

ENGINEERING

DESIGN

MACHINE DESIGN

Mentis designs and fabricates complex machines for various manufacturing and evaluation purposes. Mentis engineers solutions :

- CNC Fiber Placement Machines
- Braiding, Filament Winding, Custom Fiber Placement
- High Tension Filament Winder
- Pressure Vessels
- Fiber Creel Systems
- Heated Planted Presses



CAD

Mentis utilizes Solidworks Professional for solid modeling needs. Our engineering staff is proficient in solid modeling and the design of complex components and systems ranging from one-off aerospace components to complete production line equipment.

PROCESS CONTROL

Mentis designs and/or customizes many of the process and motion control systems to support the machines that we developed. This includes:

- Multi-zone temperature and pressure
- Individual and simultaneous
- Multi-axis Motion Control
- Novel approaches for machine programming

TOOL DESIGN

Mentis designs elaborate, closed-volume compression molds requiring very tight tolerances. Typical mold materials include P20 Mold Steel and Invar 36. Mentis also utilizes various foam materials for low cost rapid prototyping molds.

