Innovative/Award-Winning Projects

- Spray urethane in the field buildings for the military.
- Structural foam PE munitions packaging designed as a post-use construction material for in the field. (1)
- Improved mold release, flow enhanced PC for thinwalled or very large parts.
- High purity PC process for packaging applications. (Later used for CD and DVD production.)
- First 100% recycle, reinforced PC products.
- Low warpage PBT technology.
- First PC/PBT/PET alloys. Xenoy[™] precursors.
- First volume production of PEI (Ultem[™]).
- First automotive grille opening panel. (2)
- First automotive headlight/turn-signal assembly.
- First automotive cowl vent grilles. (2)
- Reinforced nylon gear case housings for GE Locomotives.
- High speed impact test facility and methodology for bumper development.
- Large part vibration welding technology for bumpers.
- First Xenoy[™] Automotive bumper system. (2)

- GE Bright-Stik[™] fluorescent lights (extruded ballast).
- Large blow-molded flat panels (Zoneline[™] A/C units).
- Validation, demonstration and mass distribution of MoldFlow[™] modeling technology.
- First replaceable bulb halogen headlights.
- Permatuf[™] high temperature stabilized and filled PP technology.
- Permatuf[™] Dishwasher tubs lead to a new highly automated assembly plant.
- GE Light-N-Easy[™], first plastic steam iron. (Same PP technology.)
- Wagner automatic paint roller system.
- Ultem[™], Torlon[™] and graphite fiber reinforced nylon applications in GE Aircraft Engines. (3)
- Ultem[™] aircraft interior applications.
- Spray metal prototype mold technology.
- Cast metal prototype injection mold technology.
- Variegated cast skin technology for automotive.
- Process for two-color cast skin technology. (2)
- Inspired Innovations[™] process development. (4)
- Molded-in colored stitch technology for sewn leather appearance.
- First PC/ABS instrument panel retainers. (2)
- First sprayed liquid paint mask technology. (2)
- First extended flat crush-curve energy management foam system for doorpanels, kneebolsters, etc. Can

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engineer crush plateau for any application by adjusting only the density of the foam. (2)

- Directed fiber preform technology for structural parts.
- First high-volume structural RIM bumpers. (2)
- First blow-molded instrument panel upper.
- Flexible Bright[™] grilles and exterior trim technology.
 (2)
- Flexible Bright[™] wheel coating technology.
- Invisible passenger-side airbag door technology. (2)
- Integral and flip-top airbag door technology. Front, side, seat and headliner airbag applications. (2)
- First cast TPU skin materials and technology. (2)
- Low cost, spray TPU skin technology. (2)
- Automated side and lift-gate door modules. (2)
- Nano-composite thin-walled fascia.
- Nano-Composite exterior body panels.
- Structural foam nano-composites.
- Blowmolded large nano-composite parts.
- Vacuum pressure forming of nano-composite parts.
- Scratch-resistant nano-composite window for a motor vehicle.
- Nano-composite TPO and PP.
- Nano-composite SMC.
- Nano-SMC large truck front-end assemblies. (5)
- Nano-SMC in personal watercraft. (5)

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- Nano-SMC Corvette body panels.
 - 1. US Army Innovation Award.
 - 2. SPE Automotive Division Awards.
 - 3. SPE Unique and Useful Industrial Product Award.
 - 4. American Product Excellence Award.
 - 5. Trade journal awards (Popular Science, Composites Manufacturing, Plastics Engineering, Trailer Boats, etc.)