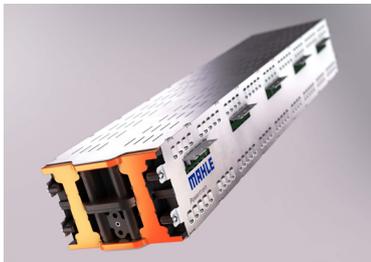




## Battery Module



Battery module



Battery Development Centre (BDC)



Battery pack test facility

### Battery Module

- MPT developed battery module concept with advanced thermal management technology for sustained high performance
- Module designed for continuous high output in performance EVs without de-rating
- Based on industry standard 21700 lithium-ion cells for:
  - › design packaging flexibility
  - › thermal performance
  - › safety, reliability & durability
  - › scalability
  - › market acceptance
- Novel cooling features to maintain thermal stability
- Modules easily tailored to suit energy requirements and package shapes
- Multiple modules arranged in battery packs to suit different vehicle applications

### Cooling Concept

MPT has developed a modular concept that allows various configurations of cylindrical cells to be arranged horizontally or vertically in single or double rows to suit different voltages & capacities, as well as providing packaging versatility.

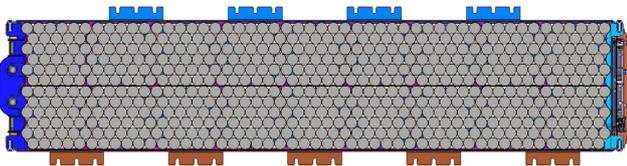
- Upper and lower cooling plates
- Both positive and negative current collectors arranged at the same (“top”) end of the cell
- Novel features conduct heat away from the cells
- Advantages of this concept are:
  - › Improved thermal performance
  - › Reduced complexity of assembly



Module for high-performance EVs  
Highly efficient cooling features

## Key Capabilities

- Cell selection
- Concept development
- Detailed design
- Thermal / structural analysis
- Prototype procurement & build
- Development testing



Internal detail of battery module



Battery test cell facility



Battery module designer

