



## SOLVING ENGINEERING AND MARINE TRANSPORTATION CHALLENGES

Harbor Marine Group is the professional engineering and marine consulting division of Foss Maritime Company, serving customers locally and abroad with professional engineering, technical services, and complete project management.

From concept to delivery, Harbor Marine Group's client-focused approach and proven track record takes marine transportation projects from the drawing board to the shipyard—and from there, around the world.

### FULL SERVICE ENGINEERING AND PROJECT MANAGEMENT

Our team of naval architects, marine engineers, mechanical engineers, project managers and technical specialists can handle every aspect of developing and executing any type of marine transportation project.

The Harbor Marine Group team provides professional services for tug and barge owners, passenger vessel operators, construction contractors, global heavy lift operators and many other sectors of the marine community.

**Harbor Marine Group**  
Division of Foss Maritime Company  
450 Alaskan Way South, Suite 706  
Seattle, WA 98104

**CONTACT:** David Dumont, P.E.  
[ddumont@foss.com](mailto:ddumont@foss.com)  
**TEL** (206) 270-4822  
**TOLL FREE** (800) 426-2885

**CONTACT:** Matt Nani, P.E.  
[mnani@foss.com](mailto:mnani@foss.com)  
**TEL** (206) 270-4893



## DELIVERING ENGINEERING SOLUTIONS. EMBRACING NEW TECHNOLOGY.

Harbor Marine Group combines its strong background in traditional marine experience with new technologies and business methods to produce the highest-quality engineering services available. Our services include:

### Naval Architecture

- Specialized Floating Structures Design and Analysis
- Structural Calculations & Finite Element Analysis
- USCG, ABS and other Classification Society Design Review and Submittals
- Heavy Cargo Transportation Planning, Engineering and Design
  - Seafastening Calculations and Detail Design
  - Deck Strength Calculation
  - Loadout and Offload Ballasting and Longitudinal Strength
  - Mooring System Design

### Project Management

- Construction and Production Management
- Owner's Representation
- Shipyard Project Management
- Contract Specifications
- Turnkey vessel acquisition programs from initial design selection through construction and delivery

### Marine Engineering

- Vapor Recovery Systems
- Steering Systems
- Shafting Systems
- Electrical Load Analysis
- Piping System Schematics
- Hydraulic Systems
- System Conversions and Modifications

### High Precision 3D LiDAR and Optical Scanning

- Structure, Piping, Arrangement As-Built Models