



Materials

EMI Shielding Compounds For High-Voltage Cover

OEM/Vehicle

Hyundai Motor Company
2019 Hyundai Nexa

System Supplier

Yura Corporation

Material Processor

Yura Corporation

Material Supplier

Hanwha Compound

Resin

Hanwha Compound ESM-204B PA6

Tooling/Equipment Supplier

Hyundai Motor Company



New conductive plastic compound materials for EMI (Electromagnetic Interference) shielding were developed for high-voltage junction box upper covers. The material replaces conventional die cast aluminum covers for reduced weight and manufacturing costs. The materials are Polyamide 6/PPO compounds with hybrid conductive carbon filler (Carbon fiber, nano carbon fiber filler – CNT, Carbon black) not containing metal powder or metal coated fiber. The weight savings is estimated at 30% (0.3kg) and the cost savings is estimated at 70% (\$50 per vehicle.)