

## Case Study- hard coat spray with Graco HFR machine



**Problem:** A large composite tub manufacturer was experiencing breakage on an expanded polystyrene (EPS) tub base support. The design was already tooled and approved so a quick fix had to be found.

**Solution:** Working with the EPS supplier and a local urethane molding house, NCFI Polyurethanes developed a black “hard coat” spray elastomer that significantly increased the strength properties without adding excessive weight or increasing part thickness beyond specifications. A Graco HFR plural component metering unit with a Fusion air purge gun was installed to efficiently spray the material. The molding house designed a robotically controlled process that allowed them to coat a base approximately every ninety seconds with remarkable repeatability and accuracy.

**Results:** This creative teamwork effort by NCFI Polyurethanes and the molder allowed the tub production facility to continue operation meet critical customer deadlines.