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.

**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.

**Versatile**

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

**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.

**Surpasses IFI Standards**

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


APPROVED SPECIFICATIONS

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

Chrysler: PF-6616, MS-CC-76
Ford: ESS-M1P24-A1, ESS-M1P24-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.