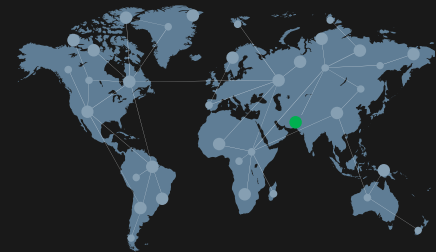




SOLUTIONS

COMPANY PROFILE

Innovating for *Future*



COMPANY OVERVIEW

NICON Solutions is primarily a Consulting & Project Management firm with expertise in Oil, Gas, Energy, Construction, Renewable and Process Safety. Our core expertise includes PMO development, project management consulting, Downstream Oil & Gas Engineering, Construction Management, Construction Optimization, Safety & Risk Management.

We help projects managers & business leaders to apply project and portfolio management practices that drive performance and operational efficiency. Our integrated approach of delivering a project is the key to our excellence where target KPIs are available and traceable by Leaders and Managers.

Our Consulting firm is specialized in Downstream Oil Business with core focus on bulk oil terminal developments. We also perform Risk Assessment & Construction Safety Analysis to deliver required fit for purpose control & barriers to run business with safety.

We have four Divisions

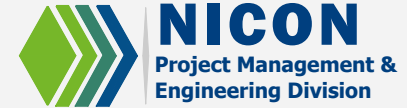
- Project Management & Engineering Division
- Smart Construction Division
- Renewable Energy Division
- Safety & Risk Management Division



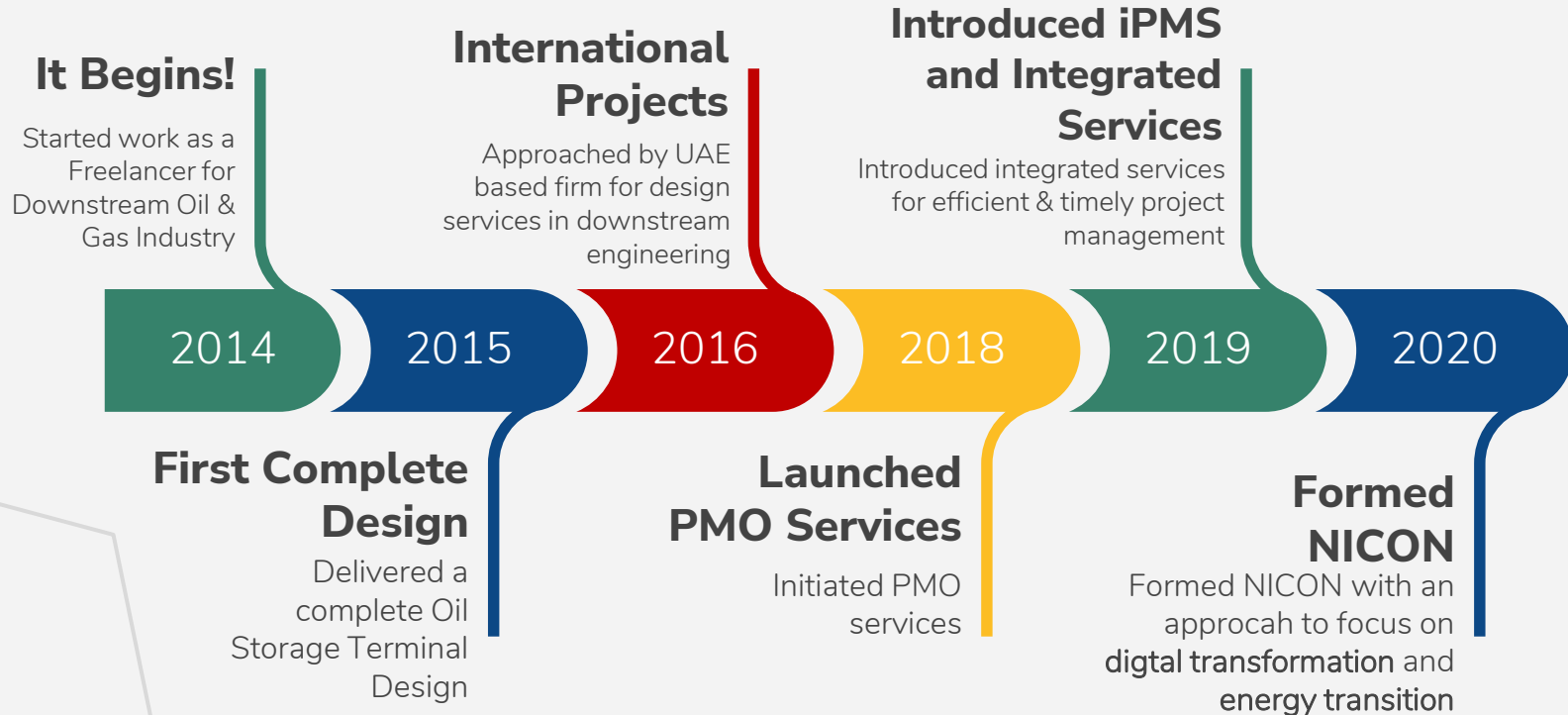
OUR FOUNDERS

Nida Iqbal Shah Founder & CEO

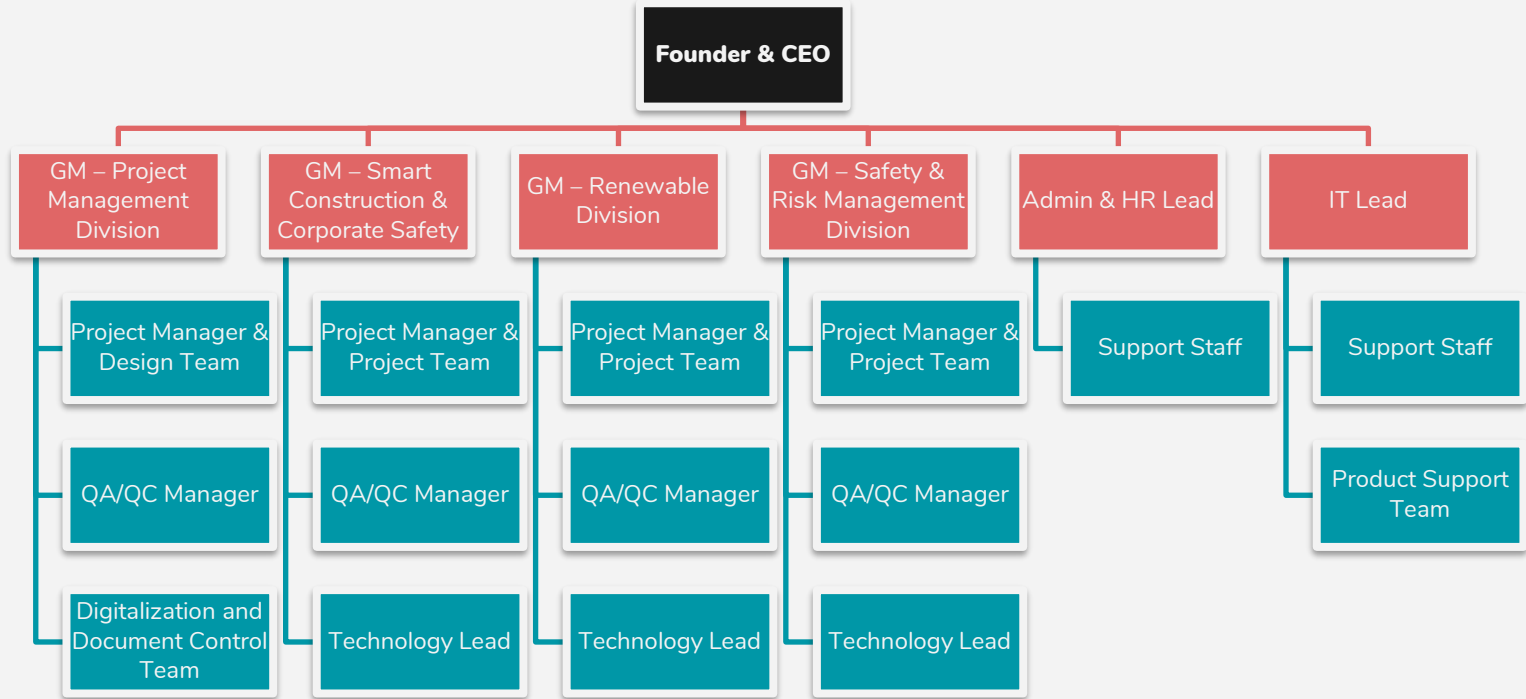
Founded NI Consultants primarily as an Engineering & Project Management Consultancy company in 2014. Later changed the name to NICON Solutions in 2018 to focus on energy transition solutions.



Our Journey



Our Team



List of Projects

Project Name	Client	Project Remarks
Design Of Daulatpur Terminal	Fast Oil Pvt. Ltd, Pakistan	2 x HSD Tanks (DxH : 15 m x 14.63 m) – 2 kT 1 x Mogas Tank (DxH : 23 m x 6 m) – 1.8 kT
Design Of Baluchistan Terminal	Fast Oil Pvt. Ltd, Pakistan	1 x HSD Tank (DxH : 22 m x 13.5 m) – 4.35 kT 1 x Mogas Tank (DxH : 22 m x 13.5 m) – 3.84 kT 1 x U/G Mogas Tank (DxH : 23 m x 3 m)
Design Of Shikarpur Terminal	Fast Oil Pvt. Ltd, Pakistan	1 x HSD Tanks (DxH : 15.84 m x 14.63 m) – 2.1 kT 1 x Mogas Tanks (DxH : 15.84 m x 14.63 m) – 2.1 kT 10" HSD pipeline design
Design of Warehouse	Best Petroleum Pvt. Ltd, Pakistan	Multiple Warehouse
Design of Underground Storage Tanks	SMART Technical Services, UAE	1 x U/G Mogas Tank (DxH : 2.5 m x 6 m) With Cathodic Protection System
Stress Analysis of Bitumen Pipeline	SMART Technical Services, UAE	
Heat Exchanger Design	Thilawa, NIHC, Myanmar	
Fire Fighting System Design at Mina Al Fahal Terminal	SMART Technical Services, Oman (For Shell Oman)	New Fire Pump Addition and water capacity enhancement + Foam Line Addition
Internal Floating Roof Installation at Mina Al Fahal Terminal	SMART Technical Services, Oman (For Shell Oman)	Product change form Jet to Mogas and installation of new IFC
Naptha Conversion project at Mina Al Fahal Terminal	SMART Technical Services, Oman (For Shell Oman)	New Naptha Ship Loading addition
Single Buoy Mooring (SBM) Relief System for Subsea Pipeline	SMART Technical Services, Oman (For Shell Oman)	Automated Relief System for Subsea Pipeline
Automation of Town Border Station	Avanceon Ltd	Fed Via Solar Panels without any external power
Stress Analysis of 30" & 20" Pipeline – Sui Southern and Northern Header	Pakistan Petroleum Limited	

BRIDGING ENERGY TRANSITION



OUR MISSION

To provide a transparent engineering & project management platform to Engineers & Project Managers where technical & project knowledge is available & accessible on cloud platforms giving an edge to monitor, provide, modify, control & execute projects timely, effectively and transparently.



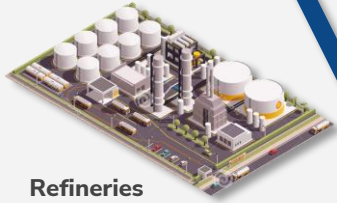
OUR VISION

To become the world's most loved, most inspired, and most profitable energy consultation company.

Our Divisions



Upstream



Refineries



Solar Parks



Power Plants

Mid- stream



Storage Terminals



Pipelines



Transmission Lines,
Electrical Grids &
Wind Turbines

Downstream & Renewables



Transportation



Petrol Stations



Digital
Transformation



Aviation Industry



Automation



Smart Grids &
Renewables



NICON

**Project Management &
Engineering Division**

**Engineering Consultancy
Services**



Engineering Consultancy

Feasibility Studies / FEED / Basic Engineering / Process Engineering

- Feasibility Studies / Cost-Benefit Analysis / Technology Selection
- PFDs / UFDs / Process Simulations
- Heat & Material Balance
- Hydraulic Calculations (Static/Dynamic)
- Equipment Sizing
- P&IDs
- Technical Safety Layouts as per Local / Codes requirements
- Venting Calculations
- Hazardous Area Calculations as per EI 15
- Surge Analysis

Mechanical Engineering (Tanks/Piping)

- Stress Analysis
- 3D Modelling on CAD
- Piping Layouts
- Isometric Drawings
- Bill of Materials
- Storage Tank Design as per API 650
- Pressure Vessel Design
- All types of storage tank designs
- Tank Lifting Modelling

As-Built & Reverse Engineering / Gap Analysis / Evaluations

- As-Built Data Collection for Brown Fields
- Design Basis Development from existing Data
- Gap Analysis
- Efficiency Analysis
- As-built Piping Layouts
- As-built Electrical Single Line Drawings / Cable Route Layouts
- As-built Civil Layouts / Underground Facilities layouts
- As-built Instrumentation Drawings / Termination Drawings / Layouts / Loop Drawings
- Development of Data Banks for Existing Site Data
- Technical and Commercial Bid Evaluations

Civil & Structural Engineering

- Structure Analysis on STAAD PRO
- Foundation Engineering (Equipment Foundations Static & Dynamic)
- Storm Water / Oily Water System Calculations / Drawings / Layouts
- Steel Structures
- Plant / Office Buildings
- Bill of Materials
- Road & Paver Design
- Civil Gap Assessments

Digital Transformation / Automation / Instrumentation

- DCS/SCADA System Design & Development
- Industrial and Plant Automation
- Instrumentation Drawings (Loop / termination / Wiring)
- Instrument Sizing
- Layouts (Instruments/F&G/Cable Routing)
- Integrated Instrumentation design on common database (Loop/Hook-up/Specifications/Schedules/I/O list)

Electrical & Communication Engineering (HV/MV/LV)

- Single Line Development
- Short Circuit Analysis
- Electrical Layouts (Cable Routing / Communication / Fire Alarm / Earthing / Equipment)
- Power Flow Analysis
- Arc Flash Analysis
- Equipment Sizing (Genset / Transformer / Motor)
- Energy Audits
- Cathodic Protection Systems for U/G Pipelines/Structures
- Solar Systems Integration



Engineering Consultancy

Webinars and Trainings for Clients

Electronic Data Management System

Our **SEED DMS** has all the documents electronically available on cloud to minimize paper work and have more control on document tracking and revision control

Latest Library for Codes/Standards

Trained team of Designers & Engineers

One of the key aspects we differ with other is due to our resilient training programs to increase capacity, capability and competency of engineers/designers with latest technologies and codes/standards.

State of the Art Simulation Software(s)

Electronic Proposal & Invoicing System

Our cloud based proposal and invoicing system is directly linked with project manhours and contract conditions to ensure project proposals are delivered timely and traceability shall be maintained. Client has a dedicated portal to review project proposal & invoicing status.



Real Time Project Tracking

NICON believes in transparency and accurate time tracking to ensure timely delivery of solutions to client. Our **Cloud based Project ERP** makes it happen for us

Dedicated HRM (ICE-HRM)

Our cloud based HRM allows us to track project manhours with every employee having access to online portal

Inter-disciplinary Coordination

Efficient Workflows

From the first day, we have introduced automated Cloud based workflows to review documents/drawings against pre-determined quality and technical checks. This is all defined in **SEED Document Management System (DMS)**.

Integrated Project Management System

Design Thinking Mindset

We Integrate!



NICON

Project Management &
Engineering Division

Project Management
Services



Project Management Consultancy

Project Management Office Services

We work in 3 ways:

- Deploying Clients' process management practices throughout the process
- Developing templates, trainings & services based on Gap Assessment
- Directing & Developing entire project based on NICON Project Management Practices.

WE PROVIDE MANPOWER TO DO THE PROJECTS !



Project Management Consultancy & Business Integration

We help Clients to develop and deploy their own Project Management model based on Company maturity and strategy. Our consultancy services are targeted towards EPC Engineering Companies and Contractors.

WE DEVELOP PROJECT MANAGEMENT ROADMAPS FOR COMPANIES!

NICON iPMS

NICON iPMS is a solution dedicated for EPC Engineering Companies, Consultants and Contractors to help the plan, execute and handover project in a coordinated way focusing on key performance indicators such as cost, schedule, scope, quality, safety etc.

Project Management Office Services



PMOs are increasingly being entrusted with more strategic responsibilities. Organizations continue to be challenged with the consistent application of defined project management processes, resource planning, forecasting, and other business demands. A well-managed Project Management Office (PMO) can address these challenges in order to ensure successful project delivery. We work with clients when they need to deploy a new PMO, operate a PMO, or optimize and enhance an existing PMO to meet a set of evolving challenges, functions, and services.

What we do!

- Based on client demand we deploy PMO services in three ways:
 - a) Deploying Clients process management practices throughout the process
 - b) Developing templates, trainings & services based on Gap Assessment
 - c) Directing & Developing entire project based on NICON Project Management Practices.
- Project Roadmap Development
- Development of Project Management Templates
- Development & Implementation of Decision Gates

**We deal only in Engineering projects*



Project Management Consultancy & Business Integration



NICON Solutions is the niche provider clients seek out when they are looking to implement business-enhancing, services that improve project and portfolio performance.

NICON Solutions helps you improve PMO performance with proven project management consulting and time-tested approaches that have been implemented in hundreds of organizations.

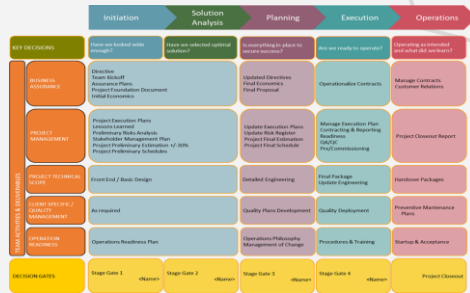
What we do!

- Company's current maturity assessment and project management gaps analysis
- Mathematical modelling of Return on Investment (ROI) considering the tangible and intangible benefits of the project structure.
- Process model assessment and restructuring as required for Business Process
- Deployment of Project Management Integration Application
- Developing & implementation of documents templates such as Project Management Plans, Risk management Plans, Electronic Document Management System, Project Schedules, Reporting templates etc.
- Establishment of the executive reports based on NICON's proprietary methods
- Gaps Assessment and analysis of the team to be allocated in the project office
- Implementation of Process Gates as per Clients' Process
- Development of Training Programs
- Dedicate Manpower services for Project Management as per Client Requirements



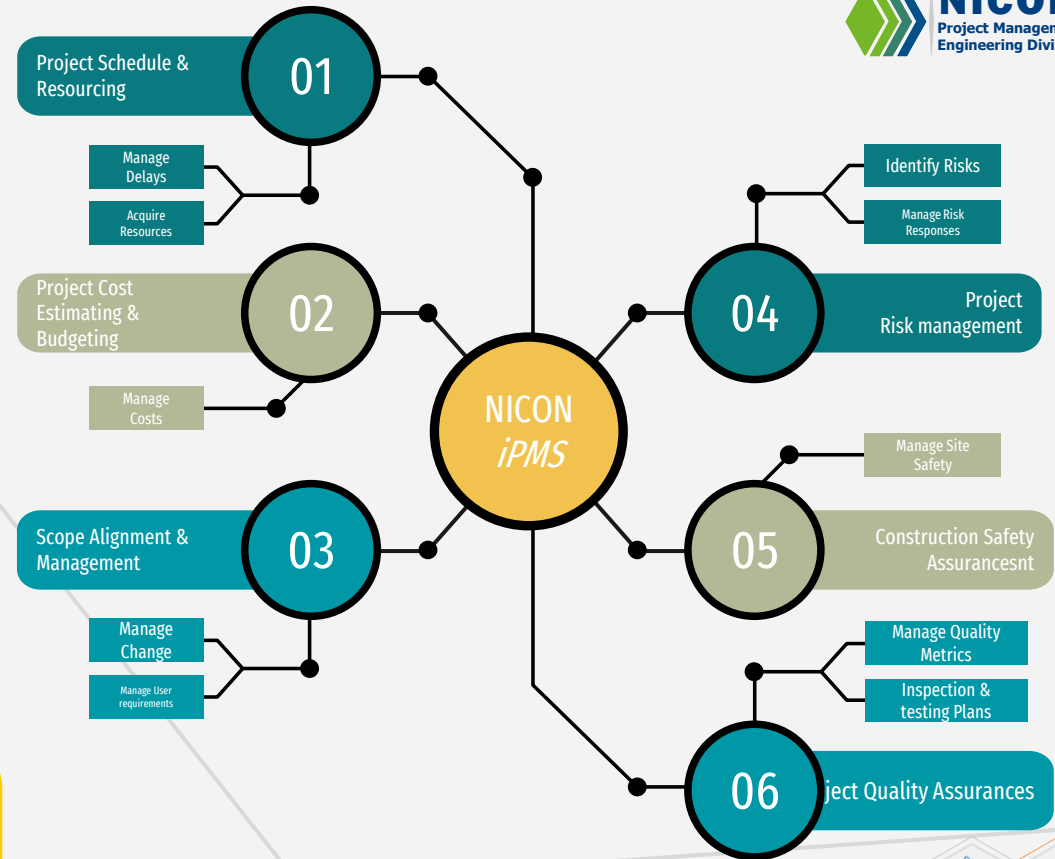
NICON iPMS

NICON *iPMS* is specifically developed to manage complicated Engineering & Construction Project with special focus to brownfield projects. NICON *iPMS* is a project delivery framework comprising of multiple assurance templates to manage project from its initiation to its handover with dedicated process gates to ensure project meet its objectives timely.



NICON Integrated Project Management Framework

In short iPMS avoid mishandling of projects by providing an effective delivery oriented approach





NICON

Safety & Risk
Management Division

Our Services



Safety & Risk Management Services

Hazard & Radiation Modeling / 3D F&G Modeling / Gap Analysis

- Heat Radiation Modeling (FRED or DNV Phast)
- Explosion Analysis and Studies
- Gap Analysis of Facility (Fire Fighting / F&G Mapping)
- 3D F&G Mapping Studies (3D)
- 3D Ventilation & Gas Dispersion Studies

Quantitative & Qualitative Risk Assessment / ALARP Demonstration

- Risk and Hazard Analysis using RAM (Fire / Unignited Release / Workplace Safety / Operational Hazards / Manual Handling)
- Qualitative Risk Assessments (Bowtie / Probability and Impact Matrix)
- Quantitative Risk Assessments (LOPA / Decision Tree Matrix / Probabilistic / Monte Carlo Analysis)
- Integrated Cost & Schedule Risk Assessment
- Barrier Management Consultancy
- ALARP Demonstration

Process Safety (HAZOP/HAZID/HEMP)

- HAZOP Studies on Proprietary Software with RAM Analysis
- HAZID Studies on Proprietary Software with RAM Analysis
- HEMP Studies on Proprietary Software with RAM Analysis
- Electrical & Control HAZOP Studies
- Hazardous Area Classification (EI Part 15)
- SIMOPS (Simultaneous Operation) Studies
- What-If Analysis



SIL Assessment/Verification Studies

- SIL Assessment Studies with LOPA
- SIL Verification Studies
- ESD System Procurement Assistance as per SIL Requirements

Construction & Site Safety

- Constructability Reviews
- Drop Object Studies
- Construction Traffic / Journey Management Plans
- Emergency Evacuation & Response Plans
- Scaffolding Assessments / Barrier Management & Controls
- Energy Isolation Barrier Management & Controls
- Work at Height Barrier Management & Controls
- Lifting & Hoisting Studies
- Tank Lifting Studies
- Temporary Site Facilities Assessment
- Occupational Health & Safety Assessment

Trainings

- Occupational Health & Safety
- IOGP/CSSS Trainings
- Construction Safety
- Process Safety
- Hazards Identification
- SIL Assessment
- In-house and online training sessions as per client PTW requirement



NICON

Smart Construction
Division

Our Services



Smart Construction Services

Construction Project Management

- e2e Construction Project Management
- Deployment of Construction Supervision Crew
- Project Status Assessments
- Construction Management & Administration
- Construction Contractor Assessments
- Progress Monitoring & Reporting
- Project Cost Analysis
- Manpower & Resource Assessments
- Change Order Assessments
- Schedule Review, Monitoring and schedule recovery assessments
- Periodic / Full-time Field Inspections
- Property Damage Assessments
- Contract Closeout administration

Quality Assurance & Quality Control

- Development of Client and Project specific inspection & testing plans
- Deployment of Quality Assurance & Control Crew
- Development of QA/QC Forms / Templates
- Services offered for all engineering disciplines (Mechanical/Civil/Electrical/Instrument/Automation)



Smart Inspections

- Unmanned Inspections (Future)
- Forensic Inspections
- Building Integrity & Civil Inspections
- Thermal Imaging for Electrical Substations
- Earthing & Grounding System Inspections

Smart Construction Tools (Future)

- Real Time Data Monitoring
- Construction Resource & Equipment Tracking
- Integrated Machine Control
- Construction Dashboard



NICON
Renewable Energy
Division

Our Services



Renewable Energy

Decarbonization & Carbon Emission Assessments

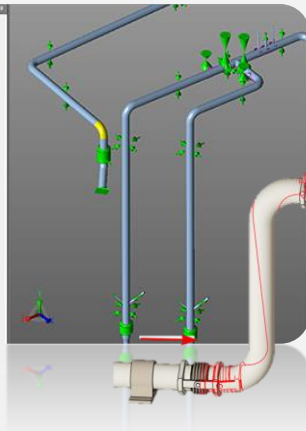
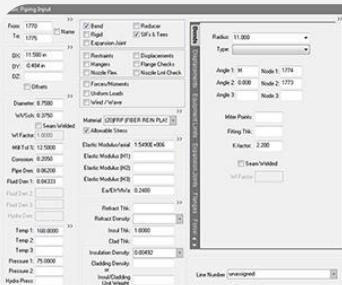
- Carbon Emission Calculations (GHG, CO₂, CH₄, N₂O, SO_x, NO_x VOCs)
- Energy Efficiency Assessments
- Carbon Capture Solutions
- Vapor Recovery Assessments
- Renewable Energy Assessments



Solar Power & Distributed Generation

- Energy Surveys
- Plant Energy Optimization Studies
- Solar Energy Utilization
- Solar Farms / Plant for Residential / Plant / Retail Outlets
- Distributed Generation & Net Metering
- \Emission Surveys & Estimation

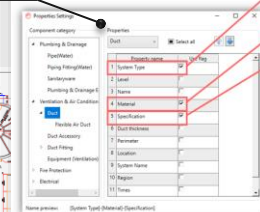
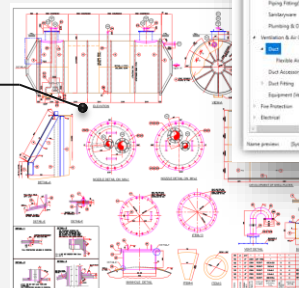
Our Works (Mechanical Engineering – Piping/Tanks)



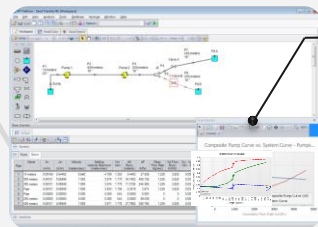
Piping Stress Analysis

U/G Horizontal Tank Drawings

Automated BoQ Generation



Item No.	Description	Unit	Quantity
1	Carbon Steel Pipe 1/2" x 1/8"	kg	11.000
2	Carbon Steel Pipe 1/2" x 1/8"	kg	11.000
3	Carbon Steel Pipe 1/2" x 1/8"	kg	11.000
4	Carbon Steel Pipe 1/2" x 1/8"	kg	11.000
5	Carbon Steel Pipe 1/2" x 1/8"	kg	11.000
6	Carbon Steel Pipe 1/2" x 1/8"	kg	11.000
7	Carbon Steel Pipe 1/2" x 1/8"	kg	11.000
8	Carbon Steel Pipe 1/2" x 1/8"	kg	11.000
9	Carbon Steel Pipe 1/2" x 1/8"	kg	11.000
10	Carbon Steel Pipe 1/2" x 1/8"	kg	11.000

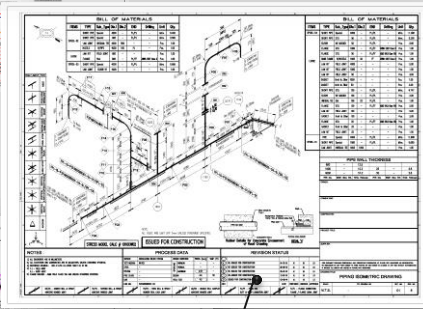
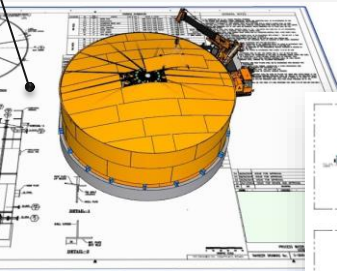
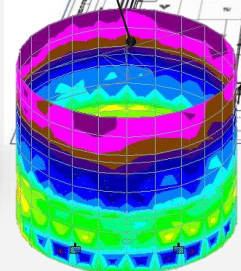
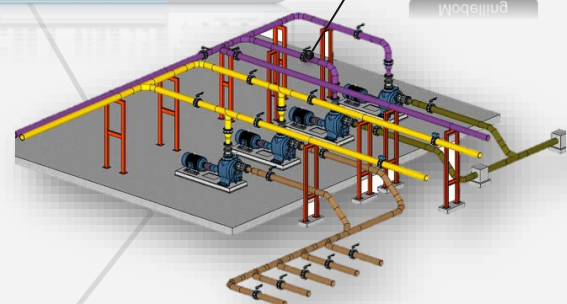


Piping Surge Analysis

Tank Drawings

Tank Calculations

3D Plant Modelling



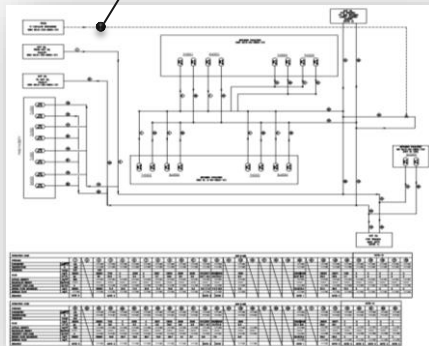
Piping Layouts & Section Views

Piping Isometric Drawings

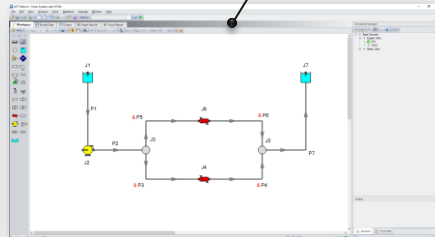


Our Works (Process Engineering / Basic & Detailed Engineering)

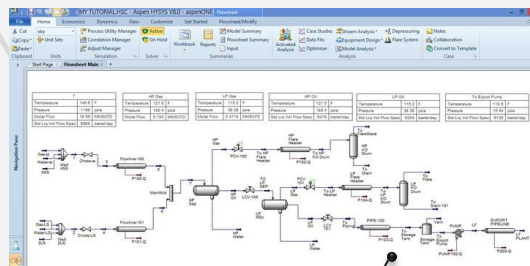
Process Flow
Diagrams



Hydraulic Analysis
(Static & Dynamic)

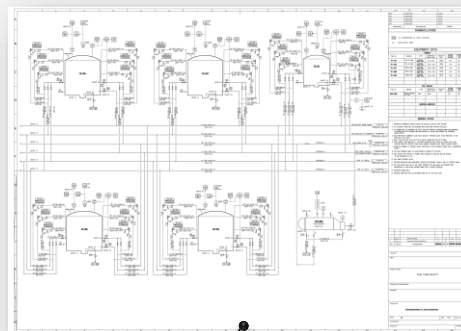


Venting Calculations

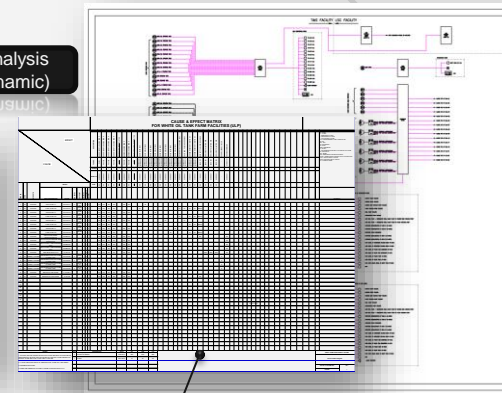


Process
Simulations

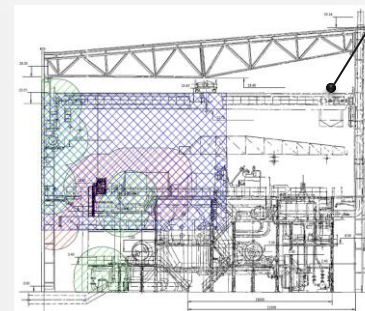
Process & Instrumentation
Drawings



Cause & Effect
Drawings / Matrix



Hazardous Area
Classification Drawings



Our Works (Civil & Structure Engineering)

Structure Drawings

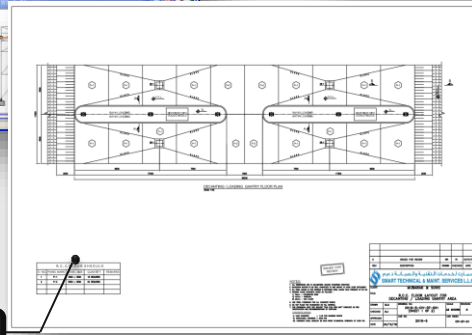
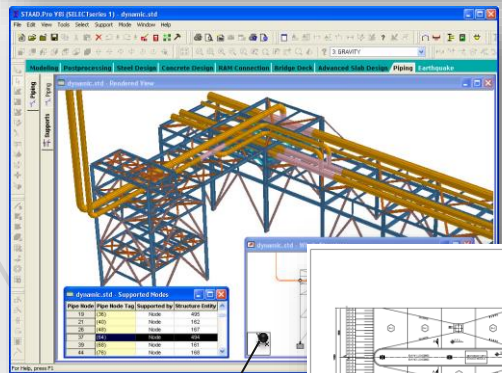
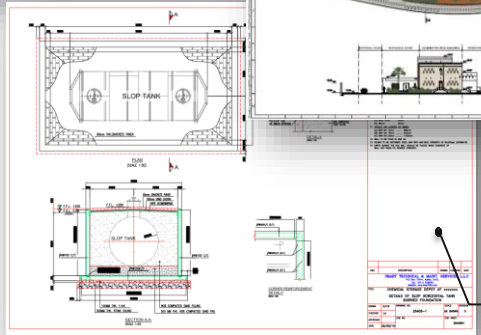
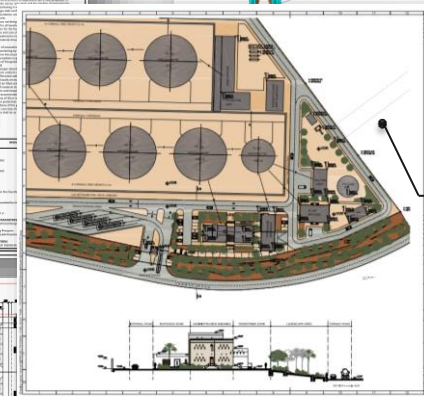
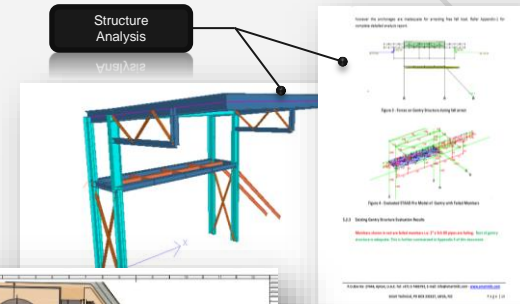
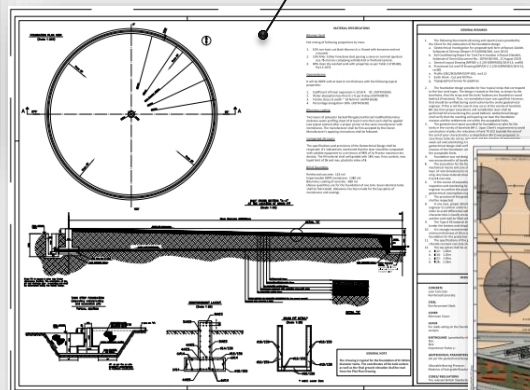
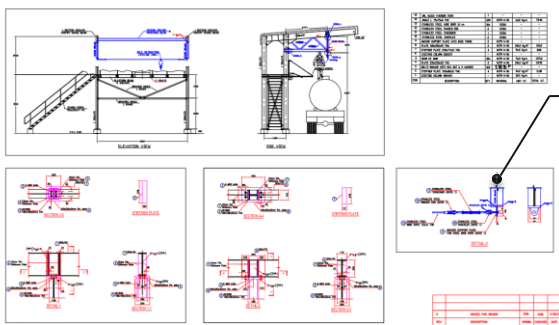
Tank Foundation
Drawing

Structure
Analysis

Detailed Plot Plans

Detailed U/G RCC
Structure Drawings

Retail Outlets Civil
Drawings



Our Works (Digital Transformation / Automation / Instrumentation)

Linked in
Common
Database

Instrument Location
Layouts

Automated Hook-up
Drawings

Automated Data
Sheets

Architecture /
Conceptual Drawings

Automated Loop
Drawings

Instrument Schedule /
IO List

Termination
Drawings

Instrument Sizing /
Control Valve Sizing

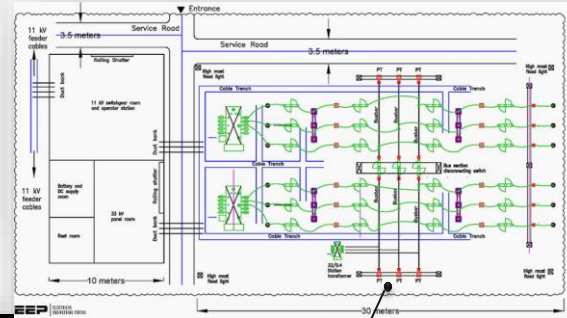
DCS/SCADA
Architecture



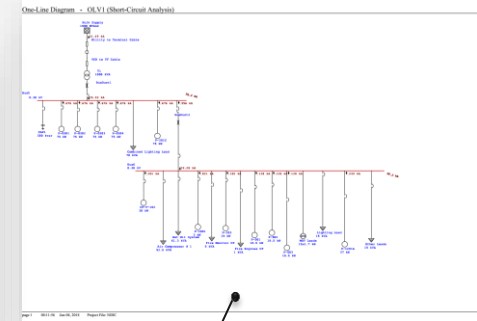
Our Works (Electrical Analysis)



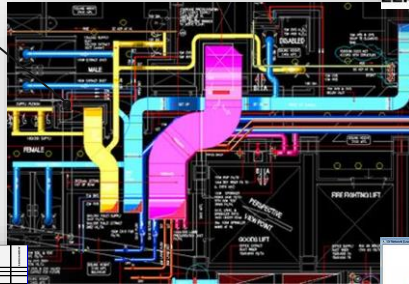
Single Line Drawings



132/11 kV G
Drawings



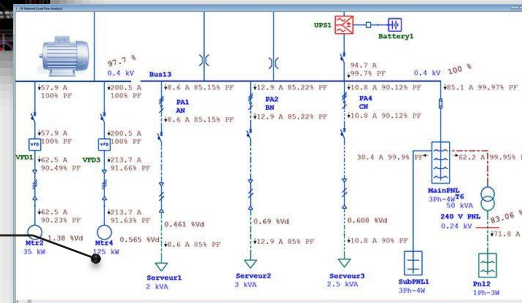
Short Circuit Analysis of Network



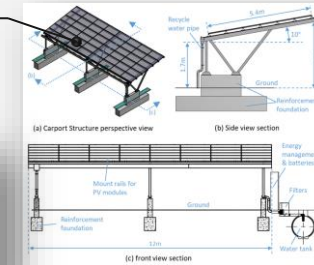
Detailed Layout Drawings
(Cable/Location)

[illegible]

Electrical Load List



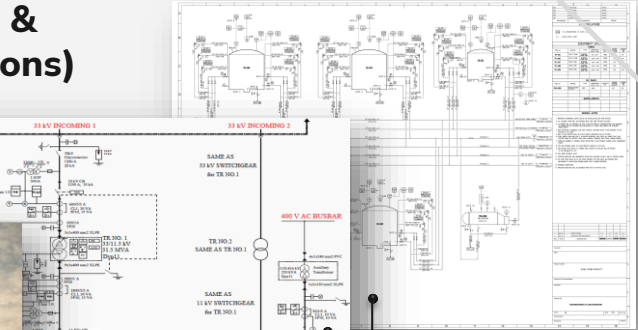
Power Flow Analysis



Solar System Installation Drawings



Our Works (As-Built, Reverse Engineering, Gap Analysis & Techno-commercial Evaluations)

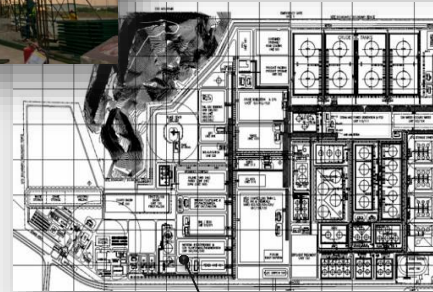


Site Visits / Data
Collection

As-Built
Drawings

Sl. No.	Item	Quantity	Unit	Rate	Amount	Remarks
1
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9
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Technical Bid
Evaluations



As-Built Plot Plans /
Topographic Survey



Contact Us!

Email: contact@nicon.com.pk

Phone/Whatsapp: +92-316-1142096

Or

Scan US!



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Karachi, Pakistan

Social Media:



www.nicon.com.pk



<https://www.linkedin.com/company/nicon-solutions>



<https://www.facebook.com/Nicon.Services>



S O L U T I O N S
Innovating for *Future*

CONTACT US

