



Materials

Battery Enclosure Cover

OEM/Vehicle

General Motors
2017 Chevrolet Bolt

System Supplier

LG Electronics

Material Processor

Hanwha Corporation

Material Supplier

HanWha Corporation

Resin

5145 SMC vinyl ester/ polyester

Tooling/Equipment Supplier

Hanwha Corporation



The battery pack is a stressed member and weighs 960 lbs/440 kg. It accounts for 23% of the car's value. The SMC cover is a large light weight cover that is integral to the pack. A new light weight high glass loaded Vinyl ester/Polyester blend SMC was formulated to meet the high speed stress strain requirements and, for the first time, be incorporated as part of the structural element. A 30% weight savings and a 40% cost savings, over alternative manufacturing methods (steel/aluminum stampings) was achieved.