



Advanced Fastening and Sealing Technologies

PRE-APPLIED EPOXY-LOCK®

Epoxy-Lock is a process in which a two part epoxy system is applied to male or female threaded fasteners of all sizes and configurations; creating powerful self-locking & self-sealing fasteners. Epoxy-Lock processing is compatible with a very wide range of material types and finishes including wood, ceramic, many plastics and more.



PRE-APPLIED PROCESS INFORMATION

How It Works

Fastener threads are coated with two separated strips of epoxy resin and hardener beneath a protective skin that allows the fastener to stay dry to the touch. The materials remain inert until assembled to a mating part. At which time, the forces of engagement will crush the surface skin, mix the two epoxy components and initiate a chemical reaction; locking the parts together.

After assembly, the epoxy forms a bond between surfaces which can only be broken with a wrench. After 12 hours, it outperforms most nylon locking elements in first-off torque. After 24 hours, the epoxy has achieved up to 80% of its ultimate cure. Curing continues for up to 72 hours.



Exceptional Locking

Extensive testing indicates that Epoxy-Lock processed fasteners provide two to four times greater breakaway torque than conventional plastic fastener locking devices.



No Lead Threads

Because the epoxies used in Epoxy-Lock are soft and pliable, they will not cause or contribute to cross threading.



Resists Chemicals

Oil, gasoline, salt spray, acids, solvents, water, and air have virtually no effect on the epoxy used in Epoxy-Lock processing after a final cure has been achieved.



Long Shelf Life

Processed fasteners have an on part life of 2 years and will remain inert until a cure is activated by engagement with a mating thread.



Versatile

The Epoxy-Lock process is compatible with a very wide range of materials including plastics, ceramic, wood and most metal finishes.



Surpasses IFI Standards

Epoxy-Lock processed fasteners meet or exceeds all torque requirements of IFI 125, IFI 525, as well as automotive adhesive coated fastener performance specifications.

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EPOXY-LOCK®



PRE-APPLIED BENEFITS

Saves Time: Epoxy-Lock processed fasteners can be automatically fed through standard feeding devices – speeding up your workflow and improving productivity.

Saves Money: Epoxy-Lock processing is less expensive than applying bottled thread locking compounds at the point of assembly. Eliminates the need for costly lockwashers, cotter pins or castellated nuts.

Quality Control: Pre-Applied parts are coated to specification, insuring consistent performance unlike bottled products.

Saves Effort: Epoxy-Lock greatly reduces the need for retightening.

Won't work Loose: Under most operating conditions, Epoxy-Lock processed fasteners are unaffected by vibration or reversal of stress.

EPOXY-LOCK APPLICATIONS

Engine Applications, Automotive Locking Applications, Automotive Body/Frame Bolts, Suspension Areas, Brakes, Rear-End, Transmissions. Ring gear bolts, Head bolts, Intake manifold bolts, Transmission bolts.

APPROVED SPECIFICATIONS

Meets or exceeds the performance requirements of the following specifications and/or standards:

Chrysler: PF-6616, MS-CC-76

Ford: ESS-M11P24-A1, ESS-M11P24-A2

General Motors: GM6175M, GM6194M

PROCESSING NOTES

- Under typical conditions, the epoxy used in Epoxy-Lock processing has a fixture time of 4 hours with a full cure in 72 hours.
- Typical coating length is 1.5 times thread diameter.
- It is recommended that Epoxy-Lock processed fasteners are not reused.

PRE-APPLIED SERVICE

Step 1 - Process Selection: Our sales and R&D staff will help you find the right process to meet your performance specifications.

Step 2 - Shipping: Once a selection has been made, have your fasteners shipped to one of our worldwide processing centers.

Step 3 - Processing: Utilizing custom, high-speed equipment, we apply the necessary materials to your exact specification.

Step 4 - Delivery: Once processing is complete, parts are shipped back ready for distribution or assembly.