



enautix

engineers and analysts

Company Profile

Houston Office

18000 Groeschke Road F13

Houston, Texas 77084

www.enautix.com



Structural analysis, rigid body analysis,
finite element analysis, and floating structures.

We find answers

Enautix is a team of engineers and designers providing solutions for the offshore industry

- From a concept for a new design, we can take it to the installation phase, or start with a 25 year old structure in need of a life extension and provide the detailed reassessment information needed to answer the tough questions.



- Experienced with the complete lifecycle of the offshore structure, including transportation, structural analysis and inplace conditions.
- Specialists in rigid body analysis and finite element analysis using ANSYS™, SAC3™, and MOSES.

Offshore Engineering Services
Design and analysis for fixed and floating structures

Offshore Construction Services
Loadout, seafastenings, etc.

Transportation Services
Load securement, both highway and marine

Offshore Inspection, Maintenance, Repair
Comprehensive reporting on the structural integrity of offshore structures

Headquartered in the West Houston Energy Corridor, we offer both domestic and world wide service.



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- Enautix provides a design and structural analysis service for in-place, transportation, and installation phases of:
 - Fixed offshore structures
 - Floating offshore structures
 - Mooring systems
- Software support includes:
 - SACST™, design and analysis software package for offshore structures
 - Collapse, Fatigue, and Earthquake
 - MOSES
 - ANSYS™, finite element analysis
- Our capabilities extend to the design of subsea structures to include: templates, manifolds, protection structures and pipeline end termination structures.
- We provide a service to manage the structural model for "life of structure" integrity monitoring.
- Our transportation engineering capability includes fatigue issues on long duration transportations, the primary structure seafastening design and also the important internal seafastening requirements.

- Enautix has a state of the art quality system in place, to ensure reliable and accurate engineering conforming to the latest inspection codes and standards.



- Our AutoCAD design staff brings a over 50 years of drafting experience to every project; we can produce a full set of structural specification and fabrication drawings.



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- Enautix can provide general offshore construction support for fixed and floating structures:
 - Load Out plans and work instructions for barges and vessels
 - Seafastening design
 - Offshore lifting and rigging studies
 - Mooring design
 - Scope of Work, Method Statement development, and execution plans
 - Structure decommissioning
- Specifications and fabrication standard AutoCAD™ drawings are produced to provide a complete package.
- Enautix can provide on-site assistance to the client during the fabrication, load-out, and installation phases if required, including special lifting studies and lifting arrangements for equipment installation and removal offshore.

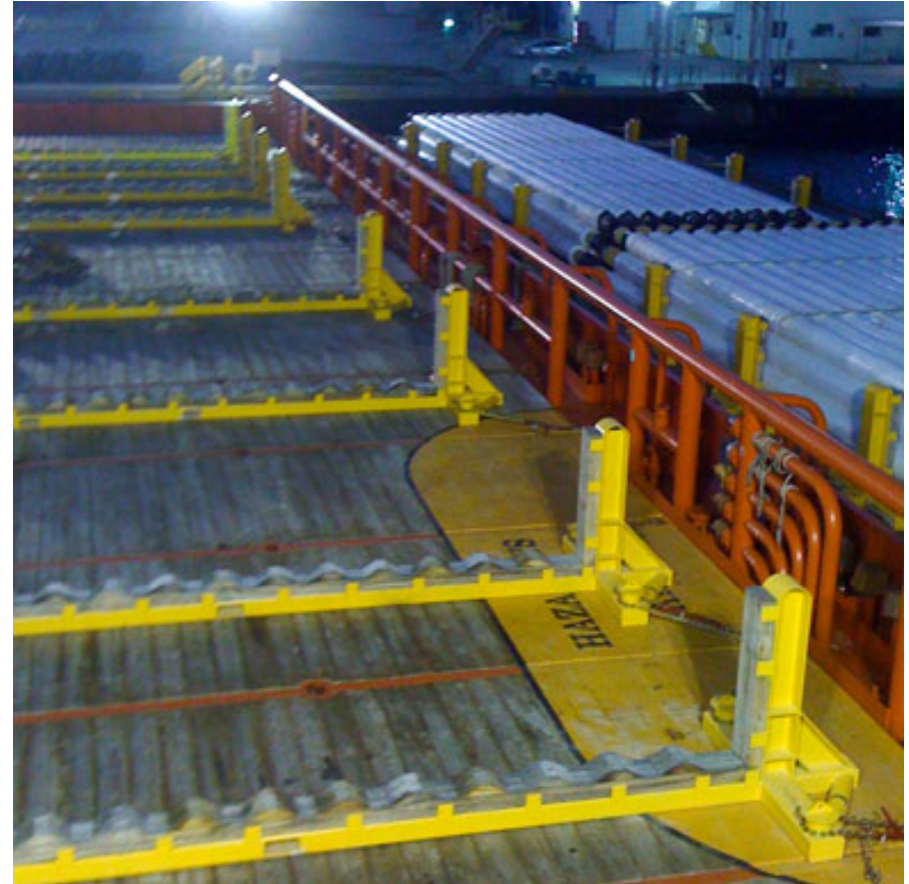




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- Proven load securement designs for transporting large structures by ship and by truck
 - Highway Transportation
 - Marine Transportation
- Highway Load Securement:
 - Chain arrangement
 - Rack Design
- Barge transport
 - Load Out plans and work instructions for barges and vessels
 - Seafastening design
 - Lifting and rigging studies



Barge and supply vessel securement racks



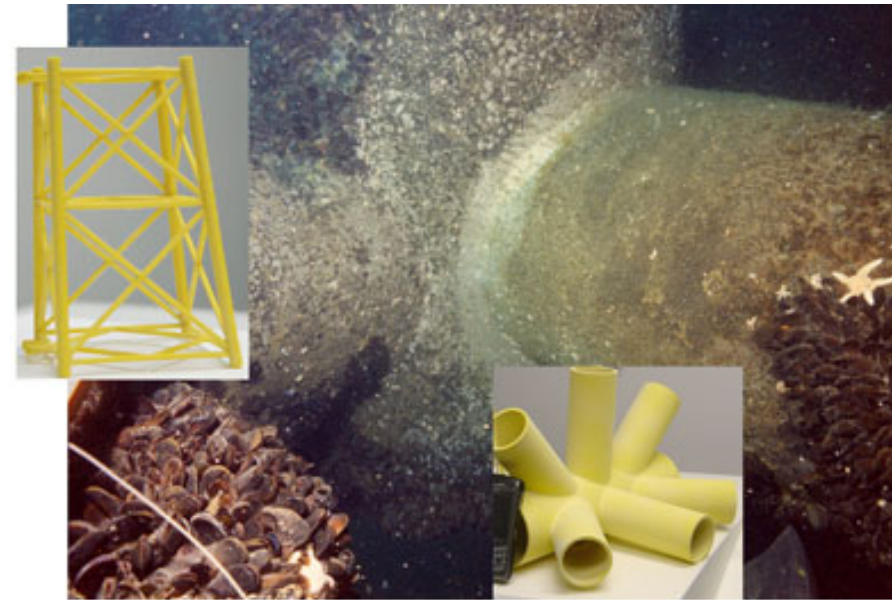
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• Underwater Inspection Services

- To assist our client with monitoring the structural integrity throughout the life of fixed and floating structures, including mooring systems:
 - Preparation of inspection drawings, structural component numbering systems and inspection data sheets for individual components.
 - Creation of spreadsheet database for trend comparisons and speedy production of inspections reports
 - Comprehensive report on structural integrity
 - Upgrading of structural model managed by Enautix
 - 3D in-house solid modeling to support the inspection process and repair concept development.
 - Processing of video and still photographs and archiving for rapid retrieval
 - Integration with the structural model and analysis of structural defects in real time with the offshore inspection.
 - Seamless interface with Enautix structural repair capability.
 - Provision of inspection engineers and data recorders
 - Diver/ROV pilot training.
 - Design of an appropriate repair solutions using our suite of repair clamp and brace designs which allow a rapid response to repair requests.
 - Inspection tailored specifically to platform strengthening for additional topside weight.
 - Inspection tailored specifically for decommissioning.
- Habitat and Cofferdam designs, and assistance with anode retrofit programs, is also available.

- Sea life being cleaned from a subsea node, along with solid models of a jacket and a node





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	TLP	SPAR	FPSO	Semi- submersible	Compliant Tower	Fixed Structures	Subsea/ pipeline
Loadout	Marco Polo topsides	Horn Mountain topsides			Tambua-Landana	Sinan Field, Cannonball Field jkt and deck, Bullwinkle	
Transportation	Marco Polo topsides	Horn Mountain topsides	Kizomba B manifold modules		Tambua-Landana	Ebouri Field, Sinan Field, Cannonball Field jkt and deck, Atlantis Field module, Kapok Field, Peregrino jkts and decks	Perdido piles & risers
Launch					Hinged barge development	Peregrino jkts	
Floatover						Corocoro deck	
Installation		Horn Mountain topsides, Tahiti	Kizomba B manifold modules, Su Tu Den modules	Jack and St. Malo	Benguela Belize, Tambua-Landana	Panyu Field China, Trinmar platforms, Alba B2 jkt	
Floatation and Upending		Genesis hull			Tambua-Landana	Peregrino jkts	
Docking					Tambua-Landana	Corocoro deck and jkt	
Inplace		Horn Mountain topsides	Pazflor modules, Kizomba B manifold, Fluminense topsides, Girassol topsides and hull	OPTI-EX living quarters & helideck		Trinmar platforms, Alba B2, GA 227 "A"	Thunder Horse subsea module
Spectral Fatigue	Marco Polo, Magnolia, Blind Faith, and Prince topsides	Horn Mountain topsides				Ebouri Field, EC 139, Trinmar platforms, HI 161 "C", EC 271 "I", HI 268a "A", Alba B2	
Earthquake						Trinmar platforms	
Impact				OPTI-EX helideck		Peregrino jkts, NGL Extraction platform	
Pushover						North Rankin, SP 62	
MOSES	Marco Polo, Magnolia, Blind Faith and Prince topsides	Horn Mountain topsides	Fluminense topsides, Girassol topsides and hull		Hinged barge development	Bullwinkle, Ebouri Field, Sinan Field, Atlantis Field module, Kapok Field, and Cannonball Field, Peregrino, and Corocoro jkt and deck	
ANSYS						Peregrino launch runners and joint rings	
Field Architecture		Tahiti	Zafiro Producer	Jack and St. Malo			
Structural Design Drawings	Prince, Magnolia, Morpeth	Horn Mountain, Great White	Enterprise			Salsa, Enchilada, OilBird, EC 1st CP-4, GP-11, BS-14, Independance Trail, DPC-4, Pogo-Benchamas Block Sta. 26	



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