

The conglomerate also owns Archangel Body Armor Incorporated. Archangel designs and manufactures innovative custom bulletproof vests for the global consumer market, for state and federal law enforcement agencies, and full body armor for the U.S. Armed Forces. Vests and body armor are composed of 2X5630 high-impact resistant plating under alternating layers of Line-X resin fused Kevlar, high-quality graphene, and d3o high-impact foam, covering major organs and arteries, the neck, major muscle groups, and joints, shaped and molded over Nomex fireproofed tactical uniforms and jumpsuits.

OM Group licensed CFD Research Corporation to develop next generation 4D computational modeling data, to optimize experimental body armor designs that protect not only against penetrating projectiles and shrapnel but also against primary blast injury or PBI, caused by explosion shockwaves and temperature increase. Computational fluid dynamics or CFD and computational structural dynamics or CSD modeling optimize the parameters for body armor design. CFD and CSD, coupled to physiology-based models of blast lung injury have also been used to predict the degree of lung injury and design adaptive chest armor that will adjust protection specific to battlefield conditions. OM Group uses similar models for transportation safety and racing protective gear to prevent blunt trauma injuries.

The OM Archangel Glide System 3 was designed to be coupled to tactical body armor, enabling the paratrooper a lightweight retractable system for rapid airborne covert deployment. The System 3 architecture was based on the Jii Wings Glide System 1 and the ESG Gryphon powered solid delta wing perfected for use by elite British military paratrooper units.

Archangel is also developing a Stoko exoskeleton bodysuit based on early nanomatronic studies conducted to dampen tremors in the muscles of the infirm. The company is also heavily funding advanced non-lethal and smart weapons research.