



Pitch
Hour



Leveraging novel battery data to decrease battery qualification time by 95% while increase precision

Nowadays, it takes a minimum of 5 days before battery cells are graded good ("ok") or bad ("not ok") in production



5-28 days

Longest lead time in cell production process by far



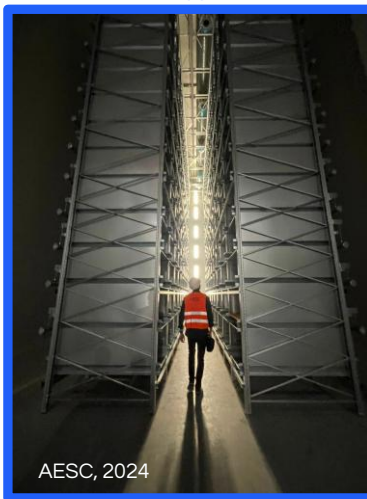
20% of overall production floorspace

is used only for storage units for the *Aging** step



> 100m€ CapEx Costs

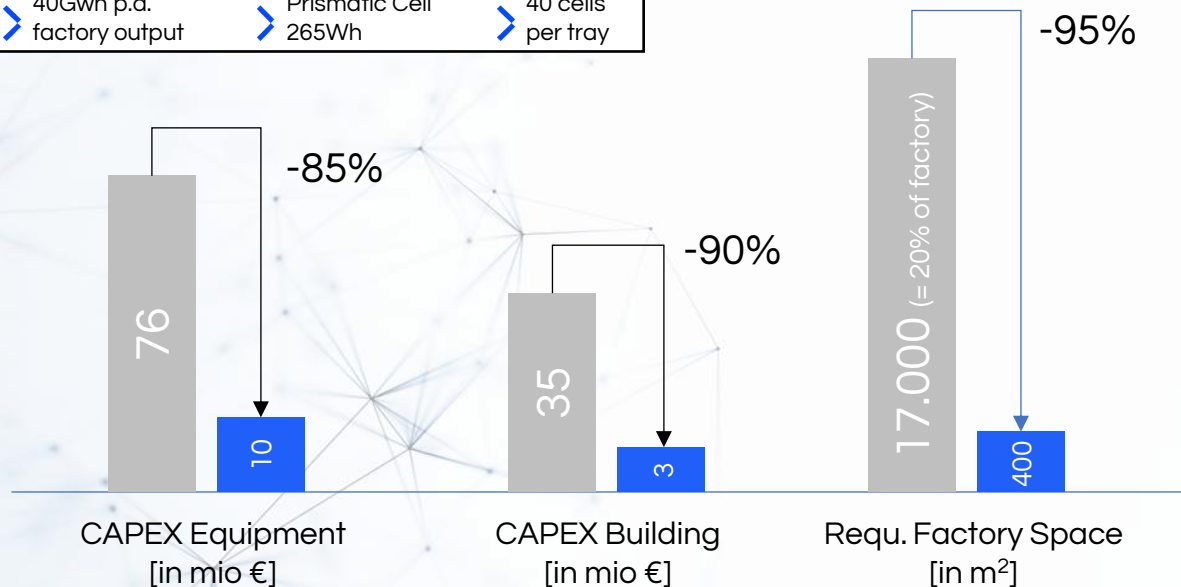
for an average sized battery production line (40Gwh)



Limatica will reduce this production bottleneck/ footprint by applying a novel, innovative measurement technology based on voltage noise

Assumptions

> 40Gwh p.a. factory output	> Prismatic Cell 265Wh	> 40 cells per tray
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- >> 98mio€ upfront savings through Aging efficiency
- + Immediate Ramp-up cost-savings due to faster feedback loops in production
- + Many more such as yield improvement, Reduction in working capital, etc.

With Limatica's data, self-discharge patterns can be detected and behavior forecasted reducing the overall measurement time to 15min



1

Collect new data

Own Hardware **measures**
"intrinsic activity" or so-called
voltage noise (VN)

2

Understand patterns

Patented Machine Learning
Analytics **correlate VN w/**
Self-Discharge

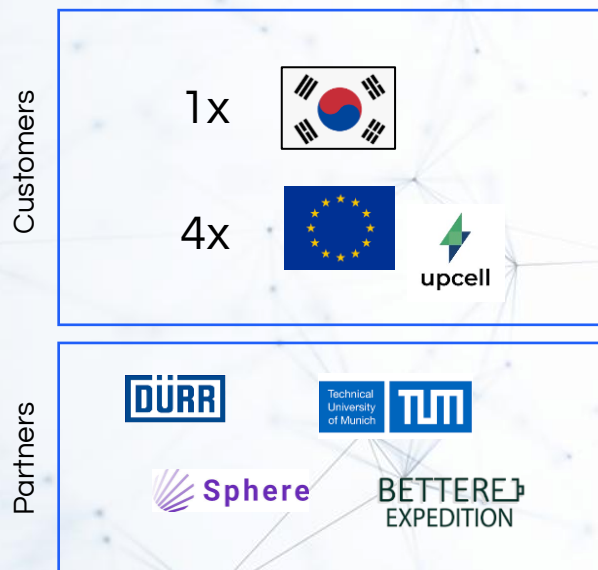
3

Predict Self-discharge

Data-Model **predicts the self-**
discharge in 15min

- ✓ **Fast**
15min test time
- ✓ **Scalable**
up to Giga-scale
- ✓ **Safe**
non-invasive
- ✓ **Rich of data**
empowering root-cause
- ✓ **Chemistry**
Agnostic

Our international pilot customers & partners are convinced of the benefits of the solution and are validating with us on scale



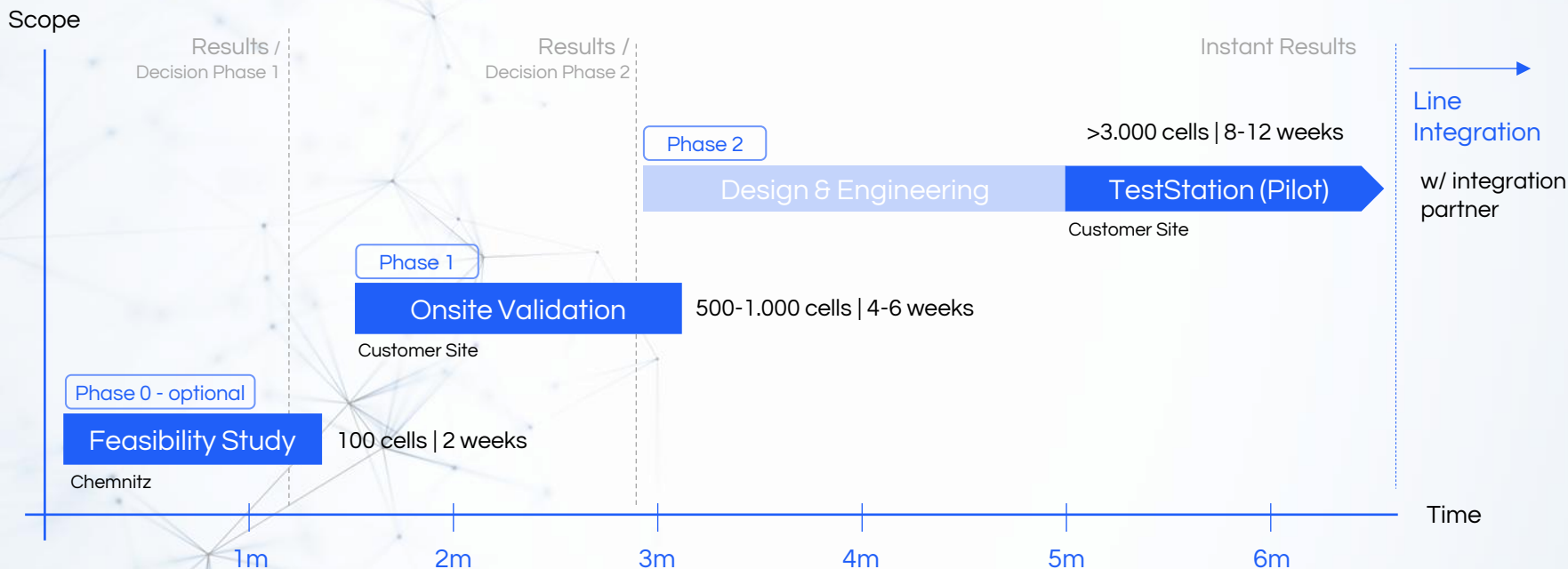
» **Scope:** ~10k cells in testing w/ leading battery manufacturers

» **Tech:** Great agreement to conventional method validated in industry environment

» **Support:** Strong industry partners & mentors with Asian & European background

Proven collaboration approach: Scale together from ramp-up to giga-scale

Learn
More



Our team is ramping up with experts from industry & research to tackle the aging step in cell production



**Dr.-Ing.
Paul Büschel**
Data &
Hardware



**Dipl.-Ing.
Thomas Günther**
Software
Scaling



**M.Sc.
Bastian Ruther**
BizDev
Financing
Partnerships

Experiences



Polestar

MAX PLANCK
GESELLSCHAFT



TECHNISCHE UNIVERSITÄT
CHEMNITZ

authentic

Capgemini invent

Info

- >15y diagnostic research
- >14 Scaling formation as HW & SW Lead at Thyssenkrupp
- VC backed, co-financed by EU
- HQ in Chemnitz, Germany

Customers & Partners



Among others

Want to tackle your

- time-to-customer
- Ramp-up
- CapEx?



Scan to meet

Let's talk.

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