

SEGMENT PROFILE

Automotive

Polyamide solutions for
automotive applications



Boosting auto performance

Higher performance with lower emissions is possible with the right partner. At Ascend, we couple high-performance materials with automotive application expertise.

We have a proven track record of working with suppliers and auto makers to bring better performance throughout the vehicle – from the exterior to under-the-hood applications.

Ascend's fully integrated production and global operations ensure the quality and consistency of material the automotive industry can rely on.

Our technical specialists partner with customers to engineer new applications that boost vehicle performance, improve passenger comfort and remove unnecessary weight from the vehicle.



Improving Engine Efficiency

Turbocharged engines require materials that can withstand higher operating temperatures and chemical exposure in smaller spaces. From best-in-class hydrolysis resistance to extreme temperature resistance, Vydine® PA66 helps ensure your application performs in the harshest environments.

- Charge air coolers and ducts
- Cylinder head covers
- Integrated air intake manifold



Ascend's auto
driven sales

\$1.2
BILLION

Performance is our middle name

Ascend is the world's largest fully integrated producer of polyamide 66 resin. Not only do we sell PA66 resins and engineered compounds into the automotive industry, we sell industrial polymer, fiber, and intermediate and specialty chemicals. Ascend products excel in a wide range of automotive applications, including cooling systems, electrical systems, e-mobility, cable ties, tire cord, airbags, paints, coatings and more.

Application development and support

Our automotive applications team relies on years of industry experience, testing and computer aided engineering support for tooling to help optimize system and part design. We work with our customers to achieve the very best from our products. That's why we offer a worldwide support network of application specialists and technical experts.

Vydyne PA66 is the high-performance plastic OEMs rely on to solve some of the toughest challenges.

Featured Solutions

Vydyne XHT Series

Extreme high-temperature grades capable of withstanding prolonged exposure to temperatures of 210C and 230C, making them ideal for turbocharger components.

Vydyne HT Grades

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

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 IM Grades

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

Vydyne ECO Series

Nonhalogenated flame-retardant unreinforced PA66 grades offer superior melt flow for molding intricate parts. The entire ECO series balances stiffness and impact, while offering chemical 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.

Ascend offers a comprehensive portfolio of glass filled and unfilled engineered plastics for challenging automotive applications. Learn more about our full product offering for automotive applications on ascendmaterials.com





E-mobility

By 2025, hybrid and electric vehicles will make up one out of every three cars being driven. Ensuring those cars perform reliably and safely is a critical challenge that will require design ingenuity and the materials to support it. Our solutions combine high-quality materials with technical knowledge to deliver best-in-class performance in power delivery systems, battery safety and range.

- Battery covers, frames and cages
- Battery management systems
- Electrical housings
- Airbag housings
- High-voltage switches and connectors
- Charging plugs and receptacles



Lightweighting

Auto makers are being pulled in two directions. Consumers want better performance, more gadgets and greater comfort, while regulations require more fuel efficiency. The answer is lightweighting. PA66's specific strength, temperature resistance and durability make it an ideal material for metal replacement –reducing part weight by up to two-thirds.

- Integrated part design
- Chassis and suspension components
- Oil pans and covers
- Transmission pans and covers



Comfort

Passengers expect more from their cars. From cutting-edge technology to quiet cabins, Vydine PA66 ensures passengers enjoy their drive. We produce engineering plastics used to reduce engine and road noise for passengers while standing up to the rigors of daily driving with the highest safety standards.

- Engine mounts
- Electronic connectors and cable ties
- Body-in-white structural inserts

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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inspiring everyday