

1.0 ENGINEERING AND CONSULTANCY SERVICES

As part of Velosi's holistic approach to asset integrity The Velosi Group has a division providing specialized engineering and design consultancy services covering all its service areas but with specific expertise in the floating segment of upstream oil and gas industry including FPSO's, FSO's, FSU's, semi-subs, semi-subs, Jack Up's, TLP's, Spar's and Lay barges and alike.

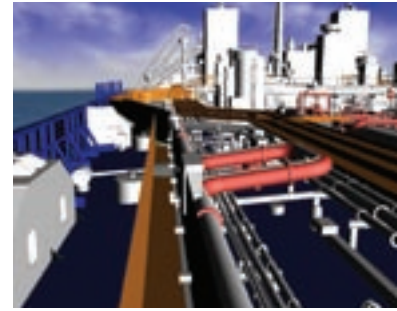
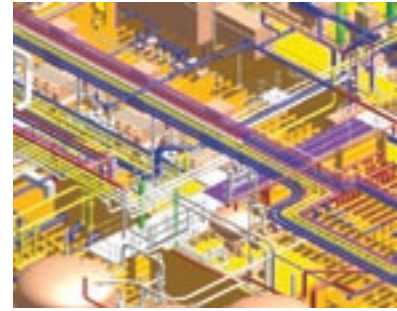
2.0 SERVICES

Velosi Engineering Services provides customised high quality, professionally managed, cost effective Design and Engineering solutions to its worldwide Clientele, utilising a strong design engineering team comprising individuals with extensive experience in the oil & gas and offshore industry.

Our engineering design team constantly endeavours to provide highly professional quality engineering solutions to cater to our Client's specific needs and provide technical solutions in a timely, cost effective manner.

The broad range of services offered by this division include:

- Consultancy during Invitation to Bid (ITB) preparation, tendering and bidding
- Preparation of Owners specification / Yard Specifications.
- Development of Conceptual / Basic / Front End Engineering and Design (FEED) / Detailed Engineering Design & Analyses
- Repair / Modification Design & Analyses
- Engineering Drawings / Analyses Reports including Finite element and Fatigue
- CAD 2D & 3D Design & Drafting
- Project development
- Project Feasibility Studies (New-Build / Conversion / Modification)
- Vessel suitability, survey and selection
- Cost estimating and budgeting
- Planning project schedule to specific needs
- Preparation of technical specifications and those for the building yard
- Concept and Basic Design tailored to suit Client
- Conceptual planning and design
- Systems engineering
- Instrumentation and control engineering
- Hydrodynamics and Limit State Analysis
- Structural evaluation
- Production system conceptualization and basic design
- Engineering Drawings / Analysis Reports for Client and Classification Society,
- Statutory authorities approval and verifications
- Isometrics, spool piece and shop fabrication drawings
- Production of 'As-Built' documents.
- Load out, Transportation & Installation Analyses
- Project Development & Management execution



3.0 TYPE OF PROJECTS

The services can be deployed across the upstream oil, gas and power generation sectors, however Velosi has particular expertise in new build or conversion projects relating to floating and marine assets, which includes Floating, Production, Storage and Offloading (FPSO) units, Mobile Offshore Production units (MOPU), Jack-Ups, Semi-Submersibles, Drill Ships, Offshore Fixed Platforms, Pipe-Lay or Derrick Barges and other offshore support vessels.

4.0 SOFTWARE TOOLS & FACILITIES

Velosi recognises that a major portion of projects which undergo cost over runs are attributed to poor or mediocre engineering. Hence, to match the rapidly changing scenarios in technology that you face today, Velosi utilises the latest state-of-art hardware and engineering software tools to provide you with high quality engineering deliverables at optimum productivity and in a cost effective manner.

- AutoCAD (2-D drafting)
- NX Nastran & FEMAP (FEM Analysis)
- PDMS (3-D Design)
- SACS
- CAESAR II
- PV Elite
- ANSYS
- ABAQUS
- Ultramarine MOSES (Motion Analysis)

