



Design
Automation
Associates Inc.

Shipbuilding Solutions

About DAA Shipbuilding

DAA helps shipbuilding manufacturers implement the Digital Shipyard to dramatically improve engineering and manufacturing productivity.

We implement Product Lifecycle Management (PLM) Automation using software and process redesign which improves cycle time, quality, and cost. Our expertise covers the entire PLM process: Systems, Design, Simulation, Test, Manufacturing, and Service.

We support Shipbuilders' Advanced Manufacturing goals by integrating Design and Manufacturing data to enable technologies such as additive manufacturing, augmented reality assisted assembly and inspection, and real-time updates to ERP and MES systems.

We help manufacturers solve difficult engineering problems by providing US-based engineers with decades of experience.

DAA enables OEMs and Suppliers to work together efficiently by allowing seamless exchange of design data.

DAA Qualifications

22 Years Shipbuilding Experience

- DAA can work at a client worksite or remotely
- 95% of clients recommend DAA¹
- 100+ clients
- 23 years implementing Engineering Digital Automation

Engineering Software Expertise

SIEMENS

**DASSAULT
SYSTEMES**

aras

SSI

Ansys

AUTODESK

Core Competencies

Engineering Automation

- Systems Engineering
- Design
- Simulation and Test
- Manufacturing Engineering
- Service Engineering

Advanced Manufacturing

- Augmented & Virtual Reality for Design, Assembly, and Inspection
- Additive Manufacturing support
- Design for Manufacturing support
- Digitally connect BOM, ERP, and MES

OEM and Supplier Integration

- Design compatibility
- More accurate quoting
- Real-time collaboration

Engineering Consulting Services

- Mechanical Engineering
- Configured Solutions
- Structural Analysis and Design

PLM Engineering Digitalization

- Digital Roadmap Development
- Model Based Definition
- Digital Thread
- Product Lifecycle Management (PLM) platform

Locations

DAA Headquarters: Windsor Locks, CT

Other Locations

DAA Midwest: Detroit, MI

DAA South: Savannah, GA

DAA West: Rexburg, ID

100% of employees are based in U.S.



Design
Automation
Associates Inc.

Shipbuilding Case Studies



Systems Engineering

Client Problem: System design and test process was time consuming and delayed speed to market.

DAA Solution: Built automated Systems simulation application which reduced Systems testing time by 75%.³

Design

Client Problem: Repetitive product design work slowed speed to market.

DAA Solution: Implement Design Automation which reduced design time by 50%.²

Simulation

Client Problem: Simulation was difficult and error-prone which drove up cost and slowed speed to market.

DAA Solution: Automate the Simulation process which reduced timelines by 95% and eliminated errors.³

Manufacturing Engineering

Client Problem: Paper manufacturing work instruction were difficult to understand and use, which caused errors and rework.

DAA Solution: Develop tablet-based Interactive Work Instructions (IWI) integrated into Manufacturing Execution Systems which reduced assembly time by 30%.²

Service Engineering

Client Problem: Inspecting parts needing repair and overhaul is time consuming and error-prone on large ships.

DAA Solution: Tablet-based application compares original digital design to physical product, which inspects parts 85% faster.²

Supply Chain

Client Problem: Supplier unable use an OEM customer's model-based digital designs, which delayed delivery timelines.

DAA Solution: Implement design translation software to allow supplier to use OEM design and meet scheduling commitments.²

Software Development

Client Problem: An existing software project needed to facilitate OEM business was failing and jeopardized the client's revenue.

DAA Solution: Took over the software project and delivered an application which was immediately used to grow OEM business to.³

PLM Platform

Client Problem: Data stored in multiple engineering functions and databases – increasing rework, wasted time, and cost.

DAA Solution: Configured PLM platform to provide one source of data for all with real-time updates, which was used to reduce total product costs by 20%.²

Case Studies Details Available on Request

References:

1. AGA 2019 Associates Voice of the Customer Survey
2. DAA client analysis 2018
3. DAA internal analysis 2017 - 2020