

TUR-M-EPOXY

Superior Bond Strength

The most critical factors in the successful application of any coating or repair material is surface preparation and compatibility with the surface to which the coating material is to be applied. Through years of experience working with HVOF thermal spray and diffusion alloy coating systems, TMT relies on its expertise and tight process controls to ensure that all of its coating systems are of the highest quality. The same factors apply to epoxy repair materials and processes for aircraft components. Failure to maintain the highest standards throughout the repair process can result in debonding of the repair material.

WHY DOES TMT TUR-M-EPOXY "STICK"?

TMT TUR-M-EPOXY #43 is a specially designed and patented repair material used for dimensional restoration of aircraft fuel and oil housings. Bench testing and thousands of hours of in-service operation have demonstrated the superior characteristics of the TUR-M-EPOXY materials and the unquestionable integrity of the repairs. TUR-M-EPOXY is more than a repair material, it is a complete, controlled proprietary process.

Each repair begins with an inspection of the repair areas to determine repairability within the approved specification limits. From there the repair surfaces are pre-machined to a specified depth. Before application of the TUR-M-EPOXY material, the pre-machined surfaces are thoroughly prepared through solution cleaning, surface roughening, pre-heating and recleaning. This is followed by a final inert gas pressure flush and the application of a proprietary bond enhancer in a near clean room environment to ensure a contamination-free surface for optimum bonding. TMT's Bond Enhancement Technology (BET) is a key factor in achieving the highest bond strength possible between the repair material and the metallic substrate by neutralizing the oxide film that quickly forms on machined metallic surfaces.

Other competing repair materials were not originally designed for the specific purpose of internal dimensional restoration of fuel and oil housings and are, at best, a compromise solution.

Along with its proven bond strength and wearability, TUR-M-EPOXY provides additional benefits even beyond those of the original housing material. Self-lubricating properties and an excellent resistance to cavitation erosion are two product improvement characteristics that contribute to extending the service life of housings. In short, TMT combines the best materials and over 20 years of experience with all types of metal enhancement coating systems to produce the most reliable repairs available today.



TMT Research Development
105 Timbers Blvd. Smith River, CA 95567
FAA Repair Station TDoR554N
Phone: (707) 487-0307 Fax: (707) 487-2025
www.tmtresearch.com

Eric Bienvenu
(321) 676-1000 Ext. 11
(321) 652-4070 Cell
eric@smitmt.com