

Company

Glasland

Situation/Challenge

- A large contract forced Glasland to implement an aggressive production plan. However, the lack of skilled chop and gel coat operators and the high production rate requirements prompted the company to investigate robotic automation

Solution

- **Automation**
 - Two FANUC paint finishing robots with PaintTool application software are used in conjunction with chop and gel coat application equipment including spray guns, chop motors and material supply pumping systems provided by Glasland.
- **Process**
 - Production requires two gel coat applications and one chop spray application.
 - A technician prepares a mold for the initial gel coat application and positions it in front of the robot. Once safety precautions are implemented the robot cycle is complete.
 - After the first coat is cured, the chop robot repeats the process.
 - The product is then dried and moved to a grinding booth.
 - Finally the third application is applied and the part is removed from the mold.

Result

- Material savings – Robotic application provides consistent materials delivery control which reduces material variation and increases part production consistency. Glasland has experienced a 30-35 percent savings on gel coat materials.
- Labor savings – Automation reduces physical complications by alleviating repetitive motion injuries and prolonged exposure to resin fumes and fiber chop.
- Product quality – Automation ensures materials are applied consistently, helping manufacturers improve quality and reduce warranty costs.