

## **Customer Profile**

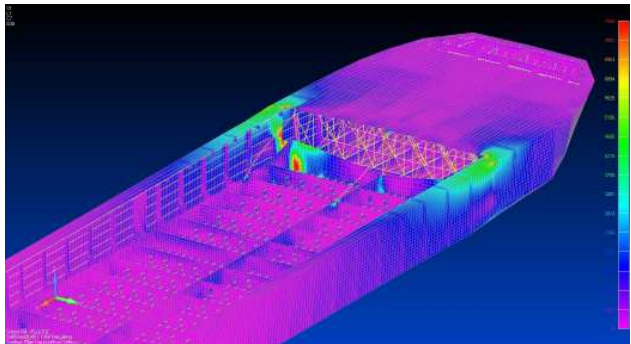
Cross State Towing Company



## **METAL TRADES INC. BUILDS OUTER HULL FOR 17,000 BBL FUEL BARGE CONVERSION**

Metal Trades, Inc. (Hollywood, SC) has built and delivered the outer hull for a double hull fuel barge conversion for Cross State Towing Company of Jacksonville, FL. The outer hull measures 256' long by 56' wide, and was designed by Glowacki Engineering to retrofit on the outside of the 17,000 BBL cargo tank bay in compliance with USCG and OPA 90 requirements.

According to Randy Brown, VP of Business Development for Metal Trades, "This was an interesting project that involved building and launching only the outer hull, requiring us to take extra precautions for launching because, without a deck or inner hull in the cargo tank bay, the barge outer hull did not have very much longitudinal stiffness. We had Saber Design and Analysis Services perform Finite Element Analysis (FEA) of the hull to verify transfer car placement and temporary bracing while ensuring that peak stresses remained low in the hull during transfer and launch." This project was a team effort.



Charleston Heavy Lift, Inc. was contracted to perform the final lifting and setting of the 353 ton inner hull cargo bay within calm waters of the intra-coastal waterway close to shore. The lift was completed as planned within a few hours. The final welding of the inner hull to the outer hull will be performed by Cross State Towing at its own shipyard in Jacksonville, FL.



Metal Trades is a family owned company specializing in Heavy Steel Fabrication, Barge Construction, and Ship Repair. Visit us at our web site: [www.metaltrades.com](http://www.metaltrades.com)  
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**Metal Trades, Inc.**  
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