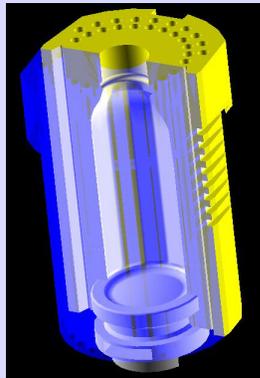


Glass Bottle, Mold, and Furnace Design

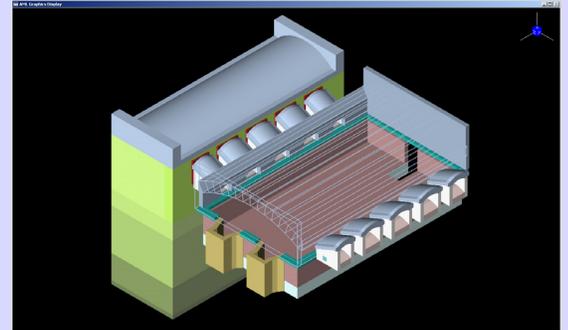


In collaboration with a major manufacturer of custom-designed glass bottles, TechnoSoft, Inc. has developed a knowledge-based engineering software framework to minimizing

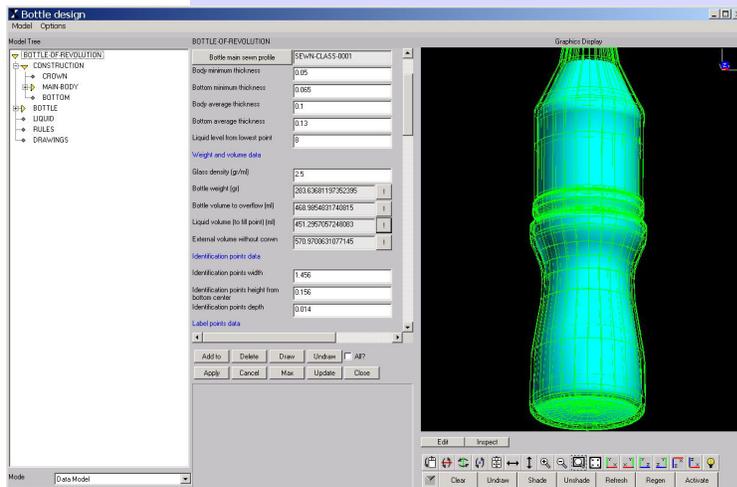
engineering time, automate manufacturing processes, and improve product quality and yield. Using the application has consistently resulted in over 75% reduction in cycle time for design and analysis of tailor-made glass bottles.

Based on the platform independent, web-enabled and distributed open architecture of the Adaptive Modeling Language (AML), this framework provides the following capabilities:

- Fully automated NC tool path generation for all mold parts
- Automated generation of detailed drawings
- Knowledge-based design of furnace systems to meet industry standards and regulations



An additional benefit of using the system has been a dramatic improvement in manufacturing yield. This was achieved mainly by enabling designers and manufacturing engineers to better visualize and simulate the manufacturing process using an accurate 3D model.



- Powerful and intuitive 3D modeling environment for creative design of the exterior surfaces
- Parametric and rule-based variation of the 3D model to accurately size the bottle, parison, and mold for different capacities and different manufacturing facilities
- Automated mesh generation and integrated structural analysis for drop, stack, and shipping simulations
- Seamlessly integrated mold design and mold-filling simulation systems

