STRUCTURAL DESIGN

- FPSO Structural design calculations including ISE and TSA
- Module strength and fatigue analysis \geq
- \geq Local FEA calculations such as Crane foundations, helideck and Flare tower structure
- Jackets and topside structural design \geq





ENGINEERING SERVICES

- > Hydrodynamics, Moorings and Riser system design
- Mooring System Components \triangleright Design Including Fairleads, chain stoppers
- > FPSO Global strength analysis, Module structural design
- > 3D modelling for pipe routing
- Transportation, Lifting, Installation Simulation \geq and Time Domain Analysis
- engineering Package \geq Interface and management



SK OFFSHORE & MARINE TECHNOLOGY PTE LTD

Email: info@skoffshore.com



SK OFFSHORE & MARINE TECHNOLOGY PTE LTD

Reg No:201918326Z

SINGAPORE

Email: info@skoffshore.com

HYDROSTATICS & HYDRODYNAMICS

- Stability and Hydrodynamic analysis for all types of Floating bodies including ships, offshore structures FPSOs, FSOs etc.
- Motion analysis: calculation of RAOs, displacements, velocities, accelerations
- Wave load analysis: calculation of Wave bending moments, wave shear forces for any given sea state.
- > Green water and slamming analysis.
- Short term calculations: Calculation of Sort term responses for a given sea states (e.g.; 100 yr. RP, 10yr RP, 1yr RP etc.)
- Long term calculations: calculation for Long term responses for a given scatter diagram





MOORING SYSTEM DESIGN & PACKAGE MANAGEMENT

- Mooring system design for spread mooring and Single point mooring (Turret, CALM buoy etc.) for catenary, taut mooring systems
- Geotechnical design, Pile driveability calculations, Anchor design calculations
- Offloading analysis: Shuttle tanker operations in tandem mooring and side by side mooring.
- Mooring pulling system design
- Mooring component design such as fairleads, chain stoppers



FLEXIBLE DESIGN AND PACKAGE MANAGEMENT

- Flexible riser system design for different configurations lazy wave / lazy S, steep wave, steep S, free hanging etc.
- Flexible and SCR dynamic analysis
- Flex joint arrangement, Flexible and SCR pulling arrangement
- Package management of flexible risers, umbilical and subsea power cables.



