

Product Case History



Polycon Manufacturers - Automotive Bumper Racks

PRODUCT(S) USED:

Exterior Coating 1: Carboguard 890

AREA COATED:

Polycon faces a typical painting problem that many OEM industries need to solve.

Polycon manufactures plastic bumpers for automobiles. These bumpers are then shipped to their customers.

The overall appearance of the product and the total shipping package must reflect quality. Polycon ships the bumpers using their own custom fabrication and painted metal shipping racks. During positioning, loading, unloading, returning and stocking the products, the racks receive a great deal of abuse.

LOCATION:

GUELPH, ON

DATE OF APPLICATION:

JUNE 2000 - DECEMBER 2002

MARKET:

0EM

SUBSTRATE:

STEEL

SURFACE PREP:

CLEAN & DRY

EXPOSURE:

CHEMICAL, ABRASION

SURFACE PREP:

LIGHT MANUAL SANDING FOLLOWED WITH A SOLVENT WIPE



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Their in-house paint chipped and multi-coats had to be applied introducing excessive handling of the racks in and out of the spray booths. This process took several days. The low solids conventional paint introduced unacceptable amounts of solvent fumes into the fab shop area, creating unpleasant working conditions. Along with all the undesirables, the paint did not perform to meet the needs of the racks.

COATING SELECTION EXPLANATION:

The solution is Carboguard 890 cycloaliphatic epoxy. This 77% solids epoxy was applied over a light manual sanding and followed with a solvent wipe. Carboguard 890 was applied in a mist coat or tack coat technique followed by a full coat.

In one shift, the work was completed with virtually no odour. The whole process began at 12pm, ended at 3am with the racks ready for service by 4pm the next afternoon.

The material cost of the 890 application was less than the three-coat production enamel.

Appropriate tests were run on the 890. The "acid test" was conducted by fab shop personnel. A "monkey wrench" was lifted up sixteen feet and then released (dropped) onto a rack coated with 890. The result - no chipping.

Polycon continues to paint their racks with Carboline 890 using the various code colours devoted to the specific bumper and automobile, providing an aesthetically pleasing shipping package that resists abuse very well.