



# CASE HISTORY ~ CH-036

## BIO-DUR 560 PROTECTS AND SMOOTHS RIVERBOAT CASINO HULL

**THE CHALLENGE:** Mississippi Belle II, a Mississippi Riverboat Casino, was in need of an underwater recoat after years of service. An extremely short drydocking “window” allowed only 36 hours to accomplish water jet cleaning and a full hull recoat before resumption of normal activities.

**THE SOLUTION:** The 220’ vessel was dry-docked midnight on a Sunday and water jetting commenced at 8am on Monday. Although the hull was heavily fouled with algae and zebra mussels it was readily cleaned with 4,000 psi/rotating jet nozzles. After minor spot repairs to anodes and bow thrusters the hull was coated with BIO-DUR 560 applied at a nominal 15 mils thickness.

**APPLICATION:** Spraying was accomplished using the following setup: fluid pressure: 2,300psi; fluid temperature: 140°F; tip size: 533; fluid hose: 150’ (heated). The spray fan under these conditions was excellent resulting in an extremely attractive finish. The BIO-DUR 560 was supplied in a black Epoxy Base with white Curing Agent to yield a very dark gray upon proper mixing.

BIO-DUR 560 was ideal for this application for several reasons:

- Excellent sprayability using readily available 1/1 heated, plural airless spray.
- Quick curing on the hull, tack-free in approximately two (2) hours.
- Complete water tolerance before curing allowed the hull to be refloated immediately after the final BIO-DUR applications.
- Completely free of volatile solvents – no smell or air pollution in the drydock during spraying.

- Ability to apply at 10 – 80+ mils with no sagging.
- Compatible with residues of all existing coating types.

**RESULT:** The hull of the vessel was cleaned, minor steel repairs were completed, and approximately 15,000 sq.ft. of surface was protected with BIO-DUR 560 in less than 36 hours. The vessel was refloated within 30 minutes after the final coating applications with final curing taking place immersed in the river.

The BIO-DUR 560 film cures hard, and shiny. Kevlar® microfiber reinforcement contributes to a very tough coating well suited to Mississippi River service exposed to floating debris. It is anticipated that the toughness of the BIO-DUR 560 will allow future underwater maintenance by water jet cleaning to remove excessive algal and shell growth.

The management of the Mississippi Belle II provided breakfast, lunch and dinner to the work crew in the refreshment tent located at the head of the floating dock. The complete absence of odor allowed these meals to be enjoyed even when adjacent areas of the hull were being sprayed!

For more information regarding this project, contact:

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PRODUCT: BIO-DUR 560

YEAR: 2002

LOCATION: USA

*We go where others fear to spread!*