

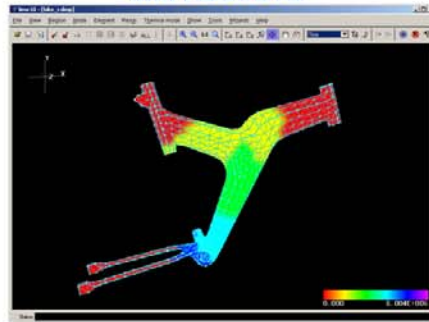


LIMS USER INTERFACE (LIMSUI)

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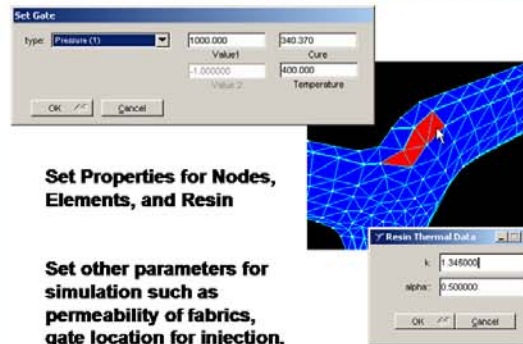
University of Delaware • Center for Composite Materials • Department of Mechanical Engineering

DISPLAY 3D Meshes and RESULTS



- Zoom, Rotate, and Move the Mesh on the Screen.
- Can Identify Different Element Types Separately.
- Contours of Calculated Variables Such as Fluid Pressures and Resin Flow Front Patterns can be plotted

Mouse Click to Set and Change Parameters Before Simulating the Injection Process



Set Properties for Nodes, Elements, and Resin

Set other parameters for simulation such as permeability of fabrics, gate location for injection, race tracking channels

Execute the Simulation without Exiting the LimsUI



Specify Different Result Output Formats
Run External Simulator

Import Different File Formats

Convert...

ABAQUS,
or I-DEAS

to LimsUI's DMP Files



Use Wizards to Create Simulation Script Files to Introduce Optimization and Control in the Process



Access External Applications from LimsUI



DOS Application

Windows Application

Future Work

- Permeability Database Connection for Element Settings and Results
- Introduce More Types of Elements to Simulate Racetracking
- Include Wizards for Distribution Media Design

Acknowledgements

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