



Floating Systems

committed to technical excellence



REAL WORLD SOLUTIONS

Stress Engineering Services has been providing expert floating systems solutions for more than 30 years. Our team of engineering consultants has an average of over 22 years experience solving problems across a variety of disciplines. This experience, coupled with our proprietary Rational Approach to Marine Systems (RAMS) technology, makes us uniquely qualified to perform expert design and analyses functions essential in the development of floating production systems.

From concept evaluation to ongoing engineering support, our engineers have the expertise and tools necessary for determining optimal solutions that maximize the performance, reliability and safety of your floating system.



FLOATING STRUCTURE HYDRODYNAMICS AND MOTION ANALYSIS

MOORING ANALYSIS AND MOORING SYSTEM DESIGN

FRONT END DESIGN AND SUPPORT - PRELIMINARY DESIGN & BID PACKAGE SUPPORT

FLOATING STRUCTURE STRESS AND FATIGUE ANALYSIS

ANALYSIS OF DYNAMIC POSITIONING SYSTEMS

STABILITY AND BALLAST ANALYSIS

PROVIDING ACCURACY FOR ALL PHASES OF YOUR PROJECT

CONCEPT EVALUATION

No decisions are more important to the economic impact of a project than those made in the concept and design phases. Our integrated system models allow us to test the feasibility of your concept with the same level of detail up-front as in the final design. The result is a faster and more reliable concept evaluation.

FRONT-END ENGINEERING DESIGN (FEED)

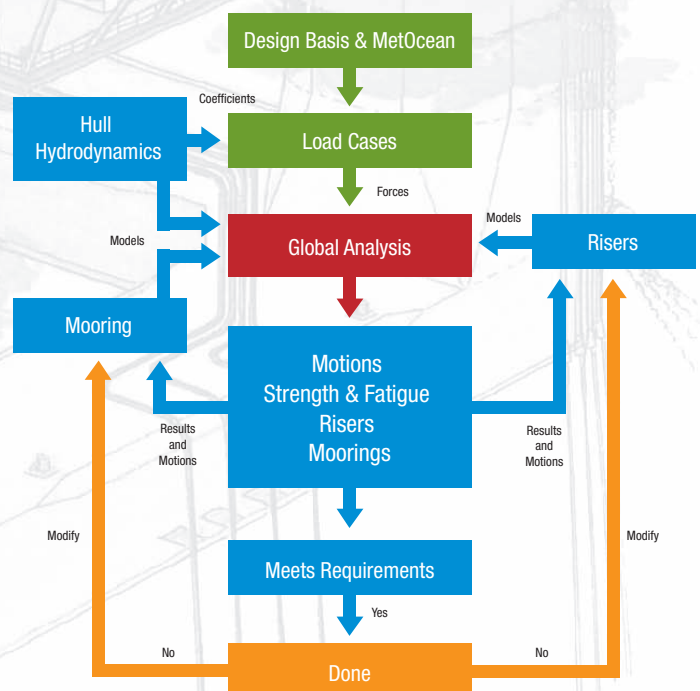
We focus on producing the results designers need. Our RAMS analysis and design tool provides us with the ability to model your floating production system to as much detail as is available at any stage of design. Design changes can be incorporated and the impact on the whole system assessed quickly. From conceptual design, to detailed design of components, to the final design verification, we have the knowledge, experience and technology to deliver the solutions you need.

EXECUTION –FABRICATION– INSTALLATION

Our involvement continues through the execution, fabrication and installation phases. We can offer valuable insight in the arenas of equipment specifications and securing equipment contracts. Making sure the as-built configuration meets requirements as well.

ONGOING SUPPORT

Our advanced engineering services continue with ongoing support for your floating production system. We are also skilled at analyzing existing facilities to ensure that yours is responding to its environment as intended; as well as, determining the feasibility of future tiebacks, performing life assessments and assessing any leaks or explosions.





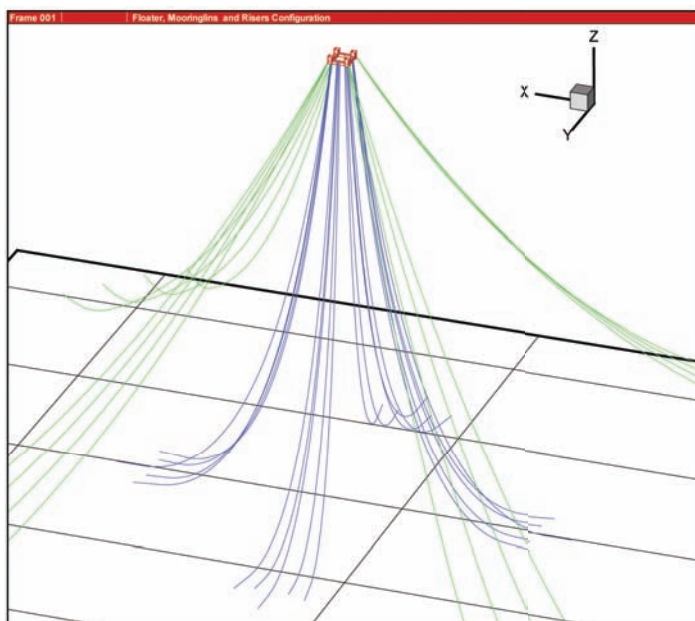
RATIONAL APPROACH TO MARINE SYSTEMS (RAMS)

RAMS is an in-house, proprietary analysis and design program that is unlike traditional analysis tools. It provides a fully coupled analysis of the floating production system with the mooring and risers coupled to the vessel, all in a single model. Analysis can also be performed in the Frequency Domain or in the Time Domain using the same models. This provides more accurate and efficient verification, design and concept evaluation results.

RISER DESIGN AND ANALYSIS

We have been involved in drilling, production and export riser systems since 1975. Our extensive experience includes global and coupled analysis of risers, initial sizing of components, defining component design loads and detailed design analysis and testing of components. Some of our riser design and analysis expertise includes riser capability analysis & optimization, component / tensioner performance analysis, and drift-off / drive-off analysis.

Stress Engineering applies classical engineering methods, advanced technologies and innovative applications to help our clients solve problems and answer questions. We can offer extensive design, testing and analysis experience in virtually all phases of floating production system operations. Not only can we ...we already are. To maintain efficiency of resources, we perform target checks at logical points of a project to ensure that progress is being made as planned and that we are making efficient use of the client's resources.



**THE RIGHT PEOPLE.
THE RIGHT ANSWERS.
THE RIGHT CHOICE.**

HOUSTON
CINCINNATI
NEW ORLEANS
BATON ROUGE

CONTACT INFORMATION

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Photos courtesy of SBM Imodco