

POWER AND ENERGY

2020

MITO E-GO (Epoxide POSS functionalized Graphene Oxide)

At MITO Material Solutions, we developed a proprietary graphene functionalization technique to create hybrid polymer modifiers for material manufacturers. MITO E-GO enhances carbon fiber/fiberglass/Kevlar composites and thermoplastics (like PA66) 20-135% beyond normal performance. With MITO, you can replace existing metal components with composite materials without sacrificing durability. Additionally, increases in mechanical, electrical, or thermal performance are expected. MITO products are non-hazardous and engineered to integrate into existing production lines at an extremely low concentration. With proven compatibility in a variety of material combinations, MITO E-GO and other in-development products will empower industries to move away from fossil fuel and unsustainable materials.

P.O.P. (Portable Overflow Prevention) Nozzle and Can Systems

The P.O.P. Nozzle and P.O.P. Can systems rely on a user-friendly technology, an auto-stop mechanism that prevents the overflowing of fuels and reduces the overall exposure to toxic fumes and liquids. The end user can be anyone filling up their lawn mowers or recreational vehicle to an armored vehicle in the field.

Portable Coupler Insertion Assembly Tool

The Hose Tool is a lightweight assembly tool for the quick and safe insertion of 3" and 4" couplings into suction hoses. This tool allows for time and money savings not only for new installations, but for fast repairs in the field. The Hose Tool is safe, efficient and field ready. A high-quality product that is proudly Made In The USA.

The Electronic Alchemy eForge: 3D Printing of Electronics

The Electronic Alchemy eForge is world's first 3D printer capable of creating fully functional electronic devices. The eForge is a multi-extruder fusion deposition modeling (FDM) printer that uses proprietary filament to create devices from conductive, resistive, capacitive, insulating, and semiconducting materials. The eForge can create a multitude of sensors and electronic parts on demand and on mission in various architectures and form factors. The eForge works with Autodesk's Fusion 360 CAD package. The development and prototyping of the eForge was funded by STTR and SBIR contracts from NASA.