MARINE PROPULSION CONSULTANTS

We are marine and mechanical engineering consultants that provide marine power transmission design, service and failure analysis, serving the US Navy, US Coast Guard, Military Sealift Command, research ships, commercial & cargo transportation, the fishing industry, and global ship construction and repair yards since 1980.

Excellence
Diehl Engineers are well known in the maritime industry, as being the best and most trusted to solve difficult propulsion problems.

Integrity
We take ownership of your needs and problems, and we are never influenced by external pressures. Be assured that we will deliver results you can trust.

Experience
We have extensive experience, having over 150 man-years of experience solving marine propulsion problems like yours.

Flexibility
We understand that you are often faced with tight schedules and unforeseen issues. We work hard to meet your timeline requirements.
Diehl Engineering Company Professional Staff:

**Rob Diehl, P.E.**  
President  
Rob has worked in the marine and industrial areas since 1986, primarily in the design and service of rotating machinery and mechanical power systems.

**Eric Diehl, P.E.**  
Vice President  
Eric has worked in the marine industry since 1983, primarily in design, manufacturing, alignment and vibration troubleshooting of gear, shaft and bearing systems.

**Scott Crawford, P.E.**  
Partner  
Scott has worked in the marine and industrial areas, primarily in predictive maintenance, vibration troubleshooting, balancing and alignment.

**John Cogswell, M.E.**  
Engineer  
John has worked in the marine industry since 2013; primarily in the alignment of numerous shaft and bearing systems of varying size and complexity.

Services we offer:

**Shafting Services:**

- Alignment Engineered Shafting Design.
- Alignment Analysis, Instruction and Supervision.
- Optical, Strain Gage and Jack Check Bearing Alignment Service.
- Rigid and Flexible Coupling Alignment Service.
- Laser Alignment of machinery connected by mechanical couplings.
- Lateral, Longitudinal, Torsional, and Whirling Vibration Frequency Calculations.

**Gear Related Services:**

- Gear Design and Specification of New and Replacement Gears.
- Gear Failure Prevention Analysis.
- Gear Failure Inspection and Repair Supervision.

**Bearing Inspection Services:**

- Inspect shaft bearings for proper installation and load, wiping, galling, fatigue, and any other signs of failure.
- Problem bearing analysis and recommendations for the proper correction to obtain the most effective and economical solution.
- Fit and scrape babbit bearings as required.

**Field Testing Services:**

We provide instrumentation, field measurements, and the mathematical analysis of marine and industrial machinery. If a problem exists, we will provide clear, concise and practical recommendations to correct it. Our testing services include:

- Dynamic Torque, Thrust, Bending & Horsepower Measurements.
- Bollard Pull Measurements.
- Bearing Load Measurements.