

SEGMENT PROFILE

# E-mobility

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Polyamide solutions for hybrid  
and electric vehicles.



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# Focused on e-mobility solutions

Innovative material solutions are critical to the continued growth of electric vehicles. Ascend Performance Materials is helping automotive manufacturers deliver what customers want: better performance and safety.

With a broad portfolio of engineered plastics, Ascend is helping make EVs safer and go farther. Our solutions combine high-quality materials with technical knowledge to deliver best-in-class performance in power delivery systems, battery safety and range.

## Power Delivery

Ensuring the safety and reliability of EVs depends on transmitting electricity from the battery throughout the vehicle. From our corrosion-resistant Vydyne® J series to the flame-retardant ECO series, Ascend has the material to keep electricity flowing where it is intended.

- Electrical housings
- High-voltage connectors
- Cable guides and harness brackets
- High-voltage switches
- Manual service disconnect
- Charging plugs, receptacles and housings
- Battery management system
- Sensors



## Battery Safety

Battery technology is advancing rapidly, delivering more power for longer range. Keeping that power contained and passengers safe is critically important. Impact-modified compounds protect battery cells with a light weight material and hydrolysis-resistant connectors help the battery cooling system maintain ideal operating and charging temperatures.

- Battery covers, frames and cages
- Cooling line connectors
- Manual service disconnect

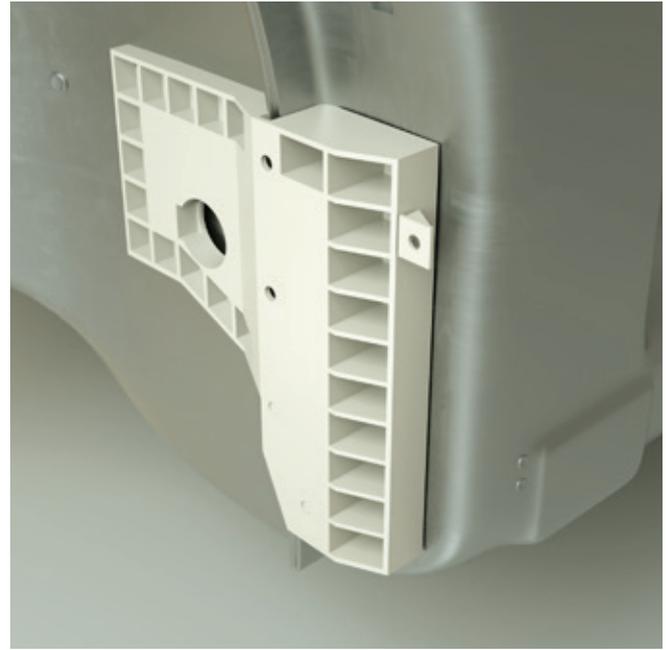


## Performance

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Ascend's application experts help auto manufacturers and Tier 1 suppliers boost performance and reduce weight throughout their fleets. The same combination of high-quality materials and technical expertise can help EVs go farther. Impact-modified compounds help reduce weight through metal replacement and lessen noise and vibration, without sacrificing safety.

- Body-in-white structural inserts
- Motor mounts
- Integrated part design



## Material Solutions

### Vydyne ECO366H

Unreinforced PA66 with best-in-class V0 rating down to 0.20 mm and RTI of 150C. Exhibits superior melt flow for intricate parts and delivers good stiffness/impact balance, chemical resistance and superior thermal resistance.

### Vydyne J Series

Electrically neutral and organically heat-stabilized PA66 grades with high dielectric strength and improved flow for easy molding are ideal for miniaturized and high-voltage applications requiring corrosion resistance.

### Vydyne HR

Delivers best-in-class hydrolysis performance for demanding cooling system applications. With an organic heat stabilizer, Vydyne HR can also be used in applications requiring electrically neutral material.

### Vydyne HT Grades

Provides high levels of resistance to material degradation after long-term heat exposure up to 190C.

### Vydyne IM Grades

Offers greater toughness and flexibility to absorb energy, especially with our high modulus ductile grades, R433H and R435H. Used to reinforce downgauged steel and aluminum, providing similar protection without the weight.

# About Ascend

Ascend Performance Materials is the largest fully integrated producer of polyamide 6,6 resin. We manufacture and reliably supply world-class plastics, fibers and chemicals that are used in thousands of everyday applications such as car parts, electronics and cable ties.

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