**Application Report**

**Foamed Materials for Automotive Interior Trim Bonding**

**Foamed hot melt material dispensing to improve automotive interior trim bonding costs and performance**

**Situation**
Hot melt materials, including ethylene vinyl acetate (EVA), polyamide, polyurethane (PUR) and pressure sensitive products, are commonly used for automotive assembly bonding of floor coverings, door panels, headliners, consoles and rear decks. Hot melt application can be either manual or automatic in the form of a bead or swirl spray (controlled fiberization).

**Problem**
*High material cost per assembly* — excessive hot melt material coverage is used to achieve the minimum bond strength required to meet performance specifications. The hot melt materials used cost between $1.00 and $4.50 per pound based on material type, so excess material on each part becomes costly.

*Poor bond strength* — poor bonds often result due to the limited open times of the solid hot melt or insufficient compression during assembly.

**The Nordson® Solution**
Nordson SureFoam™ systems mix hot melt materials with inert gas. As this homogenous material is dispensed, the gas expands to form a closed-cell foam. SureFoam systems dramatically reduce hot melt material usage while improving performance of most materials. The adhesive/gas mixture can be applied in bead or swirl patterns using any Nordson handgun.

**Advantages**
- Reduce hot melt material consumption up to 50%
- Increase open time/work time for greater production flexibility
- Decrease set time to improve production rates
- Increase volume for better gap filling and improved bond strength
- Increase penetration of porous materials for stronger bonds
- Integrate easily into existing systems with portable cart or machine mount configurations
- Reduce sags and runs due to improved thixotropic properties of foamed adhesive

To order, please contact your Nordson representative or your Nordson regional office.

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