

BLASTOX®

DOES IT EFFECT COATINGS?

S. G. Pinney & Associates, Inc conducted a *Performance Evaluation of Blastox In-Situ on Various Structures* in June of 1994. The following is a summary of their findings. This study was based on visual and instrument aided surveys of several steel structures that were abrasive blasted and coated during 1991 and 1992. These projects used Blastox® blended abrasives for the surface preparation, and these field tests investigated the coatings performance of those surfaces over a two to three year period. This study was initiated after extensive laboratory testing of coatings performance over Blastox® prepared surfaces.

Several sites and types of construction were chosen for this survey in order to obtain a broad cross section of in-service performance. The projects included railroad bridges over highways and streams, railroad bridges connecting to coal handling facilities, pulp and paper mills, potable water tanks and exhaust piping and process piping. The authors found no indications of any loss in coatings performance related to the use of Blastox® blended abrasives.

Several different types of coating systems were involved, including Vinyl, Epoxy/Polyurethane, Inorganic Zinc/Epoxy/Polyurethane, Zinc Rich Epoxy/Epoxy, Epoxy/Epoxy, Zinc Rich Epoxy/Acrylic and Polyurethane primer /Silicone Alkyd topcoat. Several different manufacturers' products were surveyed including Carboline, Elite, International, ValSpar, Tnemec, and Sherwin Williams.

Tnemec Company, Inc. is conducting on-going testing of their coatings systems' performance over Blastox® surfaces. They issued Tnemec Technical Bulletin No. 96-01 at the two year point of this testing. It states "Tnemec primers Series 20,37H, 66, 69, 140 and 90-97 have been laboratory tested for two years with no applicable difference seen when using Black Beauty abrasive with and without Blastox®." "Series 20 and Series 140 applied to panels prepared to SSPC-SP10 using Blastox® containing abrasive have been in water immersion for two years. They are in excellent shape."

Tnemec's testing has also shown that the use of Blastox® containing blast media had no effect on the performance of various exterior coating systems. The systems tested include their silicone alkyd system, organic zinc/epoxy/urethane system and two epoxy/urethane systems. The technical bulletin concluded, "Tnemec feels that topcoats listed on the product data sheets will perform as expected when the substrate is prepared using Blastox® containing abrasive."

Contact TDJ for a copy of the above mentioned reports.

"The results of this survey of varying structure in varying localities painted by varying contractors with varying coating systems offers proof of the performance of coatings applied over steel abrasive blasted media to which Blastox® was added prior to abrasive blasting."

"The only areas found that were not in excellent condition were directly traceable to either poor surface preparation or poor application."