

VT Battery

ONE COMPANY – INFINITE POSSIBILITIES

—
Battery assembly

TECHNOLOGY

DYNAMISM

PROGRESS

STABILITY

MILESTONES

- first phase of battery production at Kaposvár



1997-2002



2008

- re-start of battery production with a site acquisition at Marcali
- SOP of Li-ion batteries

- electronic tools
- automotive market entry (Ni-Mh) ISO16949
- medical market entry



2010



2012

- Li-ion e-bike packs
- first self-designed battery pack concept
- stick vacuum cleaner Li-ion batteries

- expanded automotive business share
- e-call battery assembly
- beginning of VTBH cooperation



2015



2018

- new customer and market segment in our portfolio
- a member of the European Battery Alliance

- own designed assembly lines
- production automation



from 2020

TYPICAL BUSINESS MODEL

1

DESIGN



CELL RESPONSIBILITY



2



3



BATTERY BUSINESS HIGHLIGHTS



50+ mEUR

cell value



7 main

cell suppliers



60+ mpcs

used battery cells



40+ mpcs

delivered products

PRODUCTION COMPETENCE

PURCHASED

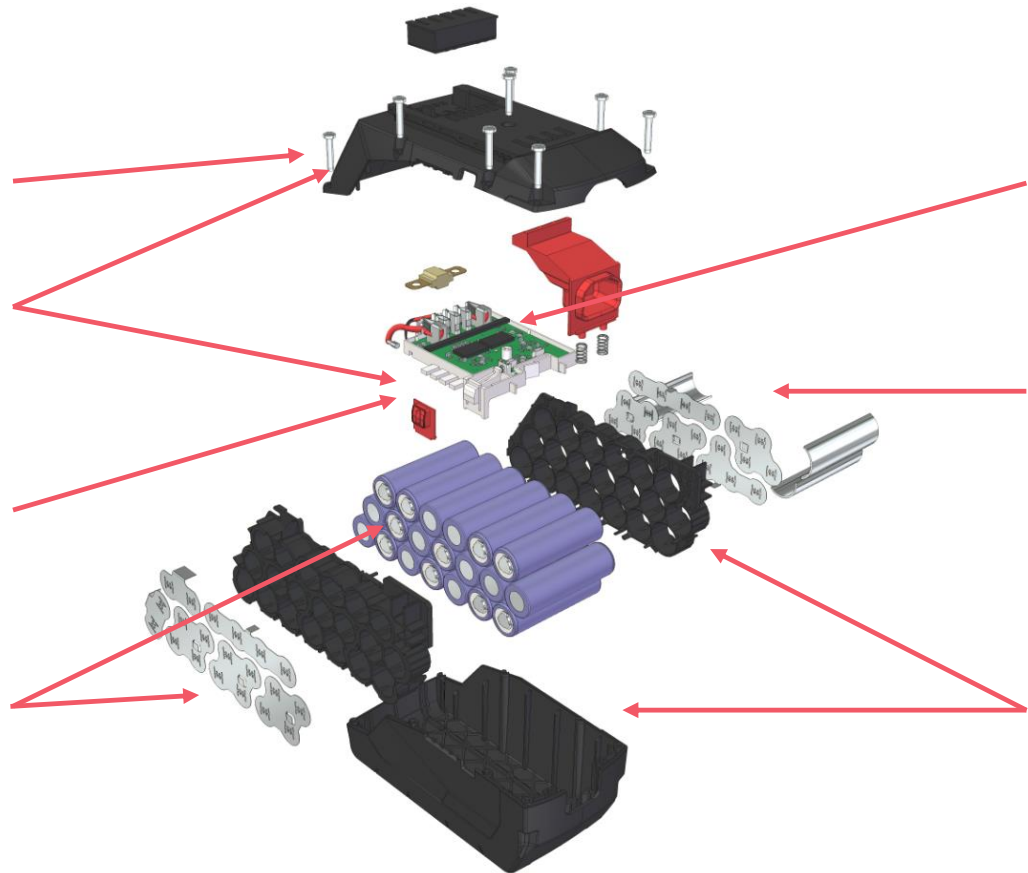


PCB production in
corporation with Videoton
Electronic Assembly
Services Ltd.

assembly of
battery pack

assembly
testing
marking
packaging

production of plastic
parts



raw material (resin)

insulation, contacts,
screws, damping
materials...

electrical components
(resistor; fuse...)
& raw material

cell, contact



PORTFOLIO

FROM UNIQUE CELL TO COMPLETE BATTERY PACKS

As for chemistry

- Li-ion rechargeable batteries
- Ni-MH rechargeable batteries
- Li-metal batteries



Li-ion rechargeable batteries



Ni-MH rechargeable batteries



Li-metal batteries



PORTFOLIO

FROM UNIQUE CELL TO COMPLETE BATTERY PACKS

Battery pack according to its cell number

• **1 – 2 – 3 – 4 – 5 – 6 – 10 – 14 – 20 – 40 – 50 – 108 – 144**

Forms

- cylindrical
- prismatic
- button

As for usage



Consumer use



Power tools and
gardening



Automotive industry



E-bike



Industrial usage



Health care



Entertainment
and telecommunication

TECHNOLOGIES



- cell welding
- soldering
- potting
- assembling

- screwing
- wire machining
- tamper printing
- ultrasonic welding

- charging
- laser marking
- testing
- wrapping

CONSUMER SPECIFIC PRODUCTION



Design and construction of means of production

- unique production cells
- traditional manual assembly lines
- automated assembly lines



Production area design for customer needs

- separate customers
- team dedicated to production
- establishing clean room
- industry 4.0 solutions



ESD protection, air control system

- ESD floor, human earthing
- humidity control
- central ventilation system
- zonal division



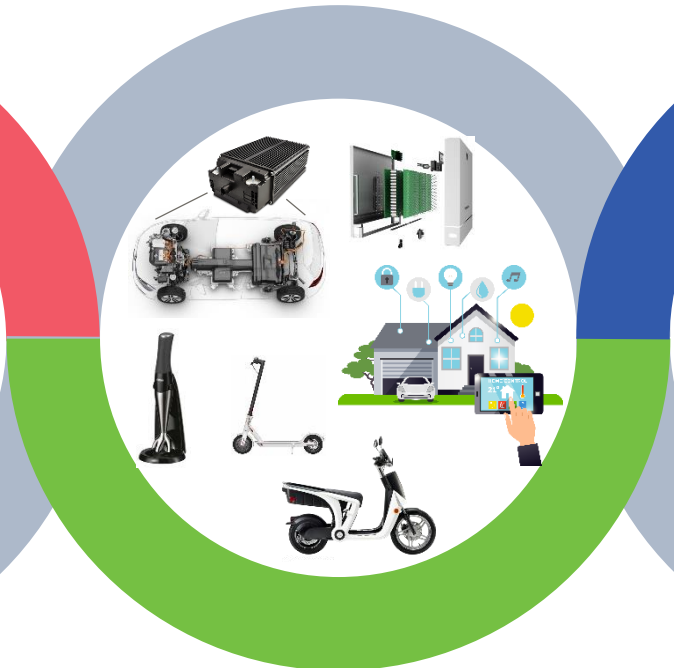
Logistics, storage

- unique barcode identification
- supermarket system
- air-conditioned warehouse for Li-ion products
- planned smart solutions

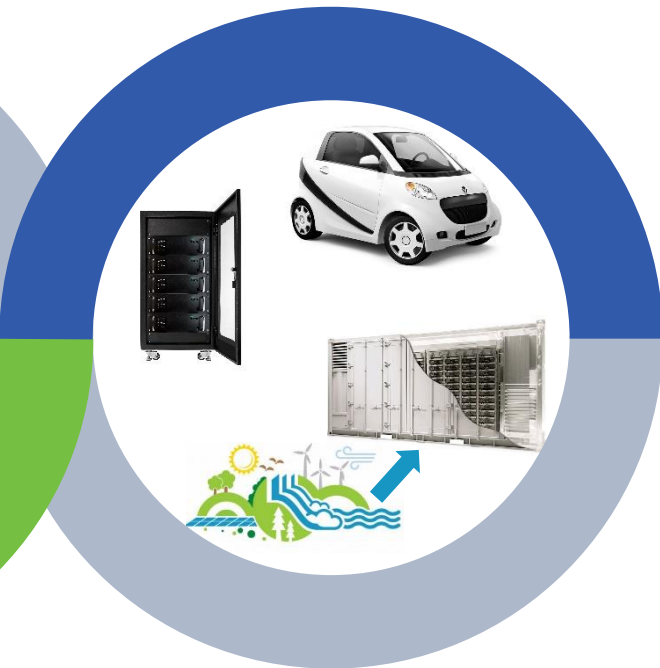
MARKET EXPOSURE



PRESENT



POSSIBILITY



FUTURE PLAN

THANK YOU FOR YOUR KIND ATTENTION!



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Highest creditworthiness