SINCE 1982

VELOSI
INTEGRITY & SAFETY
PAKISTAN (PVT.) LTD.

www.velosiaims.com
About Velosi

Velosi is a global leader in providing a broad spectrum of end-to-end Consultancy Services in the fields of Third Party Inspection (TPI), Vendor Inspection, Statuary Inspection, Certification, Testing, Asset Integrity Management, HSE, Engineering Services, Manpower Services and Software Solutions to clients in the FMCG, pharmaceutical, energy, mining, and oil and gas industries around the world.

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.

INSPECTION, TESTING & CERTIFICATION

<table>
<thead>
<tr>
<th>Third-Party Inspection (TPI)</th>
<th>Industrial In-Services Inspection</th>
<th>Non-Destructive Testing (NDT) and Corrosion Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Project Quality Management System</td>
<td>• Pressure Vessel In-Service Inspections</td>
<td>• Conventional Non-Destructive Testing</td>
</tr>
<tr>
<td>• QC Surveillance</td>
<td>• Pipeline In-Service Inspections</td>
<td>• Advanced Non-Destructive Testing</td>
</tr>
<tr>
<td>• Vendor Inspection/Surveillance &amp; Expediting Services</td>
<td>• Storage Tank In-Service Inspections</td>
<td>• Remote Visual Inspection (RVI)</td>
</tr>
<tr>
<td>• Pipe Mill Surveillance and Steel Mill Inspection</td>
<td>• Corrosion Under Insulation (CUI)</td>
<td></td>
</tr>
<tr>
<td>• Plant Condition Based Maintenance Monitoring (CBM)</td>
<td>• Evaluation and Monitoring of Cathodic Protection (CP) System</td>
<td></td>
</tr>
</tbody>
</table>

Technical Training

• Mobius Institute Vibration Analysis CAT II and CAT III
• Riggers Training
• Crane Operator Certifications & Training
• Fork Lifter Operators Certifications and Training
• Training on IMS (Integrated Management System)
# Lifting Equipment Inspection, Testing and Certification

- Mobile Cranes and Overhead Cranes Inspection as per LEEA
- Chain Blocks and Slings Inspection
- Forklifts and Racks Inspection
- CAT - V Inspection for Mobile Cranes
- Elevators and Escalators Inspection

# Testing/Analysis/Calibration

- Testing and Calibration of:
  - High and Low-Pressure Equipment
  - Electrical Instruments
  - Temperature Equipment
  - Force and Torque Equipment
  - Dimensional Equipment
  - Miscellaneous Equipment
  - Weighing Bridges
  - Storage Tanks Approved by API Methods

# 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

## Wellhead Integrity Management System (WHIMS)
- Formulation of Asset Register
- Identification of Applicable Damage Mechanism / Degradation 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

<table>
<thead>
<tr>
<th>Workshop Facilitation</th>
<th>Risk Assessment</th>
<th>Drilling HSE Consultancy Services (Onshore &amp; Offshore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Hazard Identification (HAZID)</td>
<td>- Quantitative Risk Assessment (QRA)</td>
<td>- HSE Audit, Survey &amp; inspection Study</td>
</tr>
<tr>
<td>- Hazard and Operability (HAZOP)</td>
<td>- Fire &amp; Explosion Risk Assessment (FERA)</td>
<td>- Complete Rig Inspection Study</td>
</tr>
<tr>
<td>- Safety Integrity Level (SIL)</td>
<td>- Building Risk Assessment (BRA)</td>
<td>- Rig Acceptance Survey Study</td>
</tr>
<tr>
<td>- Simultaneous Operations (SIMOPS)</td>
<td>- Fire and Gas Mapping Study</td>
<td>- Rig Condition Survey Study</td>
</tr>
<tr>
<td>- Constructability Review</td>
<td>- Emergency System Survivability Analysis (ESSA)</td>
<td>- Drop Object Survey/Inspection/ Audit Study</td>
</tr>
<tr>
<td>- Bow-Tie</td>
<td>- Evacuation Escape and Rescue Analysis (EREA)</td>
<td>- Safety Case Study</td>
</tr>
<tr>
<td>- ALARP Demonstration</td>
<td>- Dropped Object Study</td>
<td>- Working at Height Audit Study</td>
</tr>
<tr>
<td>- Inherent Safe Design (ISD) Review</td>
<td>- Hazardous Area Classification</td>
<td>- Rig Move Audit Study</td>
</tr>
</tbody>
</table>

## 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

### Waste Management Consultancy

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

### Estidama/Sustainability/Green Building Consultancy

### 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
- 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
- Pre-commissioning and Commissioning Manual
- Operating & Maintenance Manual

#### Civil and Structural Design
- 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

#### Piping Design
- 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
- Area plans
- Layout drawings
- One line diagrams showing interlocks, 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

#### Instrumentation and Controls
- 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

#### Firefighting and Safety
- 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

### Pipeline Integrity Services
- Pipeline Construction Quality Services
- External Corrosion Direct Assessment (ECDA)
- Guided Wave Pipeline Screening
### Operating Manuals and Procedures
- Standard Operating Manuals
- Standard Operating Procedures

### Design Verification and Appraisal
- Design Verification Study

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

### As-Built and Drafting Service
- RLMUs
- Updated Drawings
- Updated Database/Model

### Software Solutions
Providing multiple software solutions to every business demands and requirements

<table>
<thead>
<tr>
<th>SOFTWARE SOLUTIONS</th>
<th>PROVIDING MULTIPLE SOFTWARE SOLUTIONS TO EVERY BUSINESS DEMANDS AND REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAIL-Plant (Asset Integrity Management System)</td>
<td>VAIL-CRM (Customer Relationship Management)</td>
</tr>
<tr>
<td>Pressurized Equipment Management System (PEMS)</td>
<td>Civil Integrity Management System (CIMS)</td>
</tr>
<tr>
<td>Pipeline Integrity Management System Onshore (PIMSON)</td>
<td>Cathodic Protection Management System (CPMS)</td>
</tr>
<tr>
<td>Pipeline Integrity Management System Offshore (PIMSOFF)</td>
<td>Hull Integrity Management System (HIMS)</td>
</tr>
<tr>
<td>Structure Integrity Management System (SIMS)</td>
<td>Flexible Riser Integrity Management System (FRIMS)</td>
</tr>
<tr>
<td>Pressure Safety Valve &amp; Relief Valve Management System (PSVMS)</td>
<td>Computerized Maintenance Management System (CMMS)</td>
</tr>
<tr>
<td>Electrical, Instrumental and Rotary Management System (EIRMS)</td>
<td>Asset Performance Management System (APMS)</td>
</tr>
<tr>
<td>Lifting Equipment Management System (LEMS)</td>
<td>Inspection Scheduling Management System (ISMS)</td>
</tr>
<tr>
<td>Wellhead Integrity Management System (WHIMS)</td>
<td>Enterprise Resource Planning System Interface (ERPI)</td>
</tr>
<tr>
<td>VAIL-PHA (Process Hazard Analysis)</td>
<td>VAIL-HRMS (Human Resource Management System)</td>
</tr>
<tr>
<td>VAIL-PSRA (Petrol Station Risk Assessment)</td>
<td>VAIL-Flow (Workflow Management)</td>
</tr>
<tr>
<td>VAIL-MTS (Material Tracking System)</td>
<td>VAIL-ORP (Online Reporting Portal)</td>
</tr>
<tr>
<td>VAIL-ERP (Enterprise Resource Planning)</td>
<td>VAIL-CRM (Customer Relationship Management)</td>
</tr>
<tr>
<td>VAIL-CTR (Cost, Time &amp; Resources Management)</td>
<td>VAIL-Feedback</td>
</tr>
</tbody>
</table>

### Audits and Assessments

<table>
<thead>
<tr>
<th>OHSAS Safety Audits</th>
<th>Firefighting System Adequacy Audits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Audits</td>
<td>Regulatory Compliance Audits</td>
</tr>
<tr>
<td>Environmental Audits</td>
<td>Flammable Storage Facility Audits</td>
</tr>
<tr>
<td>Process Safety Management (PSM) Audits</td>
<td>Electrical Audits</td>
</tr>
<tr>
<td>Structural Audits</td>
<td></td>
</tr>
</tbody>
</table>

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![Software Solutions Image](image-url)
ISO CERTIFICATION AND TRAINING SERVICES

Certification and Training includes but not limited to:

<table>
<thead>
<tr>
<th>ISO</th>
<th>Description</th>
<th>HACCP</th>
<th>Hazard Analysis &amp; Critical Control Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 9001</td>
<td>Quality Management System</td>
<td>HACCP</td>
<td></td>
</tr>
<tr>
<td>ISO 14001</td>
<td>Environmental Management System</td>
<td>ISO 20000</td>
<td>Information Technology - Services Management System</td>
</tr>
<tr>
<td>ISO 22000</td>
<td>Food Safety Management System</td>
<td>ISO 13485</td>
<td>QMS - Medical Devices Quality Management Systems</td>
</tr>
</tbody>
</table>

DATA MANAGEMENT AND ANALYTICS

<table>
<thead>
<tr>
<th>Data Management</th>
<th>Data Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Intelligence / Analytics</td>
<td>Enterprise Data Management</td>
</tr>
</tbody>
</table>

Some of Our Clients

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