



CASE HISTORY ~ CH-005

BIO-DUR 561 PROTECTS THE “WIND AND WATER” AREA OF A POWER STATION PIER.

THE CHALLENGE: An oil-fired power station located on the eastern shore of the beautiful Sea of Cortez in Mexico receives fuel oil from tankers discharging in deep water at the end of a 1.2 Km long steel and concrete pier. The pier is a concrete cap sitting on top of 30” to 36” diameter steel pilings.

The coating on these pilings was in such poor condition that it was compromising the effectiveness of the impressed current cathodic protection system. An effective coating system was required which had to be installed underwater or in wet Splash Zone conditions.

THE SOLUTION: BIO-DUR 561 was selected as the replacement coating primarily because of its ease of application underwater. On large projects the old-fashioned “Splash Zone” style coatings are far too difficult and slow to apply. Splash-Zone application by the tedious “patty-cake” press-into-place method is useful only for limited repairs. BIO-DUR 561 is designed for a “smoothing-on” application similar to spreading peanut butter on toast. The Mexican contractor fashioned application tools from discarded conveyor belting and reported application rates many times faster than with Splash Zone Putty thus maximizing diver productivity in the water.

Although BIO-DUR 561 is a little more expensive than Splash Zone Putty per gallon it worked out to be considerably less expensive per square foot because only about 40 mils, (1,000 microns), are applied versus over 1/8” or 3,175 microns. Added to this substantially lower material cost was a greatly reduced application cost which resulted in appreciable savings to the contractor. The divers and other trades had no previous experience working with BIO-DUR 561 however its “built-in” ease of use characteristics allowed a very steep learning curve to obtaining excellent results

APPLICATION: Surface preparation was by hand-held pistols delivering 4,000psi seawater with beach sand entrained through a simple venture system. This very simple and inexpensive system worked perfectly in the shallow working depths of this project. The degree of blasting obtained was general equivalent to SSPC-SP10,

“Near White Metal” with randomly spaced islands of intact old coating. The BIO-DUR 561 applied as easily over the old coating residues as it did over bare steel. Since BIO-DUR 561 contains no solvents it cannot soften or weaken residues of old coatings – even antifouling paints. The freshly applied BIO-DUR 561 was not disturbed by even 2’ – 3’ wave action washing against the coating.



RESULT: The project was completed on time and under budget. Three years after completion it was inspected by a team of engineers from the Mexican Electricity Commission in Mexico City who reported ZERO percent deficiencies in the project – quite a testimony to both the contractor who performed the work and the effectiveness of BIO-DUR 561!

For more information regarding this project, contact:

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PRODUCT: BIO-DUR 561

YEAR: 1998

LOCATION: PUERTO LIBERTAD SONORA, MEXICO

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