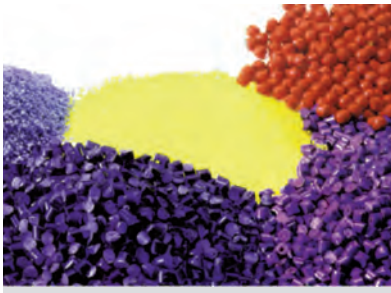




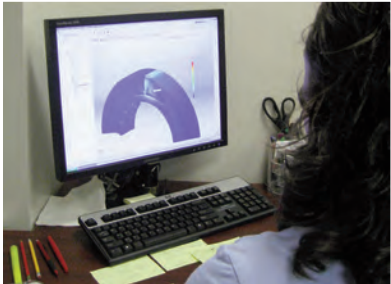
## COMPREHENSIVE ENGINEERING SERVICES

MATERIALS, DESIGN, PROTOTYPES AND QUALITY



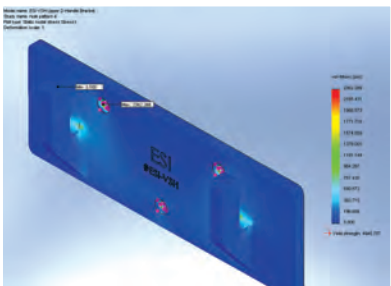
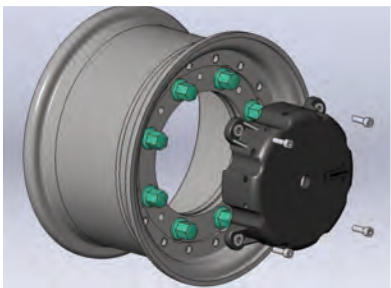
### ■ MATERIAL SELECTION

- › Extensive Experience using a broad variety of thermoplastic and thermoset materials
- › Material enhancements using reinforcements, fillers or additives
- › Wide range of materials to satisfy all application requirements
- › Material Engineering Support from major suppliers



### ■ CUSTOM PRODUCT DESIGN AND DEVELOPMENT

- › Stringent stage gate developing process activated by customer pull to minimize leadtime
- › Solid modeling — Advanced 3-D Surfacing
- › FEA — COSMOS Analysis
- › Full Simulation Testing / Performance Verification
- › Reverse engineering can be applied as required to support problem resolution
- › DOE studies & capability studies are performed on product critical characteristics
- › Continuous production improvement processes
- › Seamless Industrial Design to Mechanical Design
- › Injection Molded Design, Die-Cast Design, Thick Wall Design, & Overmold Design
- › Strong Commitment to value added processes that support customer requirements
- › CAD / CAM
- › Six Sigma methods incorporated throughout engineering product development

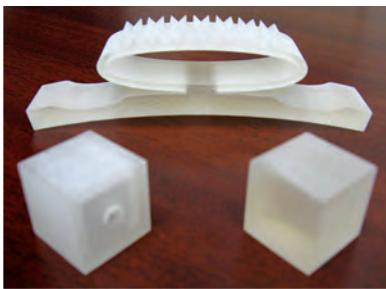
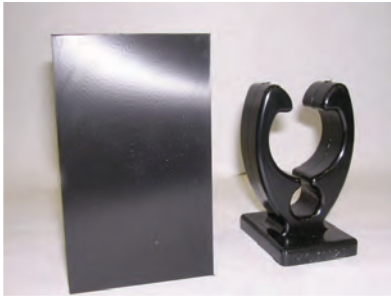


# COMPREHENSIVE ENGINEERING SERVICES

MATERIALS, DESIGN, PROTOTYPES AND QUALITY



## EXTENSIVE QUALITY RESOURCES & MODERN EQUIPMENT...



### PROTOTYPING

- › Large library of available compounds
- › Short lead times
- › Rapid Prototyping – Multi Jet Modeling (MJM)
  - Full scale parts in a matter of hours
  - Reduced time to market
  - Provides customers a hands on feel for form, fit and function
  - Very accurate (+/- .002") tolerances
- › From high quality RTV molds to Aluminum and Steel prototype tools
- › Low cost tooling
- › Multiple CNC Lathes & CNC machining centers

### MANUFACTURING AND QUALITY

- › ISO 9001 certified
- › Extensive quality resources, modern equipment, CMM, Instron Tensile, & Optical Comparator, X-ray
- › Process capability studies
- › Continuous product improvement processes
- › Wide range of finishing equipment
- › Low and high pressure injection molding
- › Short to large production runs
- › In-house assembly
- › Product validation testing
- › Statistical process control
- › Calibrated tools & gauges
- › Team approach to all projects



An ISO 9001 company