

A Brief Profile

ProModel provides Shipbuilders and Shipyards with simulation-based predictive-analytic decision support tools that allow organizations to understand and improve system performance in a low-risk environment

Our Customers

Military

- Naval Special Warfare Command
- NAVAIR
- NAVSEA

Tier 1

- Ingalls Shipbuilding
- Newport News Shipbuilding
- Bath Iron Works
- GD NASSCO
- Irving Shipbuilding

Tier 2

- Mercury Marine
- Northrop Grumman Ship Systems
- Rolls-Royce
- Textron Marine and Land Systems

Customer Success - Ingalls Improved Capacity Planning

Building four different hull forms in the tight shipyard footprint is a challenge.

An improved automated process of scheduling and assignment of build unit laydown locations resulted in significant savings at the highly functioning shipyard.

“The new tool has taken a process that historically took 10 weeks to complete and can now finish the scheduling activity in less than an hour. Following project completion and full system implementation, we expect to reduce ‘real estate’ allocation processing time by 30% and place 20 more units ‘under cover’ annually, with an estimated cost savings of over \$990K per year.”

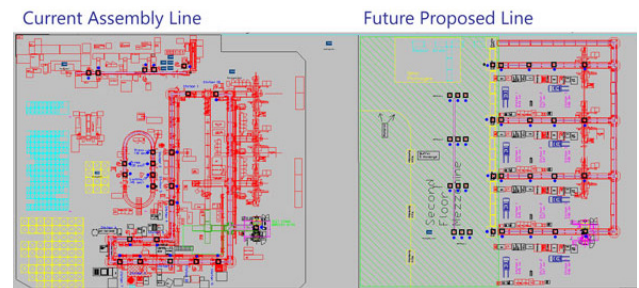
— Courtesy of “theSignal” and DefenseNews.com

ProModel Optimization Suite for Shipyard Success

ProModel Optimization Suite software provides an extremely powerful simulation environment that provides ship builders the ability to optimize their existing processes to meet increases in demand or improve their bottom line performance. ProModel’s advanced technology allows for the construction of a virtual yard that captures the behaviors of production equipment, cells, welding lines or actual vessel assembly. The virtual model then enable the organization to run multiple “what-if” scenarios, optimizing their operations and production capabilities.

Typical applications include:

- Welding line validation and optimization
- Pipe shop modeling and process improvement
- Unit construction and erection optimization
- Capital equipment justification and validation
- Supply chain and logistics design and testing

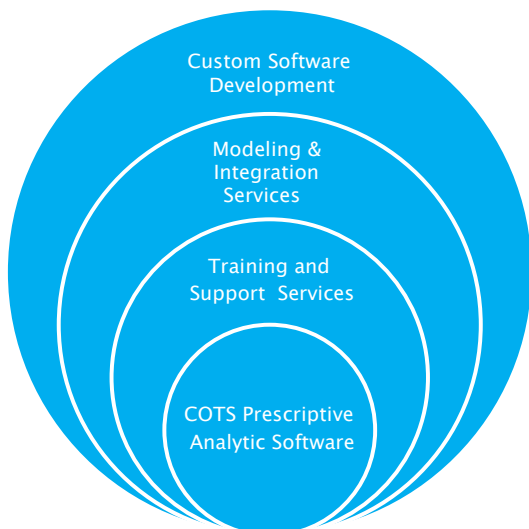
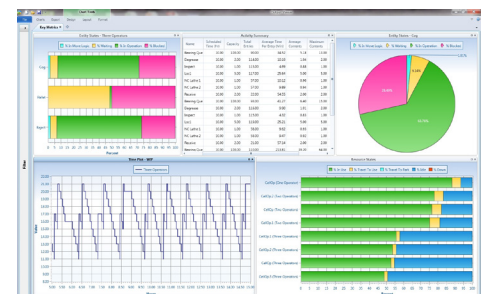


Process Simulator Professional for Shipyard Success

Process Simulator Professional is an application that allows you to quickly transform static flowcharts, VSM’s and workflow diagrams into dynamic simulation models that address your organizations analysis and analytic needs. This powerful DES tool is a direct bolt on to existing Visio installations and does not require extensive training and programming expertise. Process Simulator Pro allows you to seamlessly create and run simulation models inside a Visio® environment with little to no additional effort and capture work content already created by your organization. It is a simple, predictive, productivity-improvement tool that has the potential to increase the results achieved by your shipyard.

Typical applications include:

- Support and validation of Lean Six Sigma initiatives
- Enablement of continuous process improvement programs
- Optimize shipyard work flows increasing throughput by eliminating bottlenecks
- Capture office processes and evaluate improvement ideas
- Easily create and support PI teams and achieve rapid ROIs on starter projects at minimal risk to the organization



Shipyards AI Key Benefits and Capabilities

A “Single Authoritative Source of Truth” for Shipyards Capacity Planning and Productivity



Shipyards AI

Strategic Benefits

- Perform “what-if?” analysis on potential future work loading through the shipyard.
 - Quick turn around
 - Low enough level to determine impact on key shop loading
 - Can be used to develop “best fit” schedules for multiple ship loadings
 - Perform initial shop loading for new ship programs based on unit family preferences
- Level load footprints and shops and identify preassembly start requirements to support
- Simulate long-term plan strategies
 - Multiple new hulls/classes within the facility
 - Identify capacity limits and potential for Facilities growth (if required)

Tactical Benefits

- Daily capacity planning
- Scheduling and schedule slip mitigation
- Track interim product and unit progress to identify potential early or late completions
- Provide immediate options for alternate foot printing of next units in event of early or late complete of previous products
- Optimize use of yard cranes and transporters
- Online data entry and instant access to key real-time reports from mobile devices

Shipyards AI Capabilities and Resulting Areas of Improvement

- Rapid “what-if?” scenario generation supports experimentation on facilities, ships, shops, and business rules
- Optimization for space allocation (laydown) planning
- Reduce rework
- Provide forward visibility for scheduled or potential overloads to capacity
- Analyze spatial and personnel resource requirements of multiple possible schedules
- Propose alternatives to schedules in conflict with constraints (space/time/labor)
- Identify bottlenecks and problem areas and reduce overall storage of units between stage of construction
- Automatic, continuous optimization of loading shipyard resources across rapidly changing current, planned and prospective scenarios
- Editable map and model for future shipyard facility layout options

