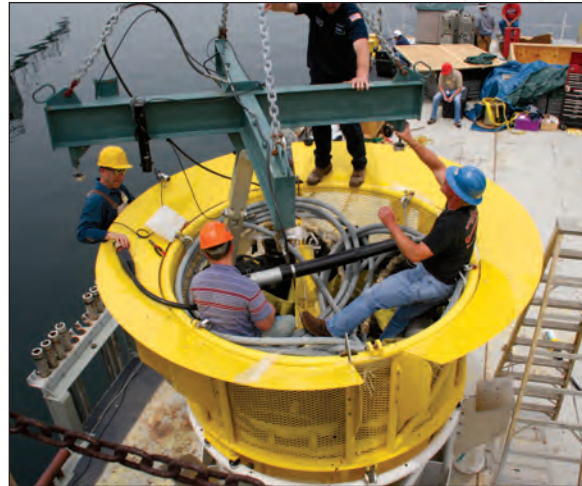


EINHORN

ENGINEERING IS INNOVATIVE

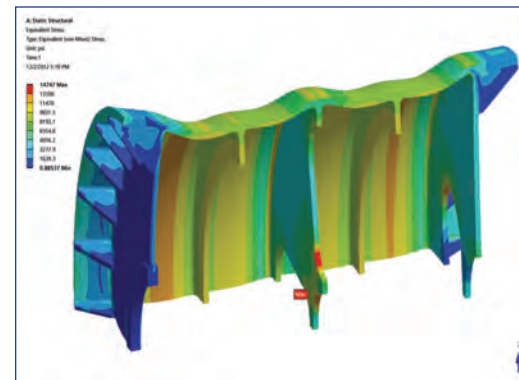
ENGINEERING



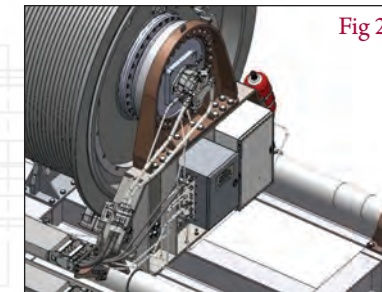
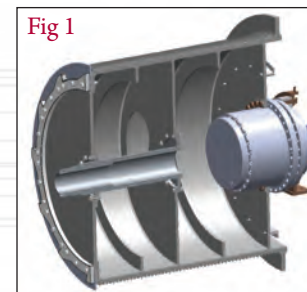
Einhorn Engineering, PLLC develops ocean engineering solutions based on classical mechanical engineering, machine design skills, and advanced computer design capabilities. Our practice is based on innovative design that translates theory into reliable performance in the often unpredictable marine environment.



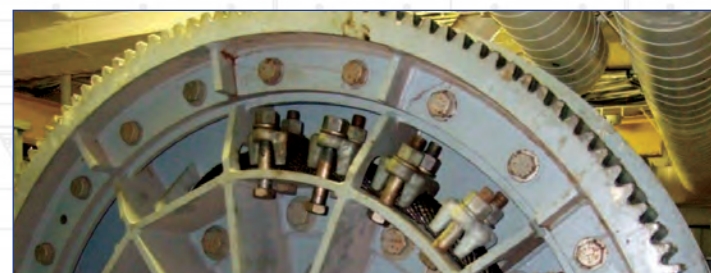
Dockside deployment of vertical towed array



Analysis on left: FEA Static simulation of winch drum shell



Figures 1 and 2 above: Solid model images of 72" pitch diameter winch system components



DELIVERING ENGINEERING EXPERTISE

- Launch & Recovery Systems
- Hydraulic & Electrical Winch Systems
- Towed System & Towbody Design
- Prototype Concept Development & Project Planning
- Offshore Mechanical & Structural Engineering Services
- Hydraulic Power & Control Systems
- Subsea Electrical & Telemetry System Design
- Load Handling Analysis and Rigging Plans
- Fabrication Planning & Oversight
- Factory Acceptance Test Planning & Oversight
- Sea Testing Planning & Field Support
- Owner's Agent Shipyard Support
- Engineering Documentation Packages

ENGINEERING SOLUTIONS CRITICAL TO WORK AT SEA

Einhorn Engineering, PLLC provides "stem to stern" mechanical engineering services for the marine and oceanographic community.

From concept to deployment, our innovative work is informed by advanced engineering skill and extensive hands-on experience at sea.

Four Core Beliefs Form Our Philosophy

- Comprehensive machine design and mechanical engineering knowledge must be complemented by real world experience at sea.
- Single engineer involvement throughout the design, fabrication, and testing cycle is the best way to deliver prototype products that perform as required.
- Through diligence, thoroughness, and responsiveness, we earn our clients' trust and cultivate long-standing partnerships.
- Our passion for machinery and the sea is the motivating reason for our work.

EINHORN ENGINEERING, PLLC
SEATTLE, WASHINGTON 98115

EINHORN
ENGINEERING PLLC

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EINHORNENGINEERING.COM (206) 985-6865

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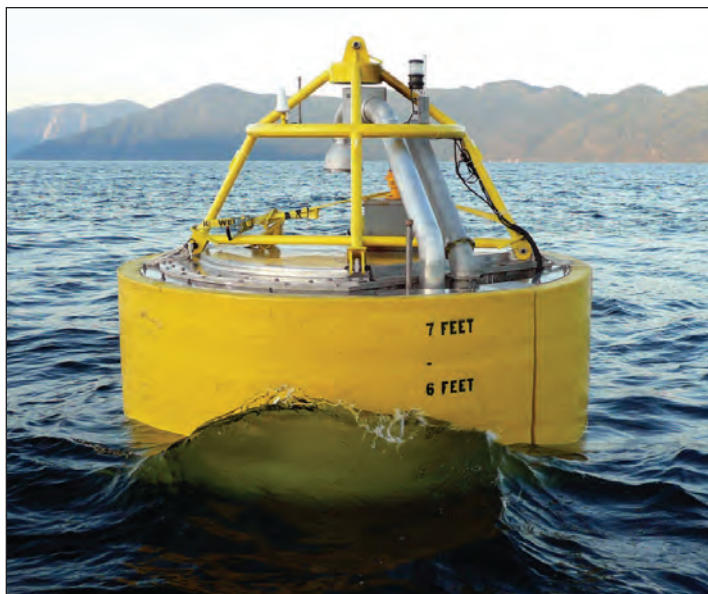
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**WE TAKE PRIDE IN SEEING
OUR ENGINEERING EFFORTS MATERIALIZE
AS WORKING SOLUTIONS AT SEA.**



Eight element vertical towed array loaded into handling system

Einhorn Engineering, PLLC specializes in providing hardware solutions to deployable system problems. From the design of a subsea towbody to house scientific equipment, to the factory acceptance testing of the in-house designed winch to deploy that towbody, we have the know-how and experience to see a project through.



20kW autonomous, self-mooring, deepwater buoy for ocean data collection



Mobilization of a vertical array launch & recovery system

*Nanciscar cursum extruendo licet.
We will find a way or make one. {trans}*

Beginning with our client's requirements we function as a design and build firm where we develop the deployment and recovery methodology, concept system arrangement and the detailed design. Working with our network of long-standing fabrication partners, we walk our design projects through the fabrication phase and see the project all the way to landing the fabricated equipment on the deck and performing sea trials.

Einhorn Engineering also functions as a consulting firm or owner's agent to make design solution recommendations, prepare calculation packages, review equipment specifications and designs, witness factory acceptance tests, or perform independent analysis.



Rigging preparations for 150kip load test for shipboard system



“Our work environment should, and does include the engineering office, the factory floor, the shipyard dock and most importantly the back deck.”

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