

Advanced Technology Projects to Support Process and Product Improvements at Alabama Shipyard

Project Title: Advanced Technology Projects to Support Process and Product improvements at Alabama Shipyard (4 MARITECH Projects)

Primary Consortium Member: Alabama Shipyard, Incorporated (ASI)

Additional Contractor/Consortium Members: Pelmatic, Proteus Engineering, CYBO Robots, Sener, Edison Welding Institute, Mitsubishi Heavy Industries, Burmester & Wain and American Automar

Project Objectives/Overview: The overall goal of the four ASI MARITECH projects is to assist the shipyard in attaining its strategic objective of becoming a world-class facility in the near future. The first three MARITECH projects were to develop new ship designs for the international commercial market. The fourth project (FY 1997) has its main focus on developing advanced business and production processes and procedures necessary to become truly competitive in the international marketplace.

Project Status: The wide spectrum of activities that have been successfully completed and those that are currently being performed are as summarized below.

- Market Analysis - developed international and domestic market analysis for containerships, bulk carriers, chemical carriers and the offshore petroleum markets.
- Portfolio of Designs - purchased ship designs that were subsequently modified to incorporate ASI build strategy.
- Ships Built - two 16,000 dwt chemical carriers for export were contracted with Dannebrog Rederi of Denmark
- Facility Modernization - designed with MARITECH assistance, the following state-of-the-art facilities: Unit Blast and Coat Facility, Automated Pipe Fabrication and Bending Shop, Profile and Web Line, Curve Plate Shop and the Sandwich and Outfitting Shop. All of these facilities have either been built or are under construction with ASI resources.
- Automated Design and Manufacturing Tools - CAD/CAM/CIM elements were purchased and now comprise a complete set of FORAN software; also instituted an extensive training program to assure the system would be fully integrated throughout the shipyard
- Materials Management - currently implementing an extensive materials management program using "Best Practices" approach
- Advanced Robotic Technology - developing shipbuilding capability with robotics and interfacing with CAD/CAM/CIM
- Information Systems - developing an comprehensive information system throughout the shipyard that can link other shipyards with the Atlantic Marine Corporation

Project Contacts:

Alabama Shipyard

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