

Edgetek™ High-Performance Compounds

Lightweight Materials for High-Temperature
and High-Strength Applications

Product Description

The Edgetek™ Engineering Thermoplastic Compounds portfolio covers a broad range of standard and custom-formulated high-performance materials. Edgetek compounds are based on select engineering thermoplastic resins that are compounded with reinforcing additives, such as carbon fibers, glass fibers and glass beads to modify and expand the performance of the base resin.



Value Solution

Edgetek compounds provide excellent strength-to-weight ratio

Using specific combinations of resins, reinforcements, modifiers and fillers, the Edgetek compounds portfolio can provide high strength without adding unnecessary weight. Many applications, such as wind turbine fan blades and power tools, benefit from the lightweight aspects of Edgetek compounds and the cost savings compared with traditional machined components. Furthermore, the chemical resistance and weatherability properties of Edgetek compounds help reduce maintenance costs.

Key Characteristics

The primary features and benefits of Edgetek compounds are:

- **Strength and durability**, providing an outstanding combination of mechanical properties and toughness
- **Chemical resistance**, withstanding fuels, oils and other harsh chemicals
- **High-impact resistance**, demonstrating remarkable impact properties at all temperature ranges
- **Weatherability**, offering specially formulated grades for use in outdoor applications

Additional features include:

- Significantly lower cost compared with machined components
- Design flexibility and processing ease
- Integral colorability with many formulations
- Part consolidation





Markets and End-Use Applications

Edgetek compounds are an excellent choice for applications in a full range of markets, including:

Automotive

Door handles, roof racks, under-hood connectors and harnesses, air ducts, body trim, bearings, fan housings, power steering and brake fluid reservoirs, fuse holders

Consumer

Sporting goods, lawn and garden equipment, hand tools, appliances, window and door hardware

Electrical/Electronic

Business equipment, printer chassis, telecom hardware, terminal blocks, cell phone holsters

Healthcare

Medical devices, durable medical equipment, surgical instruments, dental components and tools

Industrial

Structural reinforcement components, fan blades, pump housings, power tools, fasteners, conveyors

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