

Avery Dennison

Solutions for Automotive Seating

Bonding, labelling, fastening
and tracking solutions for the
automotive seat manufacturer

Helping automotive seat suppliers deliver both safety and comfort

Modern automotive seats are expected to fulfill several critical roles. Most critical is that of protection, which means not just robust design but also robust manufacturing processes and component tracking. Comfort and Safety is the other one, and here the seat suppliers are challenged to deliver more under increasing cost constraints.

Avery Dennison can offer solutions to seat manufacturers to help them deliver on both aspects. Bonding solutions to attach heat seating and occupant sensor mats to the seat foam. Labelling that will last the lifetime of the vehicle. Cable management and wire harness tapes that protect the components and prevent rattling. Intelligent RFID solutions to manage inventory and ensure reliable component tracking.



Automotive Applications

Performance Tapes

Fast, easy and sustainable bonding solutions

With a wide range of specially formulated pressure-sensitive adhesives, Avery Dennison Performance Tapes can offer the optimal solution for attaching seat heating and occupant sensing components to automotive seat foams. The increasing adoption of seat heating, driven also by the need to provide occupants of electric vehicles with thermal comfort without heavily impacting the driving range, will be a productivity challenge for many automotive seat assemblers. Pressure-sensitive tapes provide the robustness required for these demanding applications while offering advantages in productivity over alternatives such as stapling or wet adhesives.

Solutions are available that will offer a secure attachment of the heating and sensing layers, whether based on non-woven or needled polyester felts or printed polymer films, to all types of polyethylene, polyurethane and rubberised foams, even in the presence of mold release agents. Pressure sensitive tapes offer fast assembly and high productivity; there is no lost time for curing and fast application is enabled by incorporating finger-lifts for easy liner removal. Once applied, the bond is durable, resisting environmental influences such as temperature extremes, sweat and moisture as well as cleaning detergents. The availability of low emission and odor adhesives and the moisture vapour permeability of some types adds to the occupant's comfort.

Other applications for PSA tapes would include the bonding of seat cover materials to other trim parts like armrests, centre consoles and door medallions.



Durable Labels

Sustainable labelling solutions

As a global leader in automotive and transportation labelling, Avery Dennison Labels & Packaging Materials offers a full suite of labelling solutions for every automotive application—from compliant under-the-hood label materials to heat-seal seatbelt labels.

Safety and warning labels on automotive textiles provide critical information to end consumers, so they must remain permanently legible throughout a vehicle's lifetime. This can be a challenge especially on rough textured surfaces such as the seat belt webbing. A recent innovation is our heat-activated label that enables reliable safety and warning labelling on textiles without the need for special equipment. The label possesses high chemical and UV resistance, flame retardancy and meets the standard automotive performance requirements. By replacing the need for sewing, it simplifies the attachment process. Initially repositionable, this printable film will permanently attach itself to the textile when fixed with a standard heat press.

Included in the portfolio are labelling solutions for seat structures and components that includes innovative multilayer constructions that enable labels to be removed from components and reattached to the assembly.



Intelligent RFID Tags Preparing for Industry 4.0

For today's fast-paced auto industry, durable RFID labels can meet the demands and rigors of manufacturing and long-term use. The ability to use RFID to track and trace critical components dramatically increases supply chain integrity, improves customer safety and reduces liabilities, which is why industry observers are forecasting accelerated growth for RFID in the automotive industry over the next few years. Tracking industrial components has been a challenge, but new Avery Dennison RFID inlay designs have overcome these obstacles. RFID transponders can be built inside a car seat offering an unique ID for the seat, cushion or seat cover.

A partner in the automotive supplier industry recently engaged in a strategic digital transformation of its manufacturing operations to take advantage of digital labelling and tracking.

The easily deployable RAIN RFID solution was employed to tag items entering the plants as well as attaching tag chips to each item as they were manufactured. Items tagged included bags, boxes, and finished products.

After implementation in 12 plants, their findings included:

- Improved operations throughout multiple plants
- Increased efficiency in parts stocking
- Reduced manual tasks such as shipping, receiving, and transferring
- Increased customer satisfaction thanks to improved order fulfillment and greater product traceability
- Reduced tracking costs through automated manufacturing line

Together with our partners, our technology can help you implement turnkey solutions for your operations, enabling identification, authentication and engagement with individual products, components and other physical items in a seamless way. No matter the tagging requirements - Avery Dennison can help you build the right solution with our progressive family of intelligent labels and RFID technologies.

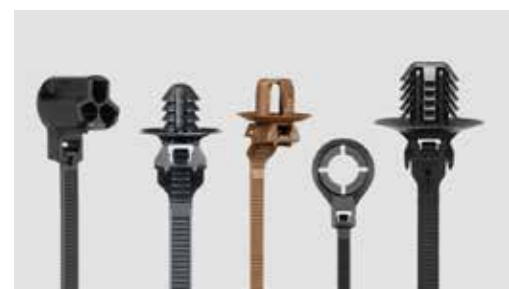


Fastener & Wire Harnessing Solutions Attach Yourself to a Leader

Avery Dennison Fastener Solution provides premier fastening, guiding and locating solutions for Automotive OEMs and automotive Tier 1 manufacturers in major markets around the globe.

The Avery Dennison ST9500 System enables high volume tagging and ticketing for a variety of applications from identification to manufacturing processes including the attachment of acoustical felts and seat heating mats. The flexible plastic staples provides the same fastening strength and low profile as metal staples, yet allow easy, damage-free removal for disassembly purposes. This system is intended to maximise productivity and reduce the risk of creating holes and snags when attaching to fabrics.

We also offer a full line of automotive engineered fasteners to keep, wires, cables and components quiet and secure. These products feature high quality polymers and unique ergonomic designs to help improve installation efficiencies, even in hard-to-reach places.



For more information on our bonding tapes and adhesive solutions, call us:

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06/2021



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