



ENGINEERING FOR
A SAFER WORLD

SINCE 1982

VELOSI
**ASSET INTEGRITY, HSE &
ENGINEERING SERVICES**



www.velosiaims.com

About **Velosi**

Velosi is a leading global consulting firm that provides Asset Integrity Management, HSE, Engineering Services, AI & Software Solutions to clients in the energy industry around the world.

We have developed a comprehensive array of tailor-made software solutions to fulfill the specific needs of energy companies worldwide.

By integrating global coverage and local knowledge with our broad range of services, we are able to design custom-fit solutions to complicated issues. Our extensive range of inter-related services and modular methodologies ensures that we can accommodate a large spectrum of projects.



44+
YEARS OF
EXPERIENCE

86+
COUNTRIES
WORLDWIDE

550+
SATISFIED
CLIENTS

1450+
PROJECTS
COMPLETED

Why Choose **Velosi**?



ONE-STOP
SOLUTION



INDUSTRY
EXPERTS



WORLDWIDE
EXPERIENCE



PARTNERING WITH
THE WORLD'S
TOP COMPANIES



BUILDING
LONG TERM
CLIENT RELATIONS



GLOBAL REACH,
LOCAL SERVICE

Our Services

We offer a full range of specialist engineering consultancy services, incorporating our own proprietary software that is exclusively developed and tailor-made to match the needs of our increasingly diverse clients around the world in the energy sector.



ASSET INTEGRITY MANAGEMENT SERVICES

Risk Based Inspection (RBI)

- Corrosion Loop Drawings
- Inventory Group Drawings
- Corrosion & Inspection Strategy Document
- Risk-based Inspection (RBI) Findings
- Inspection Isometric Drawings for Equipment & piping
- Integrity Operating Window
- Asset Passports

Pipeline Integrity Management System (PIMS-Onshore & Offshore)

- Section Layout Drawings
- Mechanical Assessment Sheet
- RBI - PIMS Study
- Inspection Plan
- Integrity Operating Window (IOW)
- Asset Passport

Structural Integrity Management System (SIMS)

- Tag Marked Drawings
- Asset Register
- Inspection Plans
- Asset Passport
- RBI - SIMS Study

Safety Integrity Level (SIL)

- SIL Methodology
- SIL Classification Study
- SIL Verification Study
- Safety Requirement Specification (SRS)
- Safety Life Cycle Document

Reliability Centered Maintenance (RCM)

- Asset Register as per ISO-14224
- FMECA (Failure Mode Effects Criticality Analysis) Study
- Job Plans
- Equipment Criticality Analysis (ECA)
- Preventive Maintenance Plans (PMRs), Task List and Identification of Spare Parts in line with PMRs

Reliability, Availability and Maintainability (RAM)

- Identification potential bottlenecks
- Estimating the on-stream availability of the unit
- Prediction the impact of equipment redundancy and sparing
- Development and mitigation strategies for expected failure modes
- Perform a preliminary equipment criticality analysis
- RAM study

Well Integrity Management System (WIMS)

- Formulization of Asset Register
- Identification of Applicable Damage Mechanism / De-gradation Mechanism
- Risk Ranking & Calculation of Criticality Based on Calculated POF & COF
- Development of Inspection Plan Against Calculated Criticality Factors



HEALTH, SAFETY AND ENVIRONMENTAL (HSE) CONSULTANCY SERVICES

Process Safety & Risk Studies

Workshop Facilitation

- Hazard Identification (HAZID)
- Hazard and Operability (HAZOP)
- Safety Integrity Level (SIL)
- Simultaneous Operations (SIMOPS)
- Constructability Review
- Bow-Tie
- ALARP Demonstration
- Inherent Safe Design (ISD) Review

COMAH/Safety Case

Health Safety & Environmental Critical Equipment Systems (HSECES)

- Identification of HSECES
- HSECES Performance Standards for all Identified HSECES
- ICP Audit for HSECES Verification
- Quality Performance Standards

Risk Assessment

- Quantitative Risk Assessment (QRA)
- Fire & Explosion Risk Assessment (FERA)
- Building Risk Assessment (BRA)
- Fire and Gas Mapping Study
- Emergency System Survivability Analysis (ESSA)
- Evacuation Escape and Rescue Analysis (EERA)
- Dropped Object Study
- Hazardous Area Classification
- Pollution Prevention and Control (PPC) Compliance Study
- Emergency Response Plan (ERP)
- Air Dispersion Modeling Study
- Project HSE Plan
- Noise Assessment Study
- Waste Management Plan
- H2S Dispersion & Zoning Study
- Human Factor Engineering Assessment Study
- Ergonomics Study
- PHSER Workshops & Study
- Construction HSE Plan

Drilling HSE Consultancy Services (Onshore & Offshore)

- HSE Audit, Survey & inspection Study
- Complete Rig Inspection Study
- Rig Acceptance Survey Study
- Rig Condition Survey Study
- Drop Object Survey/Inspection/Audit Study
- Safety Case Study
- Working at Height Audit Study
- Rig Move Audit Study
- Noise Survey Study
- Environmental Impact Assessment Study
- Occupational Health Risk Assessment Study

Environmental Studies

Environmental Studies & Assessments

- Environmental Impact Assessment (EIA)
- Strategic Environmental Impact Assessment
- Preliminary Environmental Review (PER) Study
- Construction Environmental Management Plan (CEMP)
- Environmental Management Plan (EMP)
- Decommissioning Environmental Management Plan (DEMP)
- Operational Environmental Management Plan (OEMP)
- Environmental Permit Application (EPA)
- Environmental Action Plan (EAP)
- Environmental Audit Report (EAR)

Environmental Monitoring & Testing Services

- Indoor Air Quality Monitoring
- Ambient Air Quality Monitoring
- Particulate Matter Monitoring
- Noise Level Monitoring
- Stack Emission Monitoring
- Formaldehyde Monitoring
- Site Meteorological Data Monitoring
- Soil & Water Analysis

Estidama/Sustainability/Green Building Consultancy

Waste Management Consultancy

- Waste Reduction Report (WRR)
- Operational Waste Management Plan (OWMP)
- Decommissioning Waste Management Plan (DWMP)
- Waste Audit

Occupational Health Risk Assessment (OHRA)

- Emergency Management and Planning (EMP)
- Qualitative OHRA
- Quantitative OHRA
- Workplace Exposure Monitoring
- Industrial Hygiene Monitoring Plan
- Occupational Hazard Identification (OHID)
- Workshop and Study
- OHRA Study
- Noise Survey and Assessment
- Biological Agent Assessment



ENGINEERING SERVICES

Conceptual Design, FEED and Detailed Design

Process	Civil and Structural Design	Piping Design
<ul style="list-style-type: none">• Process Flow Diagrams (PFDs), Utility Flow Diagrams (UFDs) and Heat & Material Balances• Process Simulation Report Process Design Calculations• Process Simulation Report Process Design Calculations• Piping & Instrumentation Diagrams (P&ID's)• Data Sheets• Cause & Effects Diagrams• Process & Operational Control Description• Flare and Relief System Study/Sizing Calculations• Pre-commissioning and Commissioning Manual• Operating & Maintenance Manual	<ul style="list-style-type: none">• Civil Design Criteria• Structural Design Criteria• Civil Layouts• Structural Drawings• Underground Services Specification• Underground Services Layout• Underground Service Design Details Drawings• Cable Trench Layouts• Paving Plan and Details Drawings• Foundation and Concrete Structure RC Details• Road Layouts and Details	<ul style="list-style-type: none">• Overall Site Plot Plan• Piping Material Specifications• Heat Tracing/Jacketing Specification and Schedules• Piping General Arrangement Drawings• Isometric drawings• Material take-offs• Key Plans• Stress Analysis• Pipe Supports Design details• Special Pipe Support Register• Pipe Support Spring Register and Calculations
Electrical Design	Instrumentation and Controls	Firefighting and Safety
<ul style="list-style-type: none">• Area plans• Layout drawings• One line diagrams showing interlocks, inter tripping, system capacity, Voltage levels, currents, impedances, generation power levels etc.• Schematics• Equipment drawings with major tagged equipment such as Transformers, Switchgears, MCCs, UPS, Chargers, Generators, Power supplies, PTs, CTs, Control panels, packaged equipment etc.• Inter connection diagrams• Lists and Schedules• Calculations• Studies and reports	<ul style="list-style-type: none">• System Block Diagrams• Instrument Specifications for equipment and materials• Instrument Index• Relief and Safety Device Index• Alarm and Trip Schedule• Control Room and Control Building Layouts• Instrument Cable Routing• Instrument Power and Utility Requirements• Power Distribution Schedule• Instrument Junction Box Schedules• Loop Diagrams• Input/ Output Schedules	<ul style="list-style-type: none">• Safety Design Philosophy• P & ID for Fire Water Ring Main• Firefighting Equipment List / Requisitions• Fire and Gas Detection Equipment Schedule• Extinguishing Systems Design (Where/if applicable) of fixed fire extinguishing systems (e.g. foam, carbon dioxide, clean agent, and/or dry powder systems)• Mobile Fire Fighting Equipment Schedule• Safety Equipment Schedule

Engineering Consultancy Services

- Advice and supervision of all project phases from the earliest stages to start-up
- Direct assistance to client in project definition and prefeasibility stages
- Pre-FEED engineering and FEED tender production and bid evaluation
- FEED supervision and review
- Design and EPC tender evaluation, contract preparation and assistance during negotiation with contractors
- Provision of project management teams including project controls and engineering
- Provision of satellite teams to supervise design in contractor offices
- Value management
- Planning, schedule and logistics management
- Risk management
- Construction supervision and management
- QA/QC, inspection and safety management
- Commissioning, training and handover

Operating Manuals and Procedures

- Standard Operating Manuals
- Standard Operating Procedures

As-Built Drafting Service

- RLMUs
- Updated Drawings
- Updated Database/Model

Independent Verification Services (IVS)

Design Verification and Appraisal

- Design Verification Study

Independent Verification Bodies (IVB) & Technical Integrity Verification (TIV)

Project Management Consultancy Services

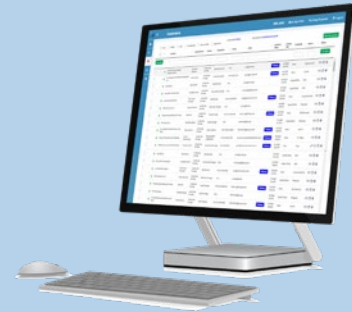
- Project Execution Plan
- Health, Safety and Environment (HSE) Plans
- Document Control
- Procurement Expediting
- Logistics Support
- Project schedule

Fitness For Service (FFS)



AI & SOFTWARE SOLUTIONS

PROVIDING MULTIPLE SOFTWARE SOLUTIONS TO EVERY BUSINESS DEMANDS AND REQUIREMENTS



VAIL-Plant® (Asset Integrity Management System)

- Pressurized Equipment Management System (PEMS)
- Pipeline Integrity Management System Onshore (PIMSON)
- Pipeline Integrity Management System Offshore (PIMSOFF)
- Structure Integrity Management System (SIMS)
- Pressure Safety Valve & Relief Valve Management System (PSVMS)
- Electrical, Instrumental and Rotary Management System (EIRMS)
- Lifting Equipment Management System (LEMS)
- Well Integrity Management System (WIMS)
- Civil Integrity Management System (CIMS)
- Cathodic Protection Management System (CPMS)
- Hull Integrity Management System (HIMS)
- Flexible Riser Integrity Management System (FRIMS)
- Computerized Maintenance Management System (CMMS)
- Asset Performance Management System (APMS)
- Inspection Scheduling Management System (ISMS)
- Enterprise Resource Planning System Interface (ERP)

VAIL-PHA® (Process Hazard Analysis)

VAIL-CRM® (Customer Relationship Management)

VAIL-PSRA® (Petrol Station Risk Assessment)

VAIL-HRMS® (Human Resource Management System)

VAIL-MTS® (Material Tracking System)

VAIL-Flow® (Workflow Management)

VAIL-ERP® (Enterprise Resource Planning)

VAIL-CTR® (Cost, Time & Resources Management)

VAIL-AIPS® (Asset Integrity Process Safety Management System)



AUDITS AND ASSESSMENTS

OHSAS Safety Audits

Firefighting System Adequacy Audits

Technical Audits

Regulatory Compliance Audits

Environmental Audits

Flammable Storage Facility Audits

Process Safety Management (PSM) Audits

Electrical Audits

Structural Audits



ISO CONSULTANCY AND TRAINING SERVICES

Certification and Training includes but not limited to:

ISO 9001	Quality Management System	ISO 45001	Occupational Health and Safety Management Systems
ISO 14001	Environmental Management System	ISO 50001	Energy Management System
OHSAS 18001	Occupational Health and Safety Management Systems	ISO 55001	Asset Management System



DATA MANAGEMENT AND ANALYTICS

Data Management	Data Governance
Business Intelligence / Analytics	Enterprise Data Management

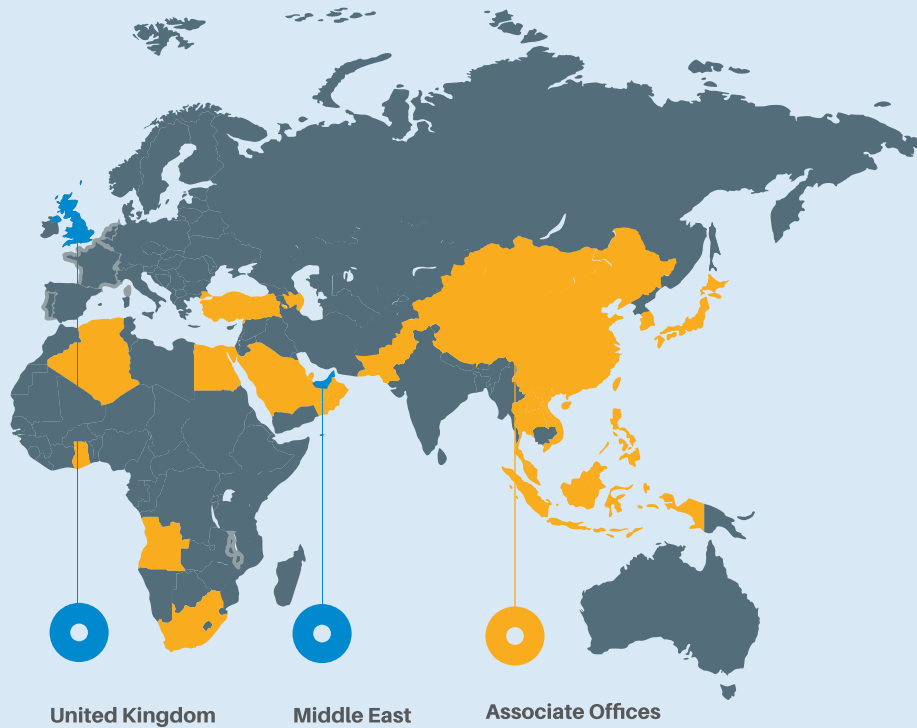
Some of Our Clients



We aim to provide holistic solutions for all your asset requirements.



Velosi **Worldwide**



United Kingdom

Middle East

Associate Offices



UK Office (Corporate Office)

United Kingdom (Jersey)



Middle East Office (Headquarters)

United Arab Emirates (Abu Dhabi)



Associate Offices Worldwide

Algeria, Angola, Bahrain, Brunei, Cambodia, China, East Timor, Egypt, Ghana, Indonesia, Japan, Kuwait, Laos, Malaysia, Mongolia, Myanmar, Oman, Pakistan, Philippines, Qatar, Saudi Arabia, Singapore, South Africa, South Korea, Taiwan, Thailand, Turkey, Vietnam

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