

XING MOBILITY

Immersion-Cooled Battery System in Real-World Applications

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April 2023





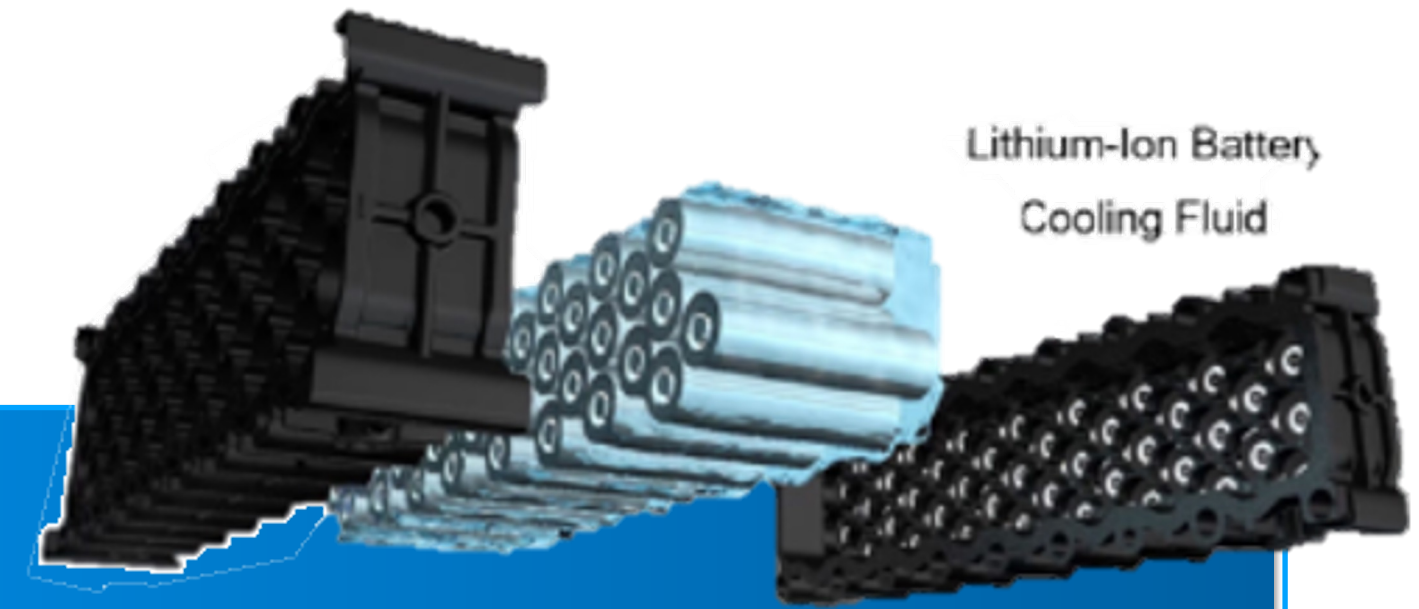
Immersion Cooling Technology

Innovation on Safety & Performance



Advantage,

- Active Thermal Runaway Suppression
- Enhance cell thermal management



Lithium-Ion Battery
Cooling Fluid

OTA
Over-the-Air Unit
Real Time Data Transmission

Battery Modules
LG 21700 NMC Cells
Fully Immersion Cooled
Active Thermal Runaway Suppression

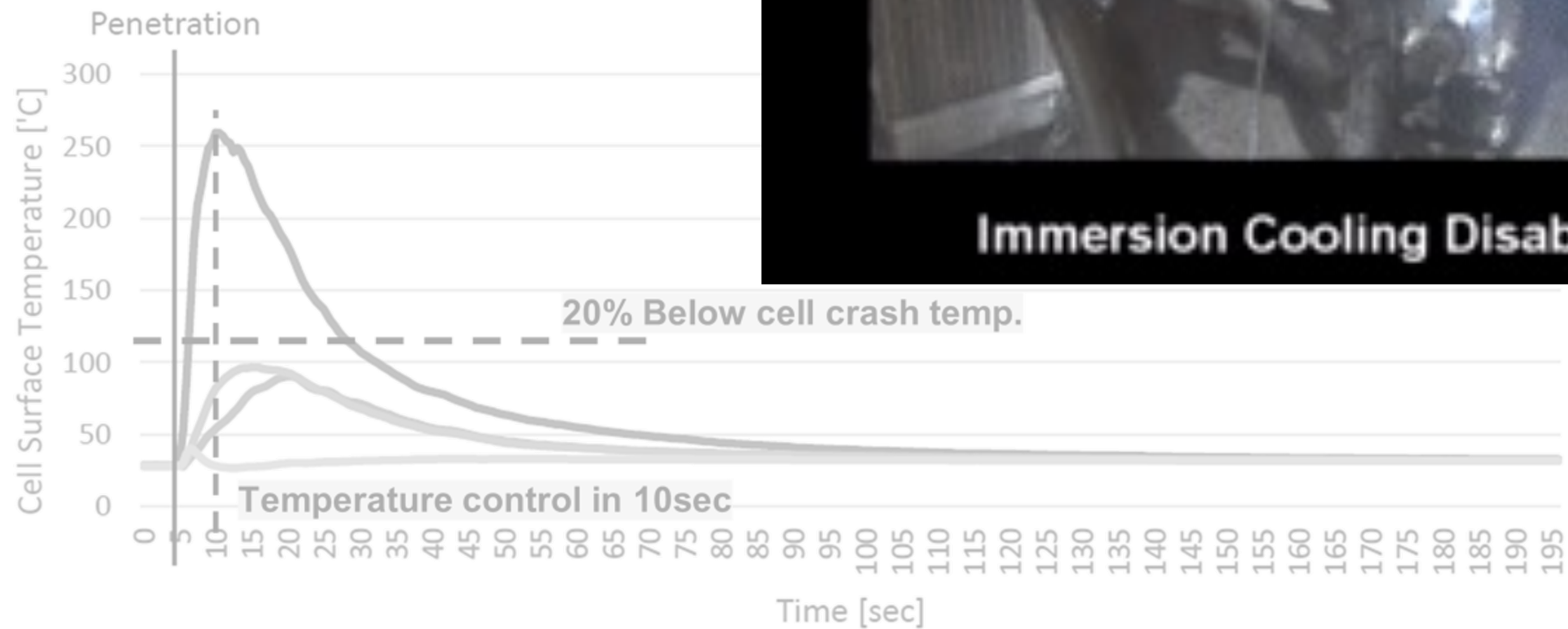
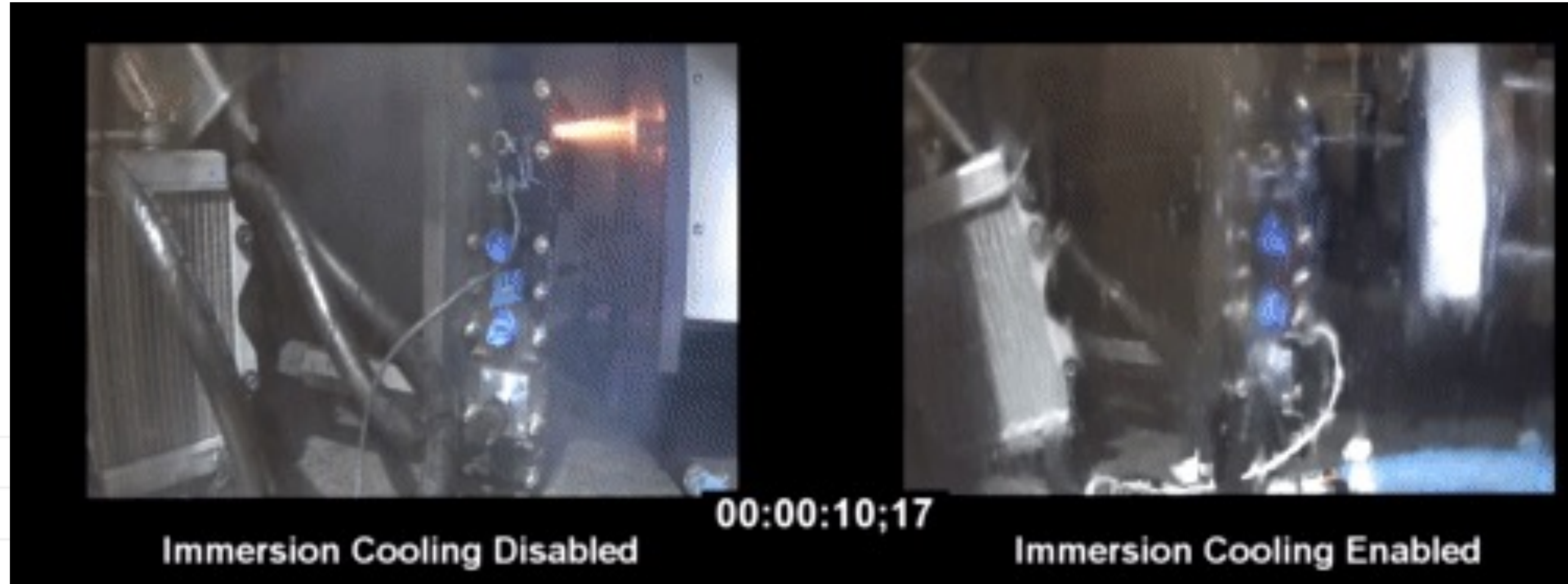
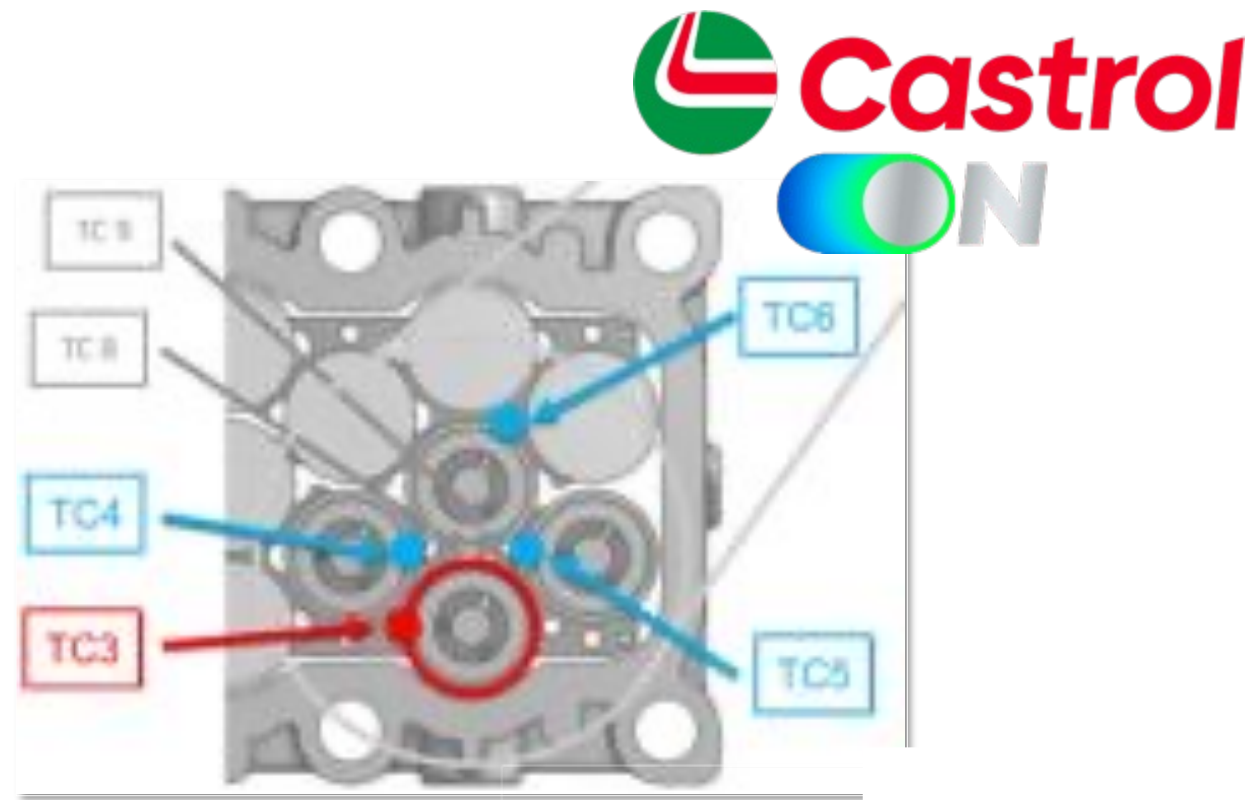
Enclosure
ECE R100 fire resistance,
IP67 verified
ISO12944-2 C5 compatible



ASM
Active Safety Module
HV failure prevention for battery operating safety

MSD+HVIL
Manual Service Disconnect
Manual safety protection while installation and
maintenance

Nail penetration test



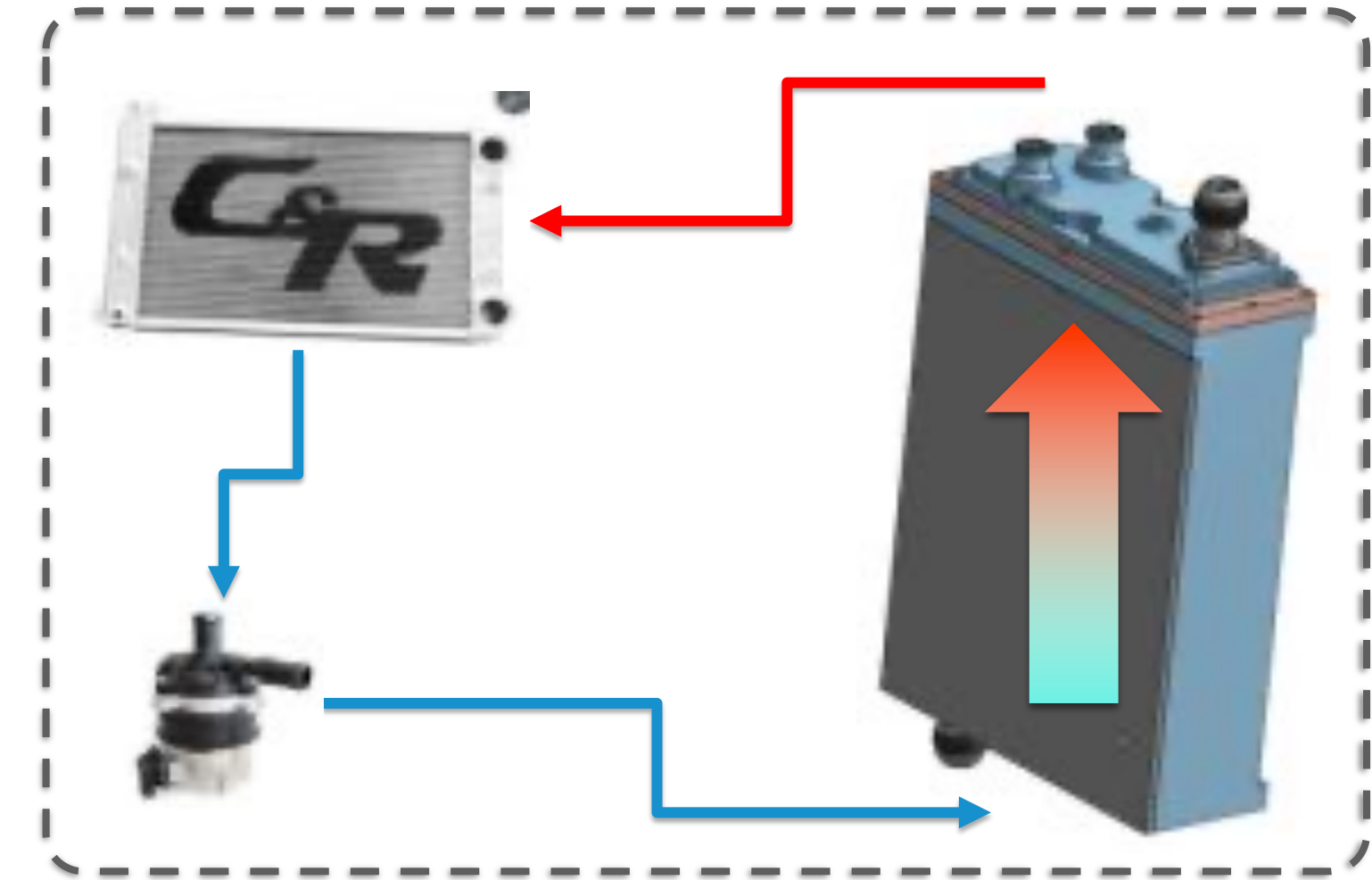
Immersion Cooling Technology

Cooling Method Advantage

Cooling method comparison test

Test purpose,

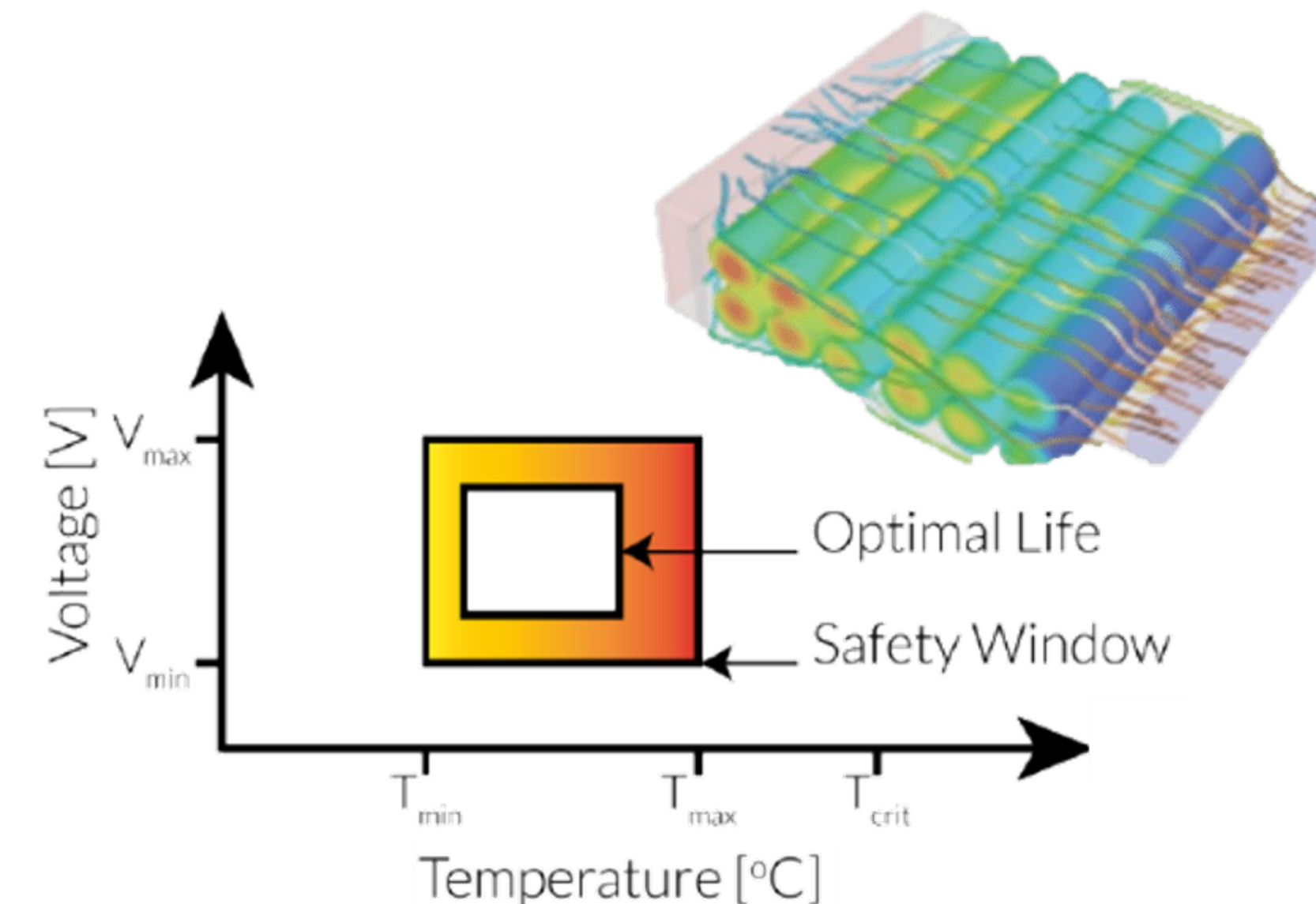
Build 2 modules with only cooling method difference to scrutinize the battery module performance



Cell temp.
- 20~30%

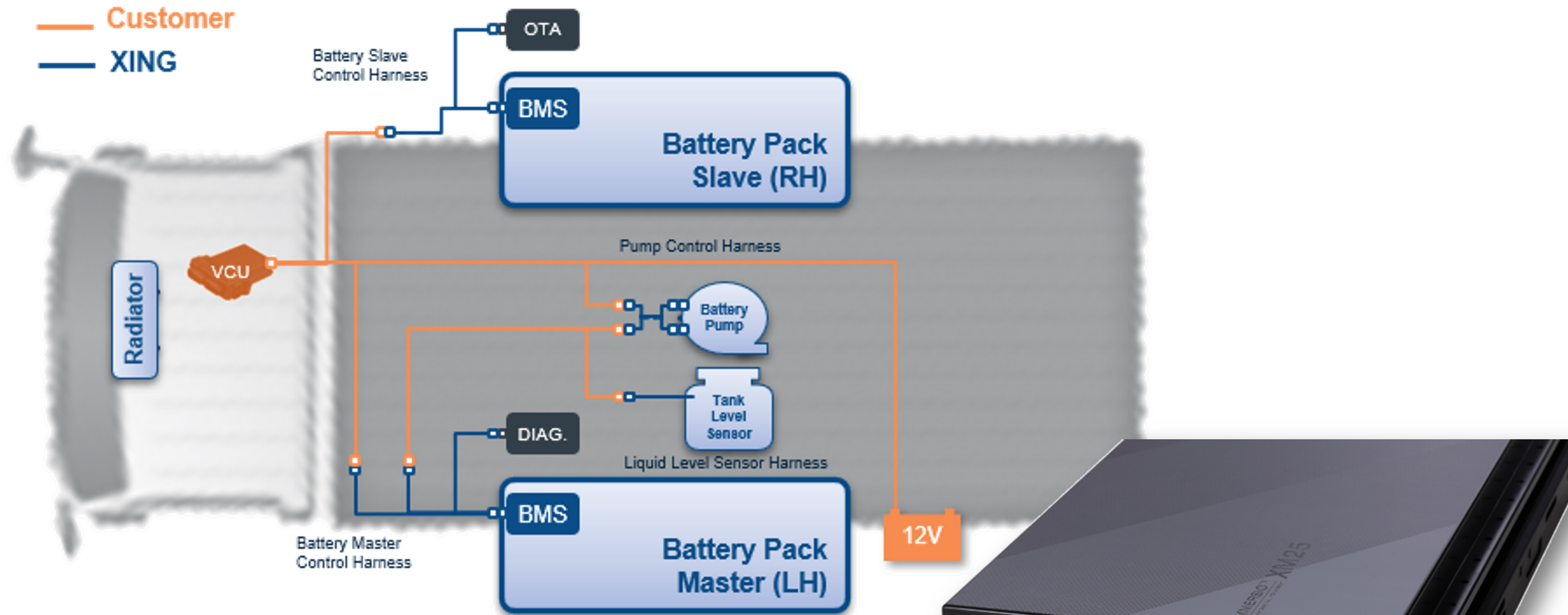
Life cycle
+10%

Heat up time
-50%



Real Case in the World

Mass Production_IMMERSIO™ XM25



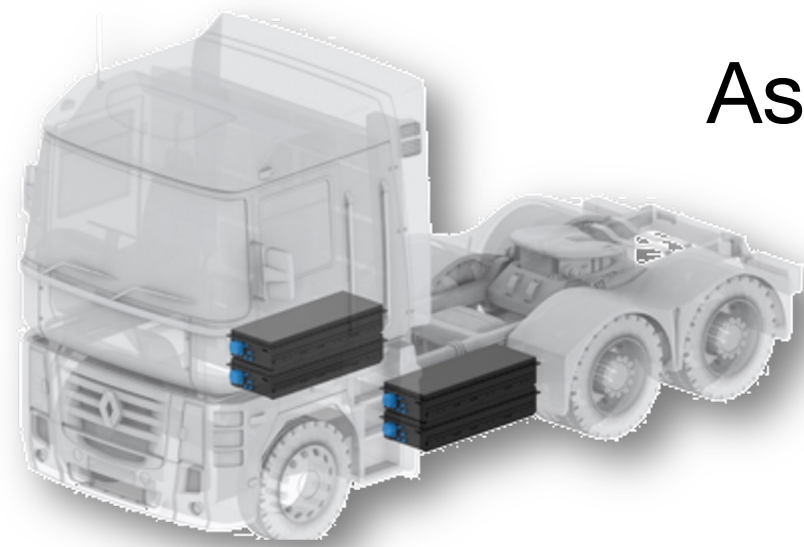
3.5 ton pure electric truck

Asian OEM Tier1 supplier

Production in 2023 Q2

Energy: 50kWh

Voltage: 400V



Safe and Reliable Pure Electric Truck

XING provides a 400V / 50kWh power supply for a 3.5-ton pure electric commercial vehicle that is designed for zero-emission logistic fleet in urban areas.

Equipped with XING's advanced immersion cooling technology, the IMMERSIO™ XM25 can meet the demands of any commercial vehicle for an eco-friendly and sustainable future.



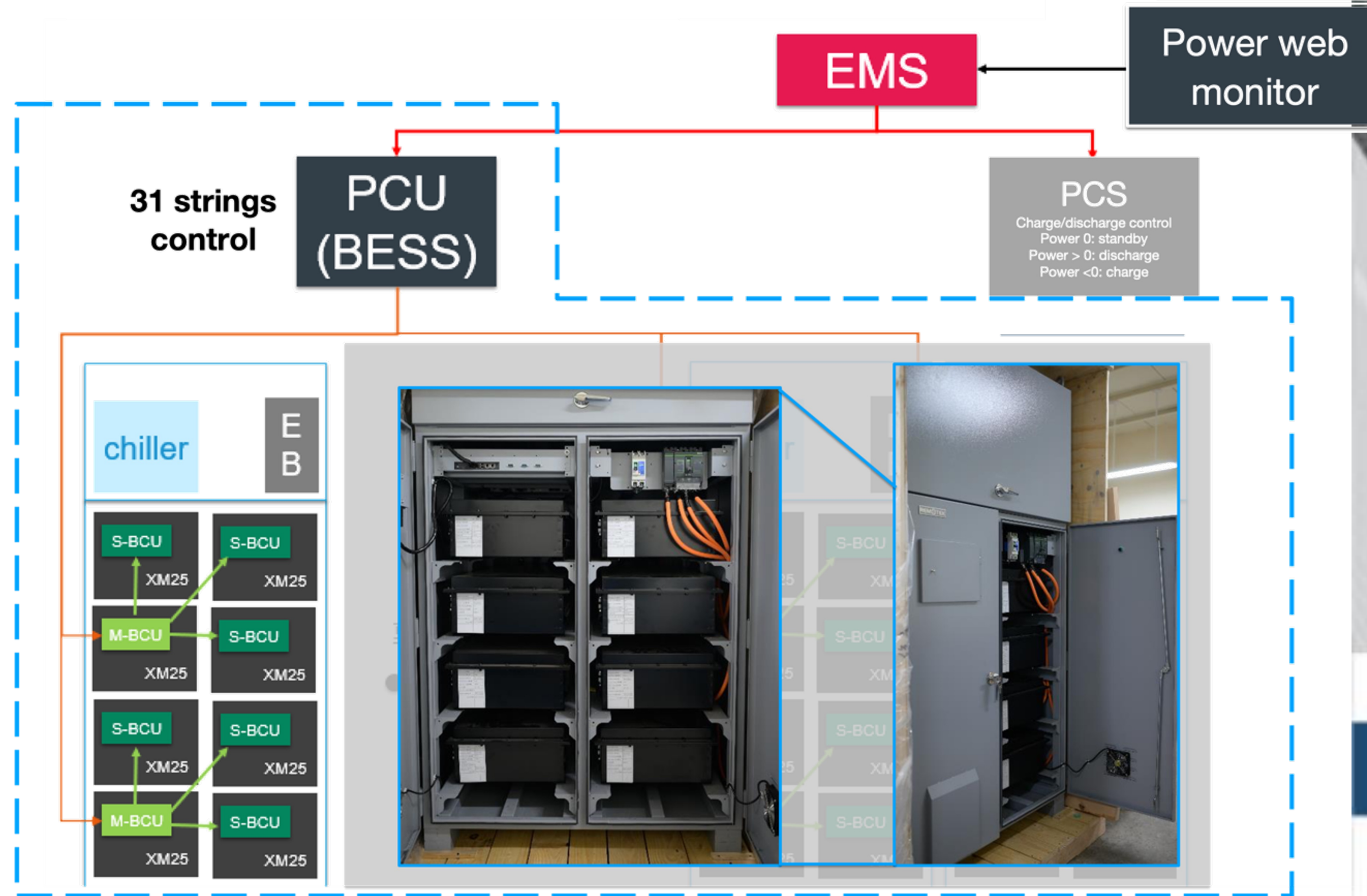
Safety

High
Energy Density

Turnkey
Solution

Real Case in the World

Mass Production_IMMERSIO™ XM25



Immersion-Cooled Energy Storage System

XING's fully Immersion-Cooled Battery System IMMERSIO™ XM25 provides 800V / 200kWh, which has been integrated into Remotek's energy storage system to support renewable energy power grid with efficiency and safety.

Energy Storage System

Taiwanese ESS partner
Delivery in 2023 Q1

Total energy: 2.4MWh
Total voltage: 800V

Rack energy: 200kWh
Rack voltage: 800V

Safety

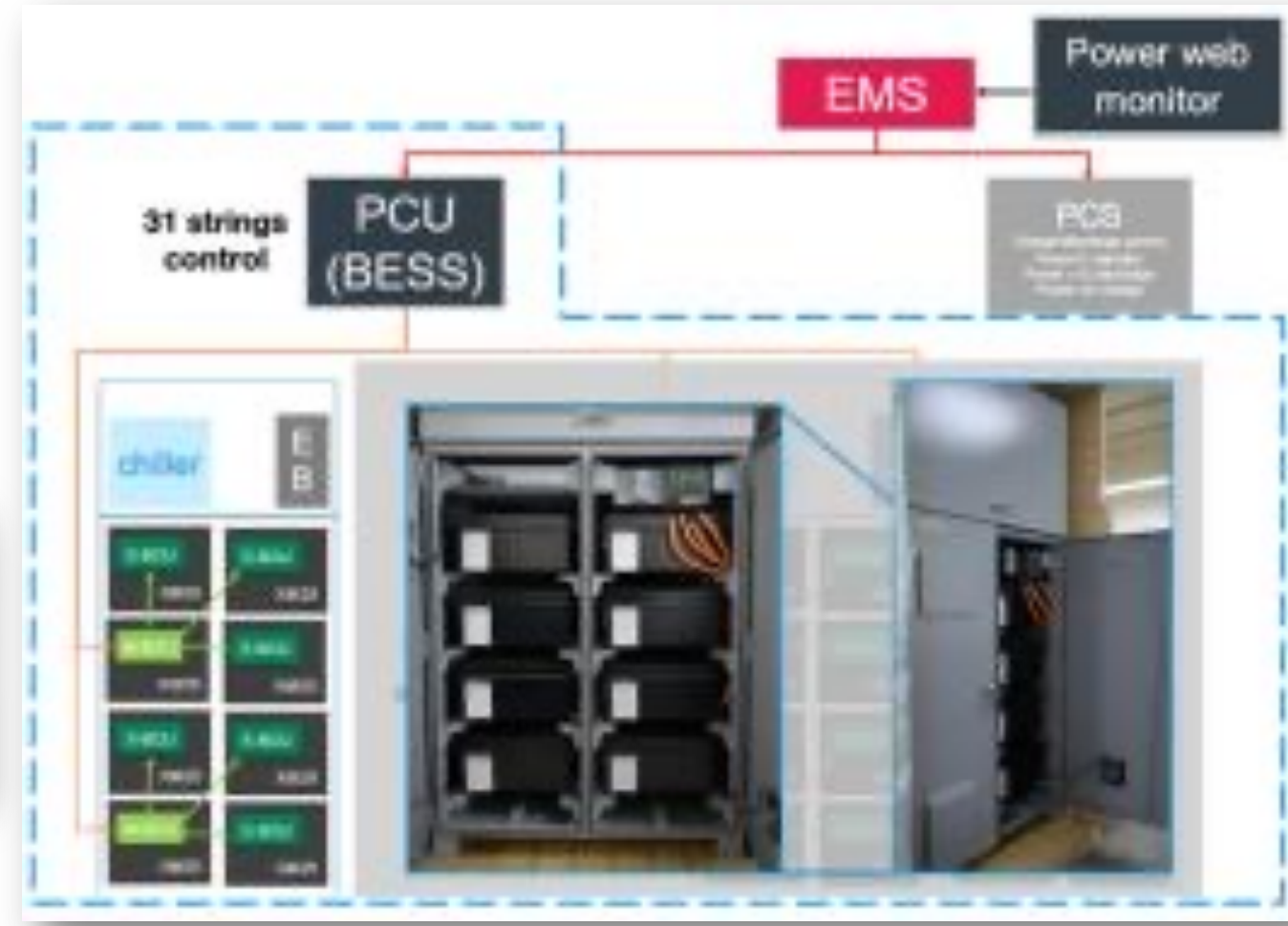
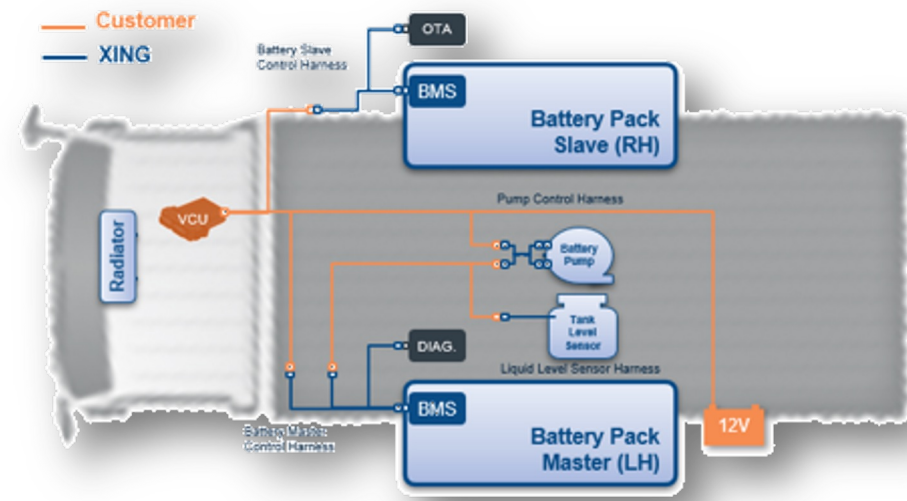
Cooling System Integration

Turnkey Solution



Real Case in the World

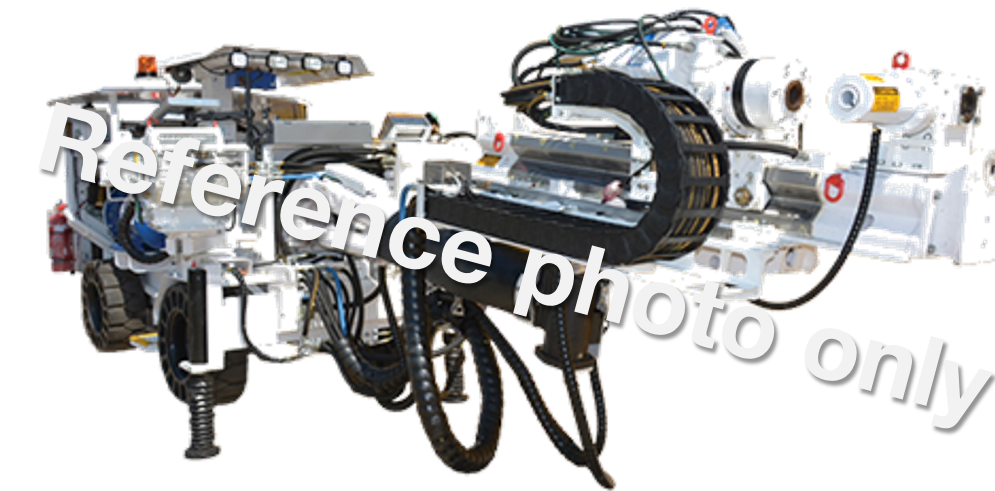
Mass Production_IMMERSIO™ XM25



Mobile charging station
 Norwegian partner
 Delivery in 2023 Q3
 Energy: 200kWh
 Voltage: 800V

Extreme Temperature Environment

Mass Production 2023



Mining drill rig
 Delivery in 2023 Q3
 Energy: 100kWh
 Voltage: 800V



Marine crane
 Delivery in 2024 Q1
 Energy: 300kWh



XING Mobility Inc.

Dynamic Power on Demand™

- Founded in 2015 in Taipei, Taiwan by Tesla and Panasonic veterans
- EV battery and thermal management experts with powertrain integration capability & know-how



Co-founders: Royce YC Hong & Azizi Tucker

Internal Project



Miss E
EV Prototype Racer
Complete Vehicle Development

Miss R
Pure Electric Supercar
Complete Vehicle Development

Mr T
3.5-ton Commercial Truck
EV Conversion

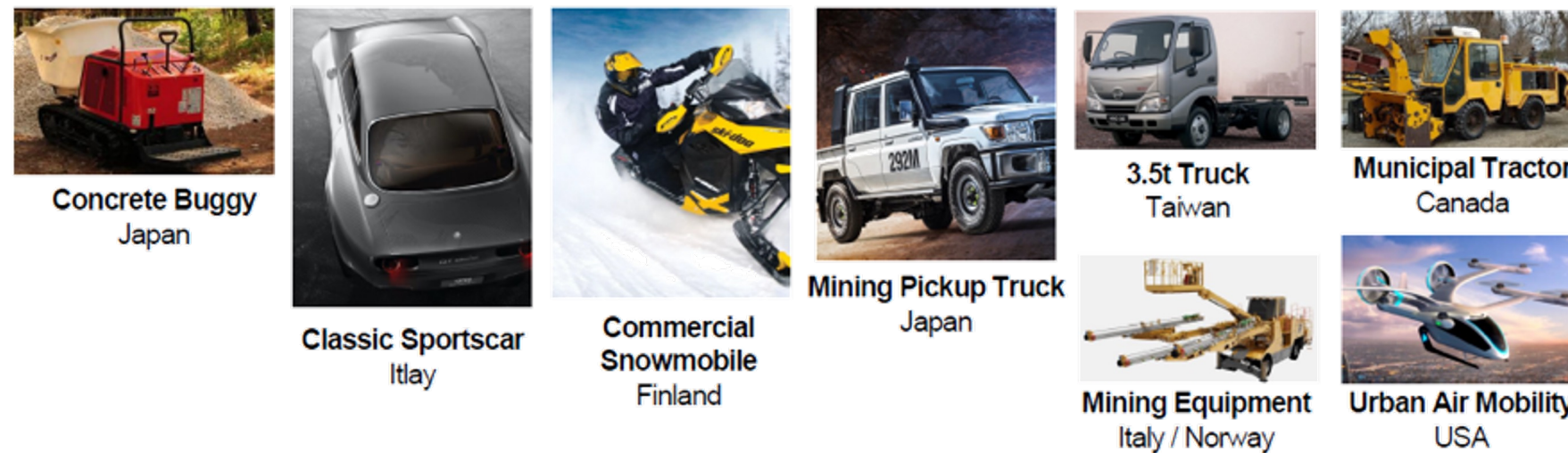
1969 Camaro EV
Electric Muscle Car
EV Conversion



Next Gen.

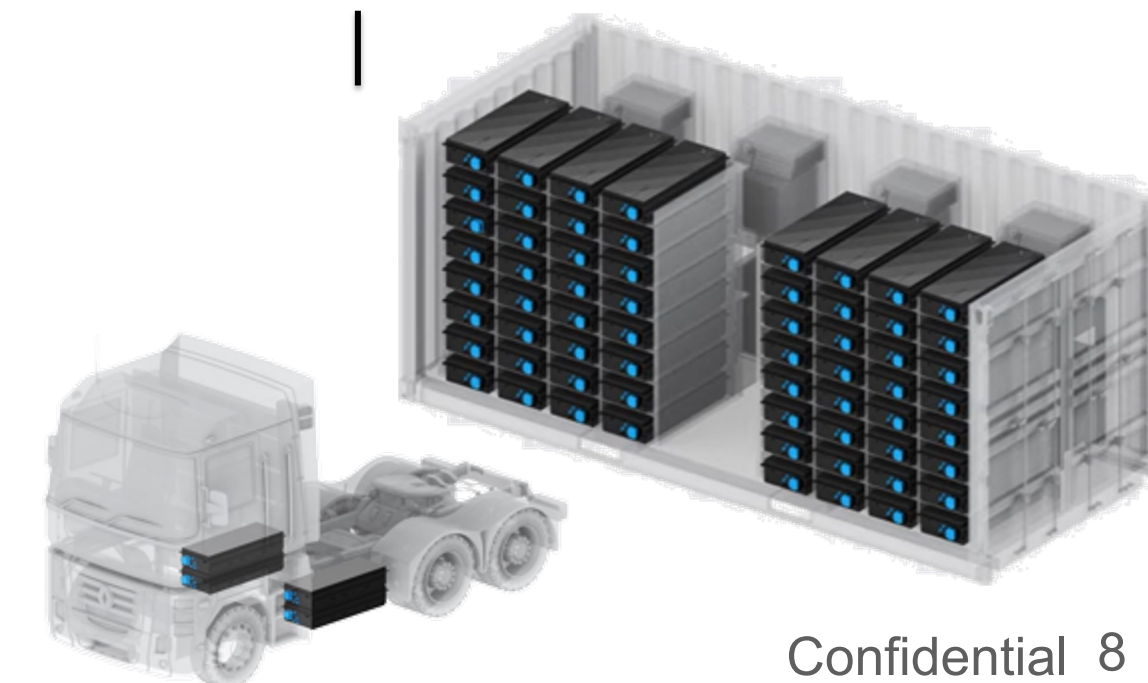


External System Integration



Mass Production Execution

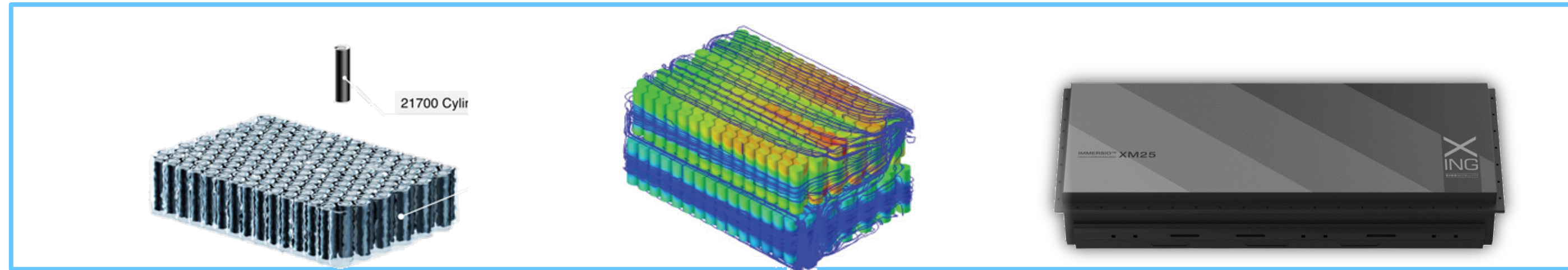
Launched the world's first commercialized immersion-cooled battery pack





Immersion-Cooled Battery System

Solution offerings



Customization engineering team

Offerings,

- Design-to-order Battery Modules
- From Design to SOP development
- IP Licensing

Target Customer,

- Automotive OEMs
- Volume Industrial Vehicle OEMs
- Tier1 Suppliers

Commercial & Industrial Vehicles

Offerings,

- XM_series Standard Battery Packs
- Variance cooling system design

Target Customer,

- Commercial Vehicle Makers
- EV System Integrators
- Fleet Owners



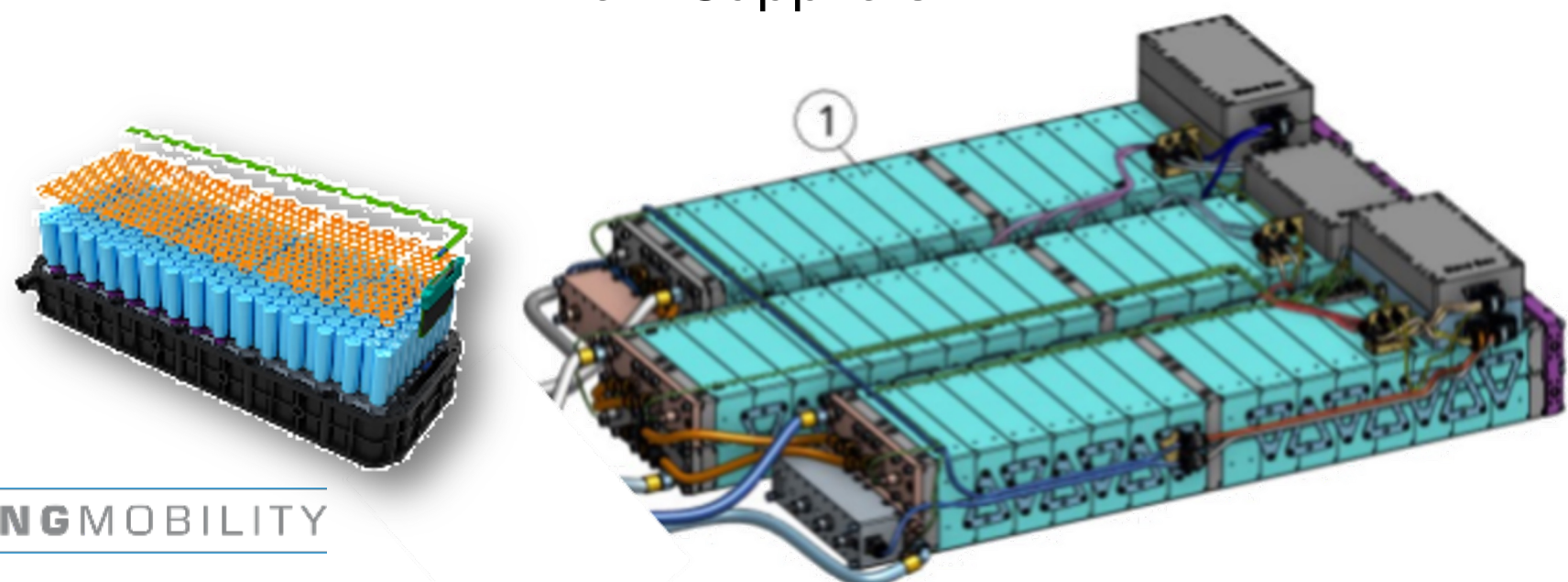
Renewable ESS

Offerings,

- XM_series Standard Battery Packs
- Cost effective design

Target Customer,

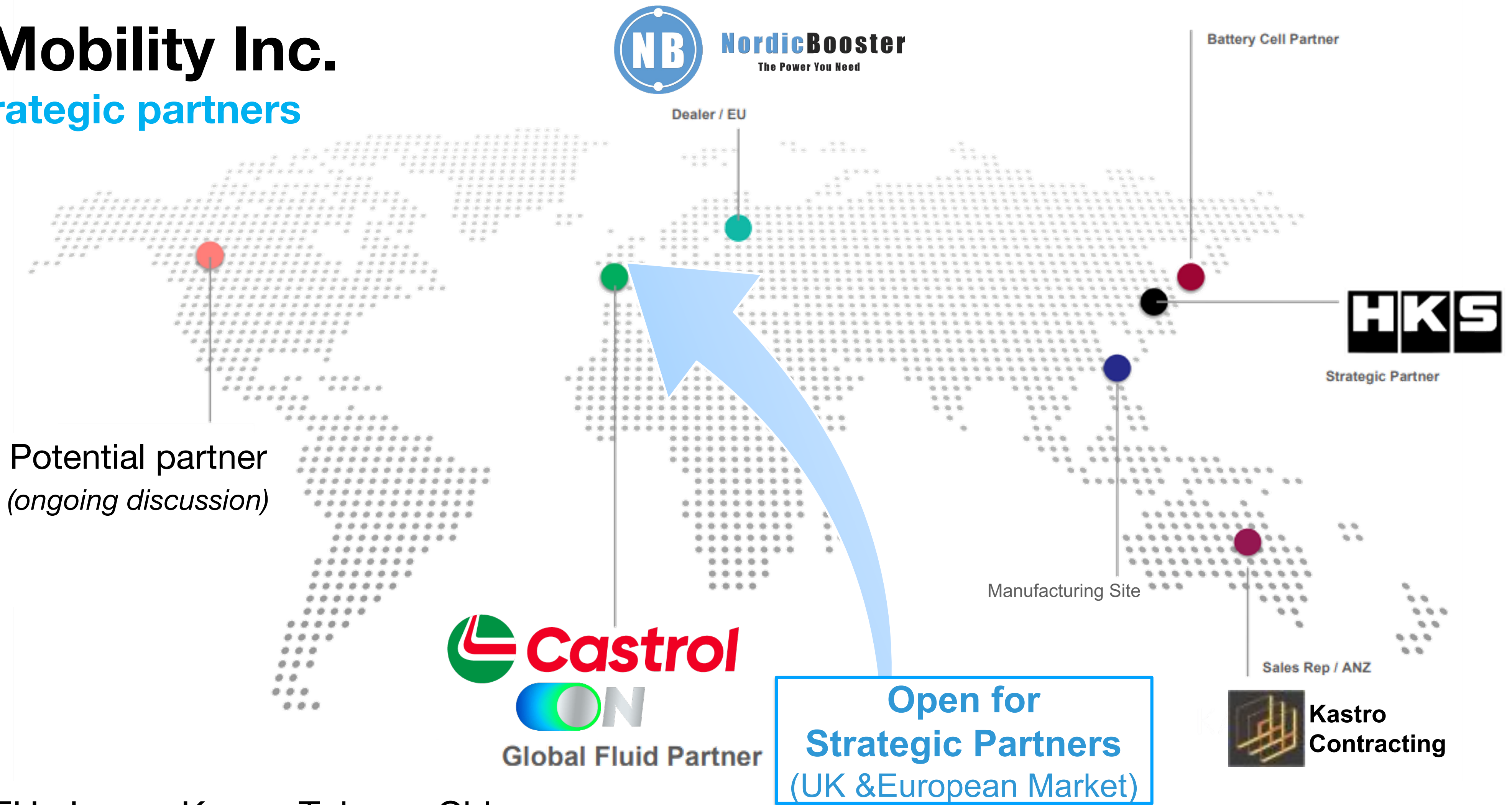
- Power System Integrators
- Enterprises





XING Mobility Inc.

Global strategic partners



- **17 patents** in US, EU, Japan, Korea, Taiwan, China
- **7-year volume order** Asian tier1 OEM
- **Global strategic partners** of key components, manufacturing, and channels
- **The world's first commercialized immersion-cooled battery pack**



What could be expected

XING Mobility upcoming events



2023 Sliverstone circuit

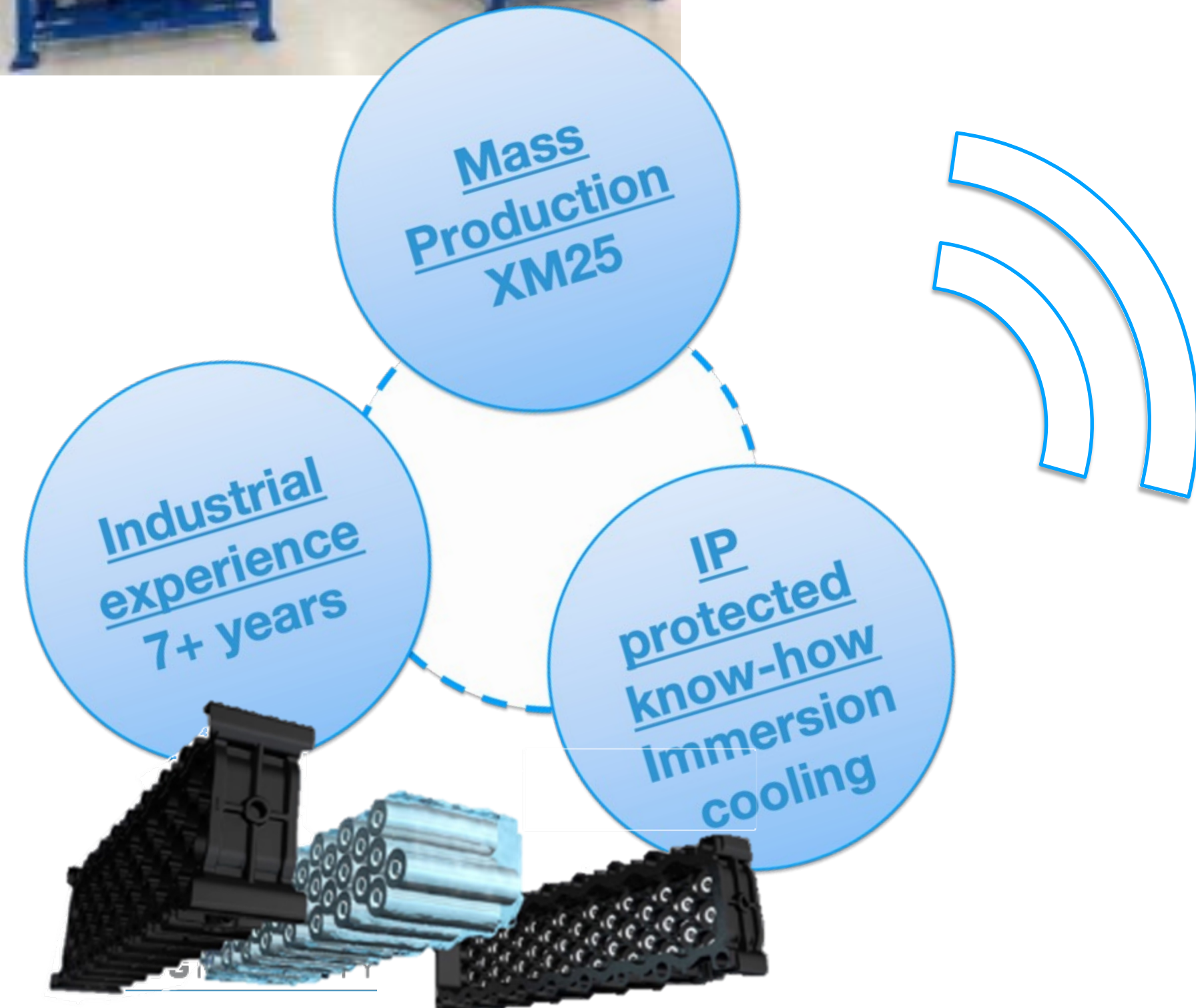
Immersion-Cooled Battery System in Real-World Applications

>> Speech at 10:15am / Hall 3

We're Exhibiting
STAND 40
HALL 3

Innovation Cell-to-Pack Showcase

Mass Production Reveal



2023 Battery Show Europe

23-25 MAY 2023
Booth Hall10-J61

> Featuring Products

- Customized EV Battery
- Immersion Cooling Technology
- Real Cases Sharing

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XING MOBILITY

**Global supplier of safe, reliable, and efficient battery solutions
for the world's sustainable future.**

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