HoldTight 102

Case History for Tactical Vehicle Manufacturer

Key Points

- HoldTight 102 used on US Army Tactical Vehicles
- High end, high-stakes coatings demand rigorous adherence to standards in application procedures
- HoldTight 102 used to remove surface salts and contaminants in conjunction with vapor blasting

BACKGROUND

A premier technology integrator headquartered in Reston, VA that provides engineered services for maintenance of the US Army's tactical vehicle fleet was tasked with writing a specification for corrosion protection of the steel surfaces of each vehicle. They were challenged with making sure that the surfaces were clean of all contaminants including salts so that painting and maintaining each vehicles corrosion control paint barrier was done in the most efficient, economical and environmentally friendly manner. In addition, the surface preparation process had to be compatible with specified CARC systems paints (Chemical Agent Resistant Coatings) to confirm that there were not any adhesion issues when vapor blasting and HoldTight 102 was used.

Not only did they research and write the specification, but they also provide maintenance for the tactical vehicle fleet's corrosion control paint systems.

CORROSION ISSUE

It is imperative that all painted steel surfaces in these vehicles be adequately painted to prevent corrosion and extend the life of the vehicle especially when these vehicles are called upon to conduct vital US Army and government business. A clean surface free of contaminants and salts prior to coating with a CARC system will better ensure that the US Army will maximize the life of each vehicle.

Specifically, the removal of salts will lessen the chance of premature coating failure and resultant corrosion problems and was a motivating driver in using vapor blasting of steel surfaces and employing an additive to help remove salts and contaminants and provide flash rust prevention for 24-72 hours.

Utilizing vapor blasting reduces the amount of water and blast media required for surface preparation in addition to being environmentally friendly by not subjecting resulting waste steams to any hazardous and non-biodegradable chemicals.

CORROSION SOLUTION

The technology integrator engineered a specification that focused on vapor blasting and has specified HoldTight 102 as the additive in the potable water used during the blasting process to help the water clean the steel surfaces of all salts and contaminants and prevent flash rusting for 24-72 hours. This allows the tactical vehicle maintenance division to achieve the cleanest surface process with out creating any environmental problems by introducing chemicals that were not environmentally friendly. In addition, it allowed the maintenance crew to best utilize its labor by cleaning many steel surfaces prior to applying the first coat without any flash rusting problems.

HoldTight 102 when properly diluted and used in the vapor blasting process will achieve the cleanliness desired, prevent short term flash rusting and not impact the environmental footprint of the group using this process. HoldTight 102 is a biodegradable, non-hazardous, environmentally friendly chemical additive that achieved all the goals expected.

RESULTS

Initial and maintenance painting of the tactical vehicle fleet is using “state of the art” technology to achieve a clean steel surfaces by utilizing vapor blasting and properly diluted HoldTight 102. By applying CARC paint systems to these clean surfaces, the US Army has a better assurance that they can achieve an outstanding corrosion barrier on their tactical vehicles and extend the life of these vehicles while providing the protection and surveillance they were designed to provide.