



OPTIMIZATION OF COMPOSITE PLY KITS

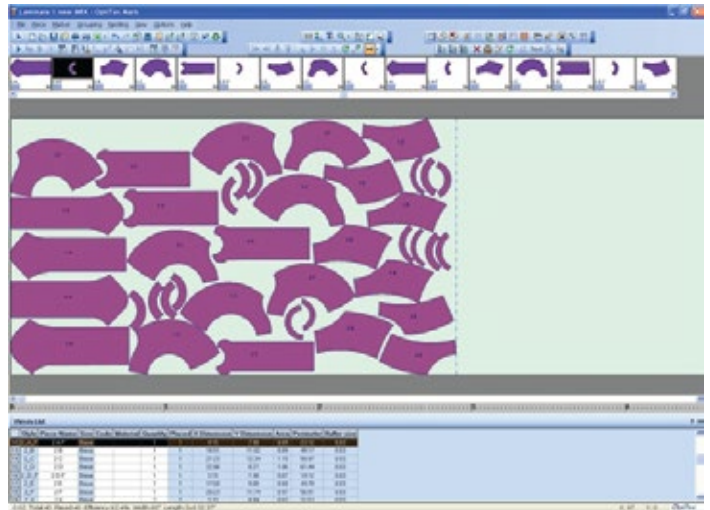
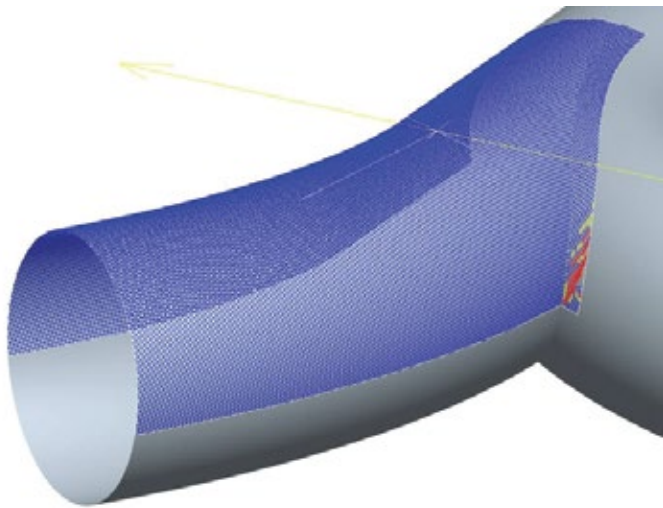
THE CHALLENGE

L&T Technology Services teamed with a variety of customers on the composite parts production to develop more efficient flat patterns and plies (this would decrease material usage & layup time and increase the repeatability of the layup & part yield).

OUR SOLUTION

Using composites processing, FiberSIM, Pro/Engineer and nesting software, LTTS performed the following tasks for the Subsystem:

- Reviewed Customer's current layup technique
- Used Customer's CAD models of the part and/or molds to develop new layup methodologies (seam placement, gaps, overlaps, etc.)
- Modeled new plies in Pro/Engineer
- Generated flat pattern's of composite plies (using Vistagy's FiberSIM)
- Nested the new flat patterns onto cut tables maximizing material usage
- Incorporated new flat patterns into production



BENEFITS DELIVERED

- One customer had a 40% savings in labor and 45% savings in material for a Return of Investment of 45 parts.
- Another customer had a 29% savings in labor and 13% savings in material for a Return of Investment of 72 parts.
- L&T Technology Services also increased part reliability and decreased training time for new operators.

