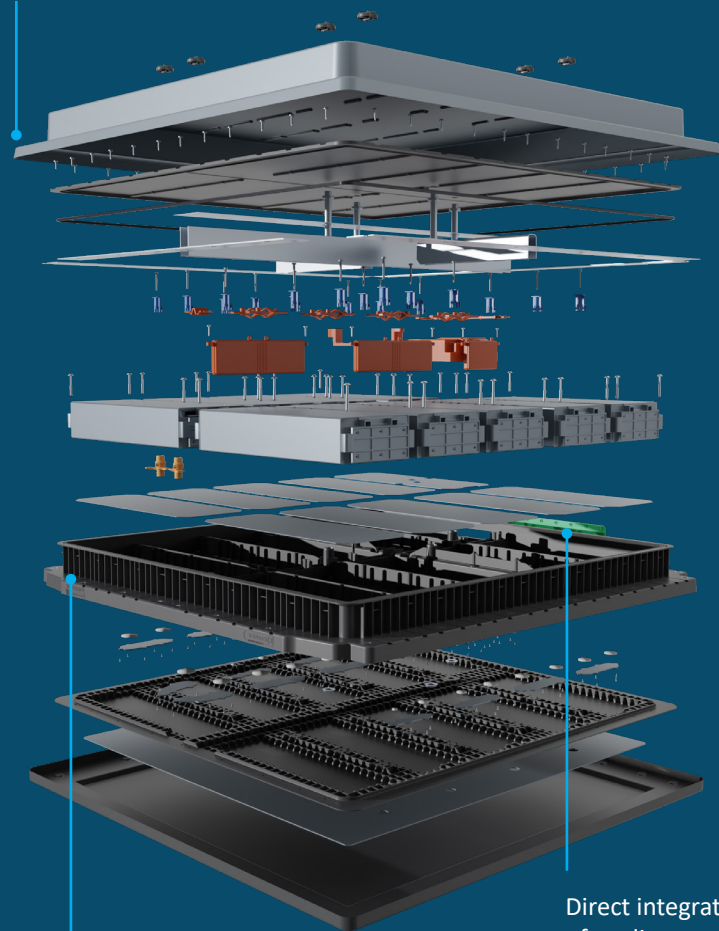


Driving the future_

Lightweight thermoplastic composite design



Direct integration
of cooling system

One shot process integrates endless fiber
stiffening features directly in the molding process



PENTATONIC™

Battery System



For more information about our battery
systems, please contact
battery.systems@kautex.textron.com
www.kautex.com





As vehicles grow in complexity, their components and systems must evolve to work in concert —

With our lightweight and fully customizable Pentatonic™ Battery System, they can do just that, unlike other heavy and unyielding and aluminum battery housings. From hybrid vehicles to full battery electric vehicles, Pentatonic has the composite battery housing solution for any customer.



Benefits

WEIGHT REDUCTION

Pentatonic weighs up to 60% less than its steel and aluminum counterparts, which improves the range of the vehicle and allows the opportunity to adjust chassis components – such as suspension and brake systems.

“ONE SHOT” PROCESS

We integrate structural elements directly into our injection or compression molding process using reinforced materials, which eliminates timely assembly steps at our customer’s facility.

Fewer secondary operations, such as welding and riveting and shorter cycle times than our steel and aluminum counterparts, and offers better leak-tightness.

FULL SYSTEM SUPPLIER

Features and thermal management components, such as cooling plates, are integrated into one fully capable, lightweight system. Reduction of secondary process steps simplifies assembly process, reducing customer bill of material and overall cost, and fewer assembly steps reduces number of sealing joints, which lessens the risk of leakages.

With proven capabilities in design, testing and production Kautex is a trusted partner in creating a more streamlined approach to the entire process.

SUSTAINABILITY

With the weight reduction that Pentatonic provides, the range of the vehicle improves dramatically, which in turn improves energy consumption and overall CO2 emission reduction along the supply chain.

SAFETY

The materials and processes we use make safety the highest priority when it comes to production and application. Our non-conductive housing material reduces risk of electrical shock and corrosion, unlike our steel and aluminum counterparts.

Volumetric safety advantages: The Pentatonic Battery System requires less clearance between the enclosure and the modules due to the isolating characteristics of our materials and the increased integration (e.g cooling plates) during the production process.

Homologation: As the pioneers in plastic fuel tank production, our decades of expertise with fire tests, leak tightness proofing, and crash tests are utilized and extended to the requirements in designing as well as producing composite battery systems.