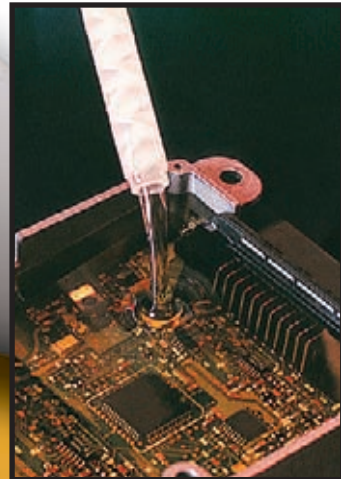
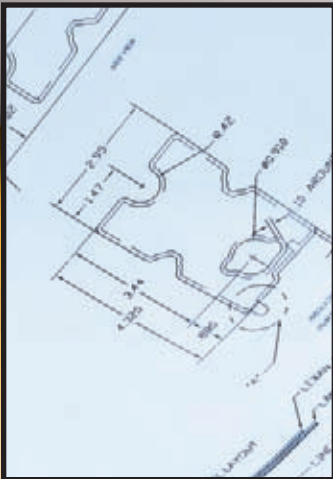


Bonding, Joining & Sealing

Fabrico is uniquely positioned to meet any conceivable product assembly challenge with a team of design, materials, and process experts.



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Bonding, Joining, & Sealing

Adhesive Applications



Low Surface Energy Plastics

The use of polypropylene (PP), polyethylene (PE), and other thermoplastic olefins is growing because of their low cost and excellent structural properties — durability, flexibility, resistance to heat, moisture, and chemicals. Unfortunately, some of the same properties that make these plastics attractive to designers also make them difficult to bond with adhesives, a preferred method of attachment.

The problem is that Low Surface Energy (LSE) plastics are essentially “non-stick” plastics; like Teflon, they don’t adhere well to other materials. Surface energy influences adhesion and controls the ability of adhesives to adequately wet plastic surfaces and create strong bonds. The better a liquid adhesive wets a material surface the more area it can cover for a stronger chemical bond.

New Bonding Techniques for LSE Plastics

New acrylic liquid adhesive and viscoelastic adhesive tape technologies produce excellent structural bonding with many LSE plastics without the use of priming or other pretreatment steps.

These include:

- Two-part, solvent-free, room temperature curing acrylic adhesive cuts costs and saves time;
- New acrylic pressure-sensitive adhesive transfer tape or double-coated tape handle high-temperatures, are chemically resistant, and have high peel;
- Cyanoacrylates are high-strength, one-part adhesives that cure at room temperature. Newer formulations produce good bond strength on LSE plastics.

Bonding, Joining & Sealing



Adhesives for Harsh Environments

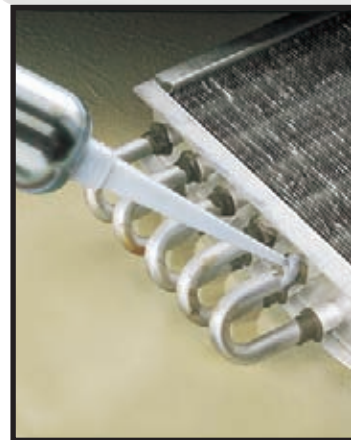
Whether in aerospace or ground-based applications, innovative, engineered liquid adhesives and thin bonding products (pressure-sensitive foam tapes and adhesive transfer tapes) that maintain properties in harsh environments have significant advantages for joining many substrates, including metals, plastics, rubbers, and glass. Compared to mechanical fastening and thermal joining, adhesives distribute rather than concentrate stress loads, accommodate flex and vibration, separate potentially reactive metals, and form seals that conform to joints and protect them from corrosion.

Liquid Adhesive Applications

New formulations of liquid adhesives deliver stronger, tougher, and more reliable bonds on metals, plastics, composites, polyolefins, and other substrates than traditional fasteners or welding while offering excellent resistance in severe operating environments.

Thin Bonding System Applications

Flexible, pressure-sensitive acrylic foam tapes and adhesive transfer tapes offer unique application opportunities with high holding strength, excellent resistance to harsh environments, and prevention of bi-metallic corrosion. These systems save time and money with fast and easy assembly.



High-Strength Adhesives

With advances in structural adhesive formulations, designers in every industry have many new options for bonding metals, composites, plastics, rubbers, glass, and more where structural integrity and high strength are requirements. Epoxy, acrylic, and urethane liquid adhesives and flexible thin bonding products (like the tape that holds the scuff strips to wing flaps) are replacing mechanical fasteners — rivets, screws, nuts, and bolts, and welding and fusion fastening in transportation, aerospace, electronics, appliance, industrial equipment, architectural, and other applications. Beyond their high-strength bonding capabilities, structural adhesives offer many performance, production, and styling benefits that can lower overall costs while increasing the value, durability, and desirability of products and applications. Designers are discovering a growing list of applications where adhesives compete effectively with conventional fasteners.



Fabrico offers a wide range of adhesive solutions including liquids, tapes, thin bonding systems, aerosol, hot melts, and more.

Large Surface Area Adhesives

Joining large surface area materials — high-pressure laminates (HPL), foam, fabric, rubber, plastic film, cardboard, paper, and other materials to substrates such as metal, wood, plastics, glass, ceramic, and concrete — usually involves completely covering one or both surfaces with a thin, uniform coating of adhesive. Large Surface Area Bonding (LSAB) is a relative term because the final bonded items can be of significantly different sizes, from large fabric-covered wall panels, tabletop veneers, ballroom-size carpets, and multilayer foam mattresses to smaller items such as gaskets, equipment name plates, and trim details for vehicles.

Contact Adhesives

Contact adhesives are applied to two surfaces to be mated and allowed to dry. When the surfaces are pressed together a strong bond forms immediately.

Aerosol Adhesives

Aerosols, generally based on latex and neoprene adhesives, are similar to contact adhesives but most are formulated for applications requiring less strength and the ability to be repositioned.

Sprayable Hot Melt Adhesives

Hot melt adhesives are one-part, 100% thermoplastic resins that flow when heated so they can be sprayed for LSAB applications. The sprayed material cools, hardens, and reaches ultimate bond strength in seconds.

Sealants

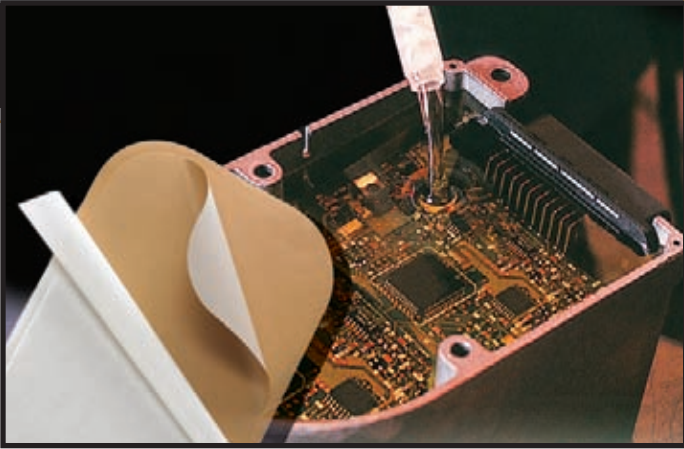
Sealants are high-solids (90%), viscous adhesives that change state to become solid, once applied, and are used to flexibly adhere substrates and prevent the intrusion of air, gas, ultraviolet light, dust, smoke, fire, and liquid through the bond or joint.

Thin Bonding Tape Systems

Bonding tapes have pressure-sensitive adhesive on two sides to adhere mating surfaces with strength that ranges from repositionable to permanent. Conformable foam tapes, removable/repositionable tapes, and adhesive transfer tapes provide toughness and durability.

Total Process Solution

Process experts make a full assessment of the application, and make recommendations for alternate manufacturing techniques based on performance, delivery, and cost. Then Fabrico employs its product development team, its extensive supplier and partner network, and fully-equipped prototyping and manufacturing facilities to provide the best possible assembly solution. Process, materials, and manufacturing — Fabrico's complete solution for better product performance and more cost-effective product assembly.



Fabrico offers its customers effective and flexible alternatives that enhance product design, performance, and economy.

Adhesive Film & Foam

World-class suppliers such as 3M provide thin film adhesives and high strength bonding foams that are converted from bulk rolls or sheets into finished products. Fabricated materials may be slit into roll form or die-cut into finished parts, and provided individually or in roll form.

Liquid Adhesives

Strategic partners such as 3M and Loctite® provide epoxies, cyanoacrylate adhesives, anaerobic adhesives, visible and UV light curing adhesives, one- and two-part silicones, and other single and plural component adhesive systems. Products are available in tubes, cartridges, cans, and bottles.

Product Engineering

The industrial assembly market has long relied on traditional mechanical fasteners to accomplish bonding, joining, and sealing of product parts. Fabrico offers its customers more effective and flexible alternatives that enhance product design, performance, and economy through engineered adhesive films and liquids. Fabrico's bonding, joining, and sealing alternatives feature converted film, foam, and laminated adhesive parts, as well as liquid adhesives in a variety of delivery systems. Our combined strengths in engineering, manufacturing, and supply chain logistics strongly and uniquely position us to provide our customers with the best possible product assembly strategy.

Dispensing & Curing

Includes time-pressure, bench top, robotic dispensing, metered mixing, and automated systems, plus valves, needles, and cartridges, as well as UV and visible light curing equipment. With more than 30 years of design and manufacturing expertise in materials-based product assembly technology, Fabrico offers its customers the correct, complete alternative for their product assembly requirement.





Fabrico Headquarters in Kennesaw, Georgia, USA

About Fabrico

Fabrico is a market leader in providing engineered die-cut and liquid adhesives for product assemblers. By focusing on customers' needs, Fabrico has developed a track record of solving unique challenges and providing sound customer alternatives.

Market Expertise

Fabrico serves product assemblers in Medical Device and Equipment, Transportation, Military/Aerospace, Alternate Energy, and Government markets, drawing on its extensive experience in adhesives-based assembly solutions.



Fabrico's combined strengths in engineering, manufacturing, and supply chain logistics provide our customers with the best possible assembly strategy.

Manufacturing Capabilities

Proud to be recognized as a single-stop integrated solutions provider, Fabrico offers its customers enhanced supply chain management and strict ISO 9001:2000 quality manufacturing processes. A complete testing lab ensures that incoming materials meet or exceed spec.

Customer Service

Fabrico provides a dedicated process consulting and technical sales team, customer integration and service, and logistical support to give customers the best assembly technology for their application.

Contact us for technical support.

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