

Weight reduction / SunForce® m-PPE foamed beads

Lithium-ion battery insulator & spacer for Electric vehicles

1 Challenge

- Decreasing weight for extending cruising distance.

2 Insight

- Using SunForce® for insulator & spacer of Lithium-ion battery.
(See density figures below)

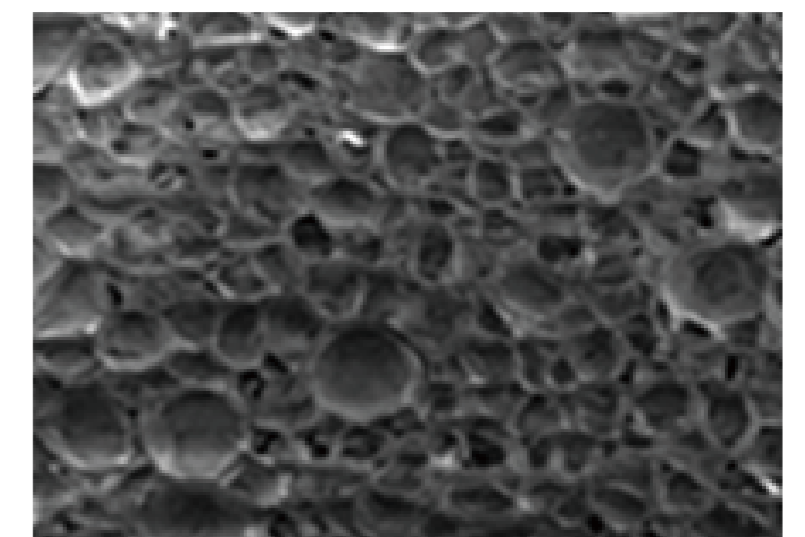
3 Result

- Realizing longer cruising distance for EV.

Product Features

- 1 World first particle foam beads product with benefits of m-PPE resin and foam beads properties.

Expansion ratio (cc/g)	3.5	5	7	10
Bulk Density (kg/l)	0.28	0.2	0.14	0.1

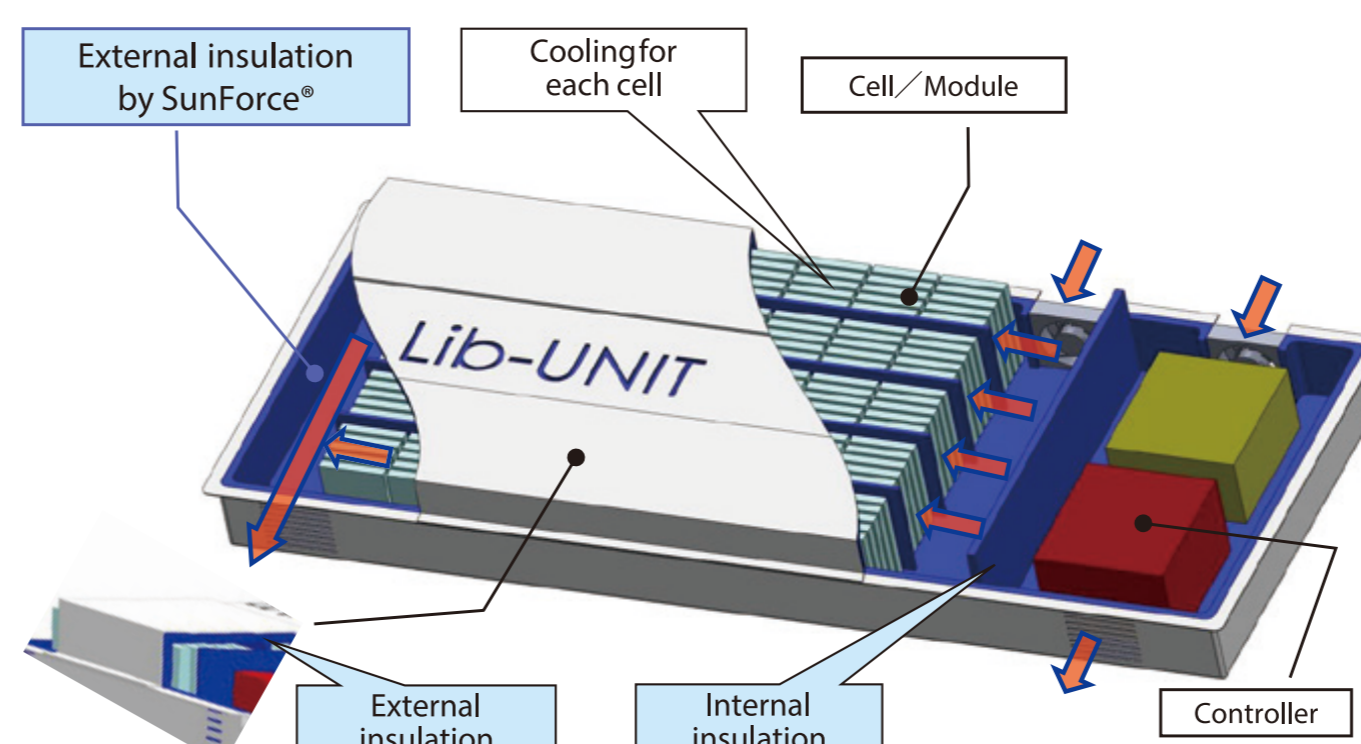
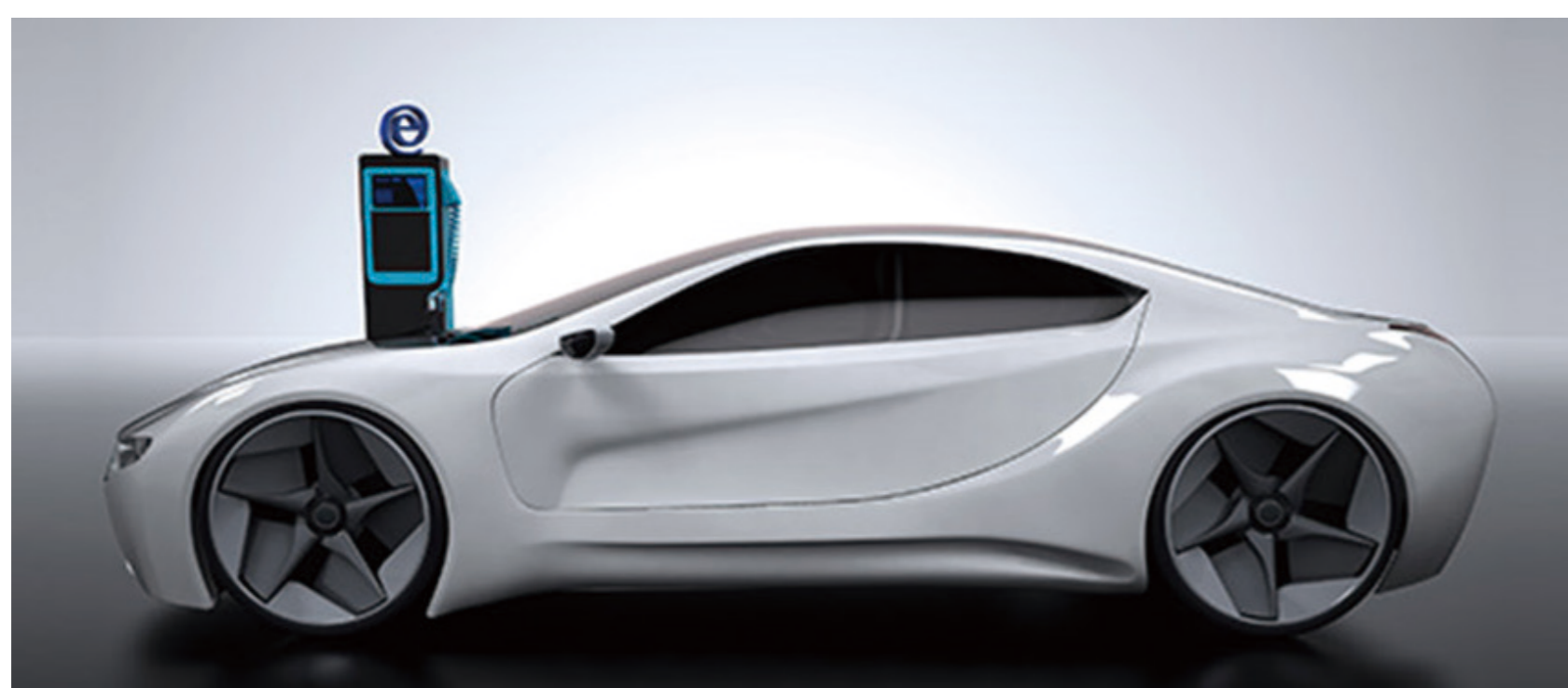


Features of SunForce®

- Excellent heat resistance
- V-0 level halogen-free flame retardant
- Ultra-light weight
- Design-ability
- Dimensional stability
- Heat insulation



- 2 Realizing light-weight and high-performance by using SunForce® with superior flame retardancy, thermal stability and heat insulation.



Li Battery insulator & spacer

State of Progress

Early Stages of Development



Development Completed