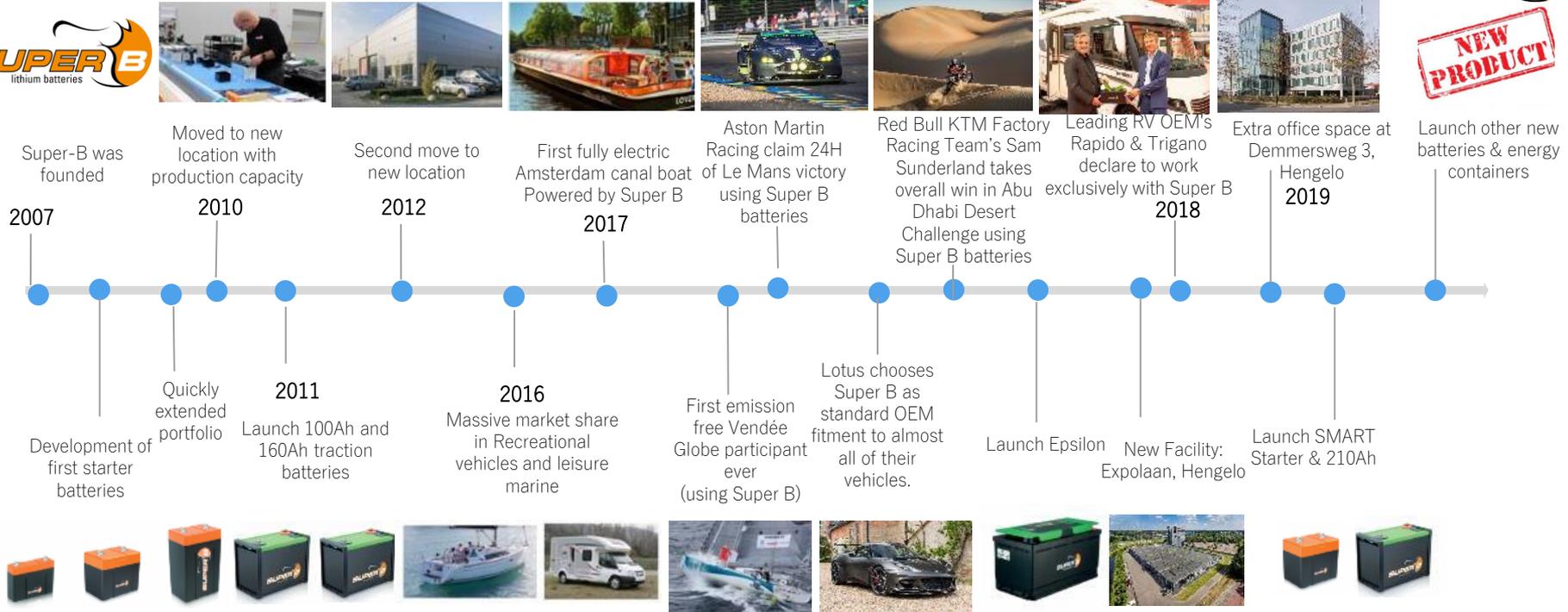
Focused market approach



Manufacturing facilities in Hengelo, The Netherlands



The Super B life cycle





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Super B

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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





Company
Super B

Product
Portfolio

Product
Portfolio

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

5200P, 7800P, 10P, 15P, 20P, 25P



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)

Transport



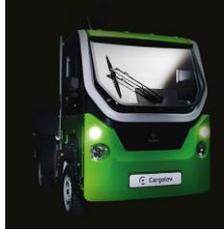
Fire & rescue

inomatic
wir entwickeln vorprung



Maritime

 
BENETEAU JEANNEAU



Electrical
vehicle
installations

TBV
Kühlfahrzeuge



Starter
batteries



Recreational
Vehicles

 **LE VOYAGEUR**



Canal
boat

LOVERS
canal cruises

Super B's high-performing products are already in use in a wide range of applications and solutions (2/2)

Industrial



Service vehicles

Street cleaning equipment manufacturer



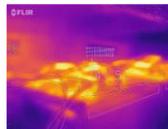
Material handling

Access equipment manufacturer

Energy storage



UPS for data centers



EATON



Tugboat/ferries

Utility boat manufacturer

Thank you

