



# Advanced Manufacturing

---

In-plant logistics and safety  
for automotive components  
enhanced with RFID

## At the moment of production, in the mold itself, an RFID tag is applied to each individual component.

---

Efficiency, quality control and safety are being improved with Industry 4.0 in the automotive supply chain.

### The Challenge

The foam used in vehicle interiors and seats is classified as a hazardous product at the manufacturing stage. It needs to pass multiple safety checks at the source manufacturing plant before safely progressing through the supply chain. How are they using RFID to automate the in-plant logistics and support the safety controls?

### The Solution

At the moment of production, in the mold itself, an RFID tag is applied to each individual component. As the component is transported through the production process to logistics it passes through multiple warehouses. Each warehouse has entry and exit readers connected to an internal tracking system that automatically monitors the movement of each unit stage by stage.

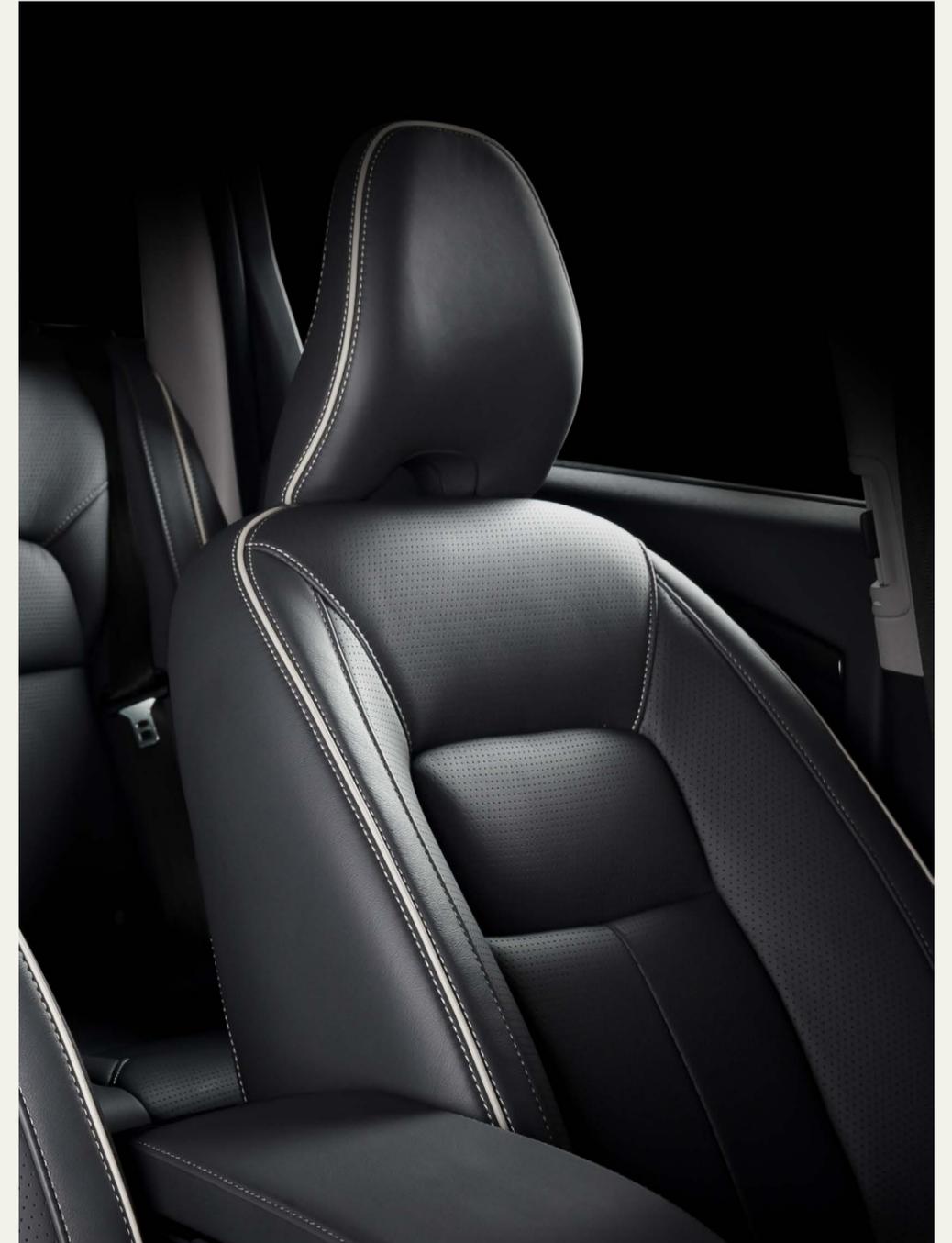
In the manufacturing plant, foam can be a fire risk. One safety control involves a 24 hour rest prior to being sent to outbound logistics. The gates automatically monitor the production dates and time, and identify every unit to ensure compliance before approving its entry into the outbound logistics zone.

### The Result

1. 100% components pre-tagged at source with essential information using RFID
2. Enhanced safety controls removing human error

### The Benefits

- Cost savings
- Improved Data Quality
- Increased Customer satisfaction
- Compliance



**RFID label: Avery Dennison Smartrac**  
**Partner: Dipole**