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IFLUIDS

ENGINEERING AND CONSULTANCY WLL

Global Reach. Local Focus

Qatar's Premier Consultancy for Process Safety and Design Engineering Services

www.ifluids.com.qa info@ifluids.com.qa +974 7174 4651 / 7082 4588

CONTENT

- About us
- Objectives
- Industry focus
- Our services
- Quality System
- Why iFluids Engineering WLL
- Clientele
- Contact Us

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About Us

iFluids Engineering WLL is an ISO 9001:2015 certified consultancy based in Qatar with certified engineers and 270+ completed projects. We serve a global client base across oil & gas, power, chemical, pharma, fertilizers, automobiles and infrastructure sectors.

- Engineering Design & Consulting
- Process Safety
- Fire Protection
- Asset Integrity
- Loss Prevention
- Environment

Established in 2019

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iFluids GROUP COMPANIES

iFluids ENGINEERING

(INDIA)

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IFLUIDS ENGINEERING

(ABU DHABI)

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(QATAR)

IFLUIDS MALAYSIA

IFLUIDS ENGINEERING & CONSULTING

(SAUDI ARABIA)

Objectives

We aim to be more than a service provider we strive to be a trusted partner in each Client's operational journey, from conceptual design to field implementation.

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Our Approach

We achieve our objective through:

- Cross functional expertise across Engineering, safety, and Environmental domains.
- Use of cutting edge software tools.
- Global project experience from India to the Middle East, with a deep understanding of local regulations.
- A culture built on quality, agility, and accountability ensuring every project is delivered with precision and purpose.

What Drives Us

- To provide innovative engineering design solutions and safety studies that optimize plant efficiency and ensure compliance with global standards.
- To empower Industries to minimize downtime, enhance asset performance, and reduce operating costs through effective integrity and reliability programs.

Trusted Across Sectors

Oil & Gas – Upstream, Midstream & Downstream

Petrochemical & Chemical Plants

LNG Terminals & Storage Facilities

Power Plants & Utilities

FPSOs, Offshore Platforms

Road & Infrastructure

Renewable Energy

Greenfield / Brownfield Projects

Fertilizer Industry

Automobile Industry

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Our services

- Engineering Services
- Process Safety and Risk Management Studies
- Environmental Studies
- Asset Integrity Services

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ENGINEERING SERVICES

iFluids Engineering WLL delivers end-to-end Engineering Services, from conceptual design to detailed engineering. Our expertise ensures safe, reliable, and cost-effective solutions tailored to the unique needs of Oil & Gas, Petrochemical, Power, and Industrial Projects

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PROCESS

- Process Design Basis
- Process Flow Diagrams (PFD)
- Process & Instrumentation Diagrams (P&ID)
- Utility Flow Diagrams (UFD)
- Utility List
- Equipment list
- Line List
- Process Simulation & Report
- Pump Hydraulic Sizing
- Control Valve Sizing
- Equipment Data Sheets
- Surge Analysis
- Operating, Control & Shutdown Philosophies
- Hydraulic Analysis
- Transient Hydraulic Analysis
- Flare & Cold Vent Network Design & Analysis

PIPING & PIPELINES

- Piping Design Basis
- Piping layout/ GA
- Isometric drawings
- Pipe Material selection & Sizing
- Piping stress analysis
- Support drawings/ schedule
- Piping Weight Calculation
- Valve specifications
- Material Take – off (MTO)

CIVIL & STRUCTURAL

- Design Criteria
- Specification for Topographical study
- Geotechnical Survey Specification
- Pipe Support Analysis
- Structural Calculation
- Equipment Foundation Analysis
- Structural Analysis

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MECHANICAL

- Plot plan
- Equipment layout
- Engineering Design Basis
- 3D Modelling
- Material Take – Off
- Feasibility study of new equipment
- As Built Drawings – Entire plant
- Mechanical design & Fabrication drawings – Tanks/ Pressure Vessel /Heat Exchanger
- Equipment's Data sheet
- Vibration Analysis and Pulsation Study

ELECTRICAL

- Basis of Design / Philosophy
- Electrical Protection Philosophy
- Equipment Specification & Datasheet
- Preparation of Single Line Diagram
- Electrical Load List
- Cable sizing & Cable Schedules
- Conceptual Cable Routing (Cable Tray/Trench) Layout
- Substation Layouts
- Emergency Power Load Sizing
- SAFOP/ E-HAZOP Studies

POWER SYSTEM STUDIES

- Load Flow Studies
- Short Circuit Analysis
- Motor –Starting Analysis
- Harmonic Analysis
- Transient Stability Analysis
- Protection Relay Coordination
- Switching Transient Analysis (Insulation Coordination)
- Arc Flash Assessment
- Lightning Protection Study
- Lighting Design & Illumination Study

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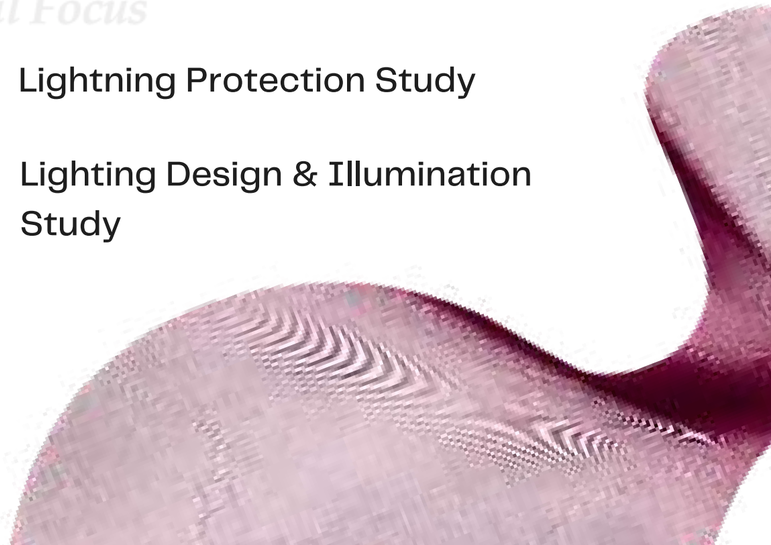

INSTRUMENTATION

- Instrumentation Design Philosophy
- Instrument Location Layouts
- Instrument Cable Schedule and Diagram
- Instrument Data Sheets
- Integrated Control & Safety system (ICSS) Specification
- Control & Safety System Topology Diagram
- ICSS Database Including I/O Schedule and Index
- Control Room Layout Drawing
- Control Narratives
- C-HAZOP

FEASIBILITY & PRE BID ENGINEERING

- Project Design Basis
- Project Risk Register
- Cost Risk Analysis Methodology
- Preliminary Project Execution Strategy
- Operating Philosophy
- Pre-Project planning activities
- Project / Activity Scheduling
- Feasibility and Concept Overview
- Bid Evaluation Services
- Plant System Design

FRONT END ENGINEERING DESIGN (FEED) & DETAILED DESIGN

- Project Design Basis
- Project Risk Register
- Equipment List
- Material Selection
- Operation & Control Philosophy
- Multi-Disciplinary Deliverables
- Typical comment (take-off)

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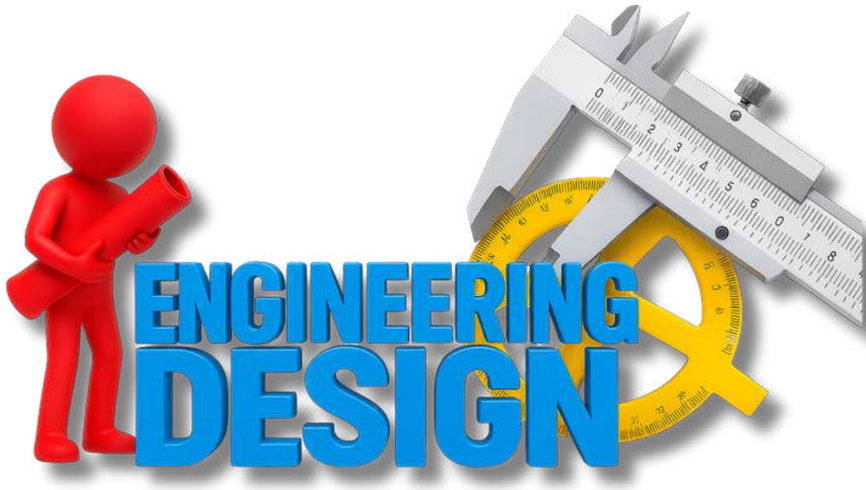

FLAGSHIP PROJECTS

- Adequacy Studies – FS/CO for Dukhan Production Facility Upgrade (DPFU) phase 3-part B – Qatar Energy
- Chemical Compatibility Assessment, Segregation Study and Hazardous Materials Storage Compliance Review – Q-Power – Qatar Energy
- Engineering Deliverables – EPC For Installation of Breathing Air (BA) Cascade System at NFB Offshore Platform) – Qatar Energy LNG
- Process Safety Engineer Support and Deliverables Submission – NFPS Onshore Building and Infrastructure Project COMP9 – Qatar Energy LNG
- Technical HSE Support– FEED– New Port Control Tower Facility in Ras Laffan Port – Qatar Energy
- RAM Study and Value Engineering Study for EPIC FOR AUTOMATION UPGRADE FOR NGL STORAGE AND LOADING FACILITIES, MESAIEED project – Qatar Energy
- RAM STUDY – FEED FOR IMPROVE RELIABILITY OF GAS SUPPLY TO POWER PLANTS – Qatar Energy
- Surge Analysis for EPC OF QE LNG BARZAN ISBL FOR QATAR ENERGY LPG BLENDING PROJECT – Qatar Energy LNG

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FLAGSHIP PROJECTS

- TRANSIENT STUDIES USING PSCAD – PRE-FEED POWER FACTOR IMPROVEMENT FOR ELECTRICAL POWER SYSTEM IN – Qatar Gas Operating Company Ltd
- Surge Analysis for FEED FOR C3/C4 SUPPLY TO RAS LAFFAN PETROCHEMICAL PROJECT (RLPP) – QATAR ENERGY LNG-SOUTH FACILITIES
- Surge Analysis Study for QG FEED for Installation of Dump Valve in Fire water network – Technip Energies, Qatar
- Harmonic study to size the harmonic filter for electro chlorination package – EPIC for common cooling seawater system phase-3 project of Qatar Energy (RLIC) – Medgulf Construction Company WLL
- As-built drawing preparation in Bentley MicroStation Software based on RLMU (redline markup) – DOPET, Qatar
- Engineering Deliverables – Zero Liquid Discharge Project – QAFCO

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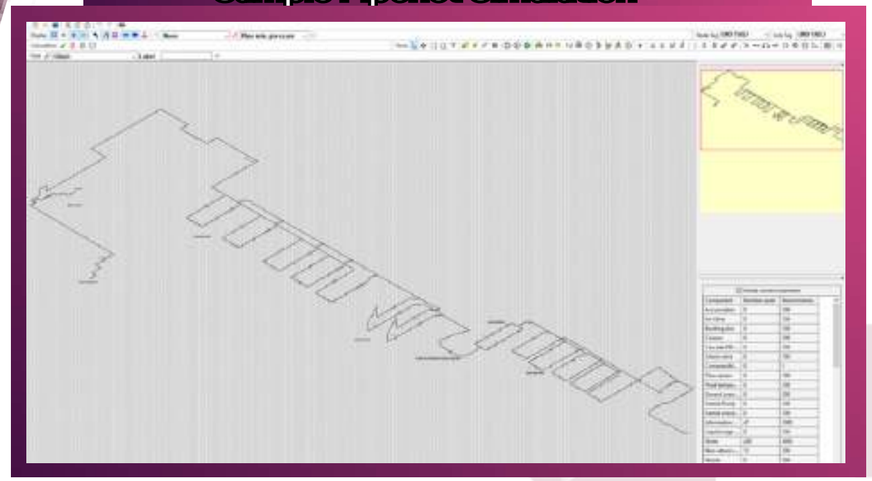
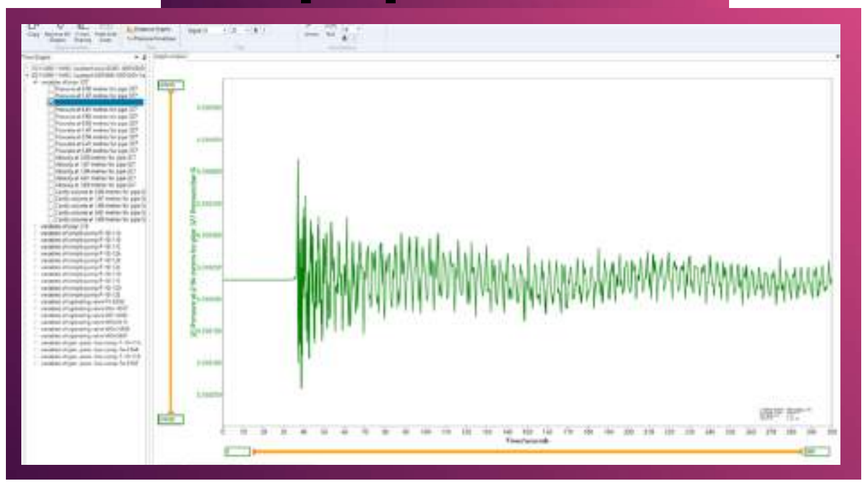
SOLUTIONS IN ACTION

PROCESS DESIGN ENGINEERING

Sample Pipenet Simulation

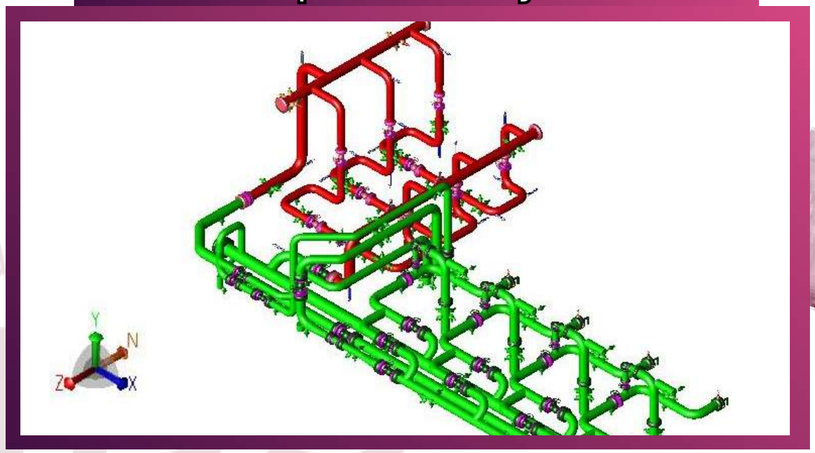


Sample Pipenet Simulation



PIPING & MECHANICAL

Sample Stress Analysis



Sample Static Equipment Layout

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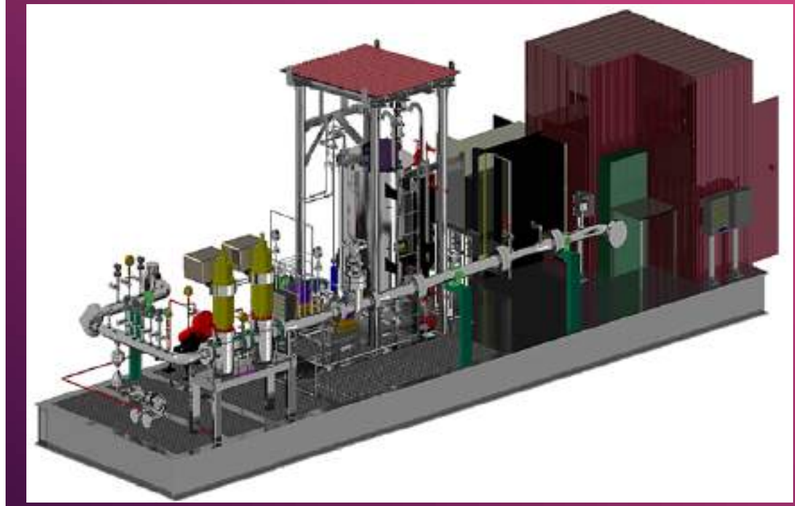
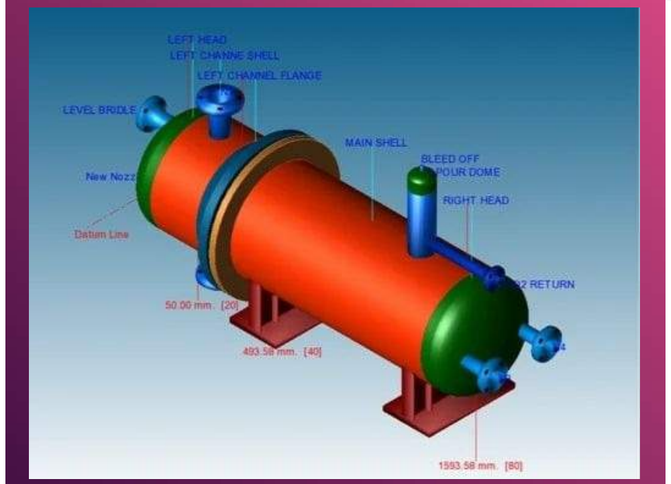
SOLUTIONS IN ACTION – CIVIL ENGINEERING

GAS MODULAR SKID

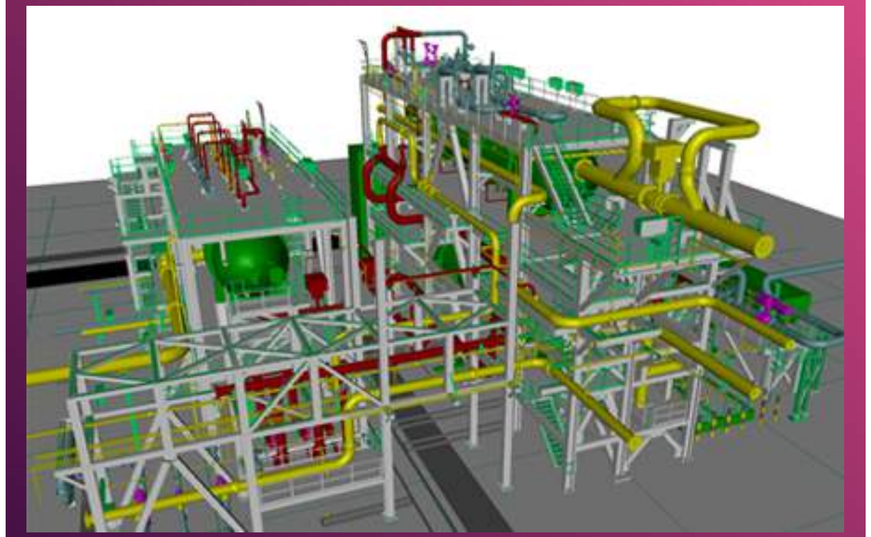


DISTILLATION PLANT

PRESSURE VESSEL



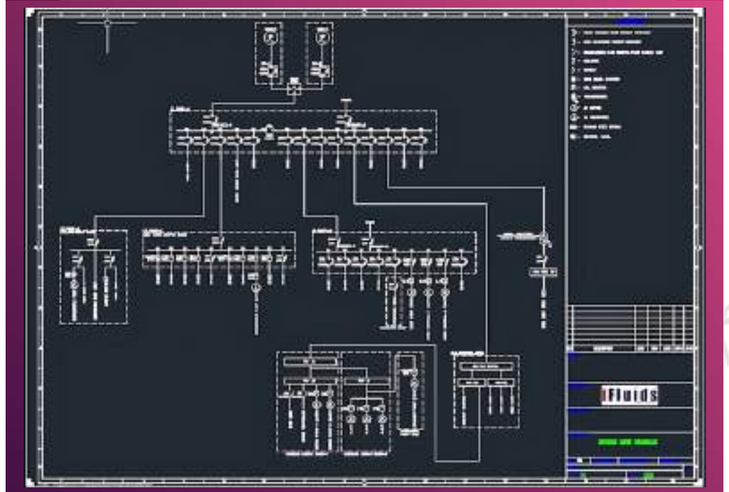
WATER MANAGEMENT FACILITIES



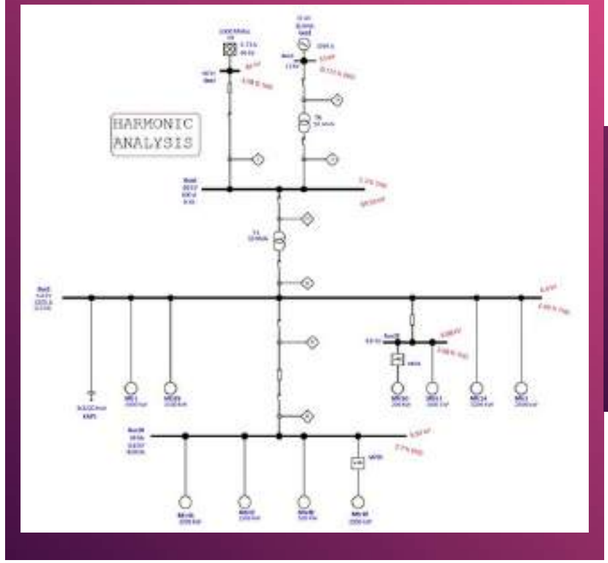
SOLUTIONS IN ACTION

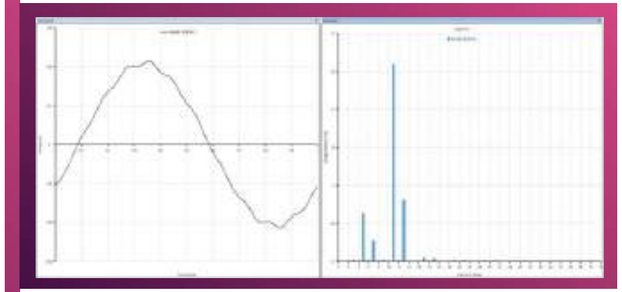
ELECTRICAL ENGINEERING

Sample Single Line Diagram



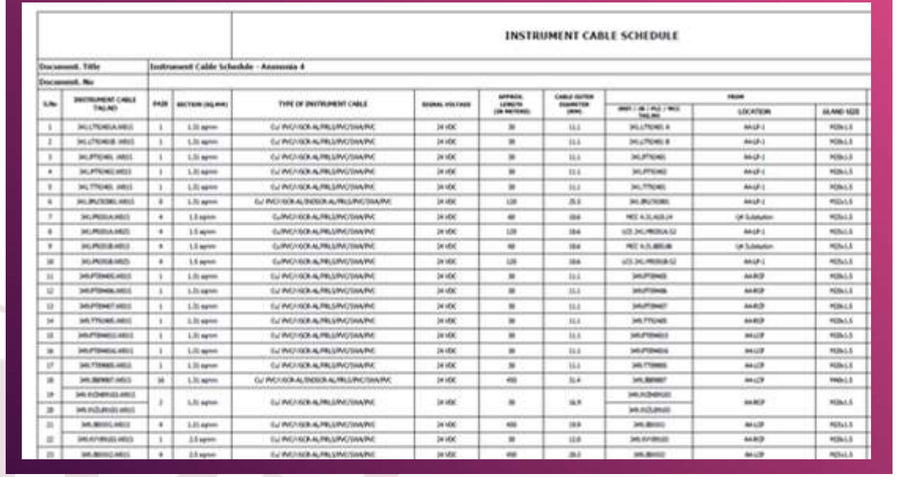
Sample Harmonic analysis





INSTRUMENTATION ENGINEERING

Sample Instrument Cable Schedule



INSTRUMENT CABLE SCHEDULE

Document. Title: Instrument Cable Schedule - Annexure 4

Document. No:

S.No	INSTRUMENT CABLE TAG.NO	PAIR	SECTION (SQ.MM)	TYPE OF INSTRUMENT CABLE	SIGNAL VOLTAGE	APPROX LENGTH (IN METERS)	CABLE OUTER DIAMETER (MM)	FROM		
								UNIT / DB / PLC / MCC TAG.NO	LOCATION	ISLAND SIZE
1	34LCT5040A.W01	1	1.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	30	11.1	34LCT5040 A	AA-LP-1	P23x1.5
2	34LCT5040B .W01	1	1.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	30	11.1	34LCT5040 B	AA-LP-1	P23x1.5
3	34LPT5040..W01	1	1.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	30	11.1	34LPT5040	AA-LP-1	P23x1.5
4	34LPT5040.W03	1	1.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	30	11.1	34LPT5040	AA-LP-1	P23x1.5
5	34LTT5040..W01	1	1.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	30	11.1	34LTT5040	AA-LP-1	P23x1.5
6	34LJBU5030..W01	8	1.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	120	25.3	34LJBU5030	AA-LP-1	P32x1.5
7	34LPR101A.W01	4	1.5 sqmm	Cu/PVC/SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	60	18.6	MCC 4.11.A10.14	LH S.Station	P23x1.5
8	34LPR101A.W02	4	1.5 sqmm	Cu/PVC/SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	120	18.6	LCS 34LJPR101A-S2	AA-LP-1	P23x1.5
9	34LPR101B.W02	4	1.5 sqmm	Cu/PVC/SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	60	18.6	MCC 4.11.B01.08	LH S.Station	P23x1.5
10	34LPR101B.W03	4	1.5 sqmm	Cu/PVC/SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	120	18.6	LCS 34LJPR101B-S2	AA-LP-1	P23x1.5
11	34LFT5040..W01	1	1.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	30	11.1	34LFT5040	AA-RCP	P23x1.5
12	34LFT5040A.W01	1	1.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	30	11.1	34LFT5040A	AA-RCP	P23x1.5
13	34LFT5040T.W01	1	1.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	30	11.1	34LFT5040T	AA-RCP	P23x1.5
14	34LTT5040..W01	1	1.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	30	11.1	34LTT5040	AA-RCP	P23x1.5
15	34LFT5040D1.W01	1	1.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	30	11.1	34LFT5040D1	AA-LCP	P23x1.5
16	34LFT5040D2.W01	1	1.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	30	11.1	34LFT5040D2	AA-LCP	P23x1.5
17	34LTT5040..W01	1	1.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	30	11.1	34LTT5040	AA-LCP	P23x1.5
18	34LJBU5007.W01	16	1.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	450	31.4	34LJBU5007	AA-LCP	P40x1.5
19	34LFU2040D1.W01	2	1.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	30	16.9	34LFU2040D1	AA-RCP	P23x1.5
20	34LFU2LB101.W01							34LFU2LB101		
21	34LJBU01.W01	4	1.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	450	18.9	34LJBU01	AA-LCP	P23x1.5
22	34LFU1PB101.W01	1	2.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	30	12.9	34LFU1PB101	AA-RCP	P23x1.5
23	34LJBU02.W01	4	2.5 sqmm	Cu/ PVC/ SCR-AL/PBL/LPVC/SWA/PVC	24 VDC	450	26.3	34LJBU02	AA-LCP	P23x1.5

Sample Cable Routing Layout

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PROCESS SAFETY & RISK MANAGEMENT STUDIES

At iFluids Engineering WLL, we help industries build safer and more resilient operations through effective Process Safety & Risk Management. Our services focus on identifying risks, preventing incidents, and ensuring compliance protecting people, assets, and the environment while supporting sustainable growth.

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PHA STUDIES

- HAZID
- Hazard and Operability (HAZOP) Workshop
- Event Tree Analysis (ETA)
- Fault Tree Analysis (FTA)
- Bow-Tie Analysis
- What-if Analysis
- Failure Mode And Effects Analysis (FMEA)
- Preliminary Hazard Analysis
- Quantitative Risk Assessment (QRA)
- Root Cause Analysis
- Inherent Safety Review

Technical Safety Studies

- Fire & Explosion Risk Assessment (FERA)
- Escape Evacuation and Rescue Analysis
- Emergency System Survivability Analysis
- Project Health Safety and Environment Review
- H2S Zoning /Toxic Gas Dispersion Assessment
- Smoke and Gas Detection Study
- TRIA :Temporary Refuge Impact assessment
- Shelter in Place Assessment
- Passive Fire Protection Assessment
- Active Fire Protection Assessment
- Rapid Risk Assessment
- Fire Risk Assessment
- Building Risk Assessment
- Ship Collision Risk Assessment
- Vehicle impact Assessment
- Dropped Object Study
- Process Safety Management Studies

PNGRB Regulatory Compliance Studies

- Emergency Response & Disaster Management Plan
- Asset Integrity Management Studies

Functional Safety studies

- SIL Assessment (Using Layer of Protection Analysis (LOPA), Fault Tree Analysis & Risk Graph Method)
- SIL Verification
- SIL Validation
- ALARP Demonstration Workshop
- SIMOPS

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Loss Prevention

- Fire Water Demand Calculation & Hydraulic Analysis
- Fire & Safety Equipment Data sheets
- Fire Protection Adequacy Assessment
- HSE and Fire Protection Design philosophies
- Reliability Availability and Maintainability Study (RAM)
- Fire & Gas Detector Mapping
- Fire & Gas Layout Preparation
- Hazardous Area Classification Study (HAC)

Human Factors Engineering (HFE) Studies

- Ergonomic Risk Assessments
- Procedural & Operational Human Factors
- Emergency & Evacuation Human Factors
- Human Error Analysis
- Behaviour Based Safety (BBS)

Safety Audits

- Electrical Safety Audit
- Fire Safety Audit
- Environmental Audit
- Water Audit
- External Safety Audit as per IS 14489 and OISD Standards (Multi Discipline)
- Life Safety Audit
- Chemical and Process Risk Audit

Design Review Studies

- Design Safety Review (DSR)
- Inherent Safety Design (ISD)
- Piping and Instrumentation Diagram Reviews
- Material handling reviews
- Layout Safety reviews
- Constructability reviews and Audits
- Independent Verification Review (IVR / IVB) Services
- Optimization & Cost-Benefit Analysis
- Value Engineering

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Chemical Safety

- Chemical Compatibility Study
- Chemical Segregation Study
- Hazardous Chemical Storage Assessment
- Dangerous Goods Storage Assessment
- Warehouse Chemical Risk Assessment
- SDS Compliance Review
- Chemical Inventory Risk Assessment
- Segregation Matrix Development
- Chemical Storage Layout Review
- NFPA 400 Compliance Assessment
- Chemical Exposure Assessment

Consequence Analysis

- Consequence Modelling
- Fire Radiation Modelling
- Explosion Overpressure Analysis
- Toxic Dispersion Modelling
- Vapour Cloud Explosion (VCE) Analysis
- Jet Fire Analysis
- Pool Fire Analysis
- Flash Fire Analysis
- BLEVE Assessment

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FLAGSHIP PROJECTS

- Ras Laffan Onshore Facility HAZOP & SIL Assignment Study Unit 107 and Unit 111 – Dolphin Energy
- HAZOP, SIL Assessment and SIL Verification Studies for 2025 HAZOP&SIL Revalidation for RL3-T6/7 – QatarEnergy LNG
- Safety Studies for FS/CO for Dukhan Production Facility Upgrade (DPFU) phase 3-part B – QatarEnergy
- HAZOP, SIL Assessment and SIL Verification Studies for 2025 HAZOP and SIL Studies for Integrated South Utilities – QatarEnergy LNG
- Safety Studies for EPIC FOR NEW DIESEL ENGINE DRIVEN 3.3 KV EMERGENCY GENERATOR SETS AT QATARENERGY REFINERY – QatarEnergy
- Safety Studies for NFPS Onshore Building and Infrastructure Project COMP9 – QatarEnergy LNG
- HAZOP, SIL Assessment & SIL Verification Studies for Revalidation for Offsite Asset – QatarEnergy LNG
- QatarEnergy LNG NON-LNG STORAGE & LOADING (S&L) REVALIDATION HAZOP AND SIL STUDIES – QatarEnergy LNG

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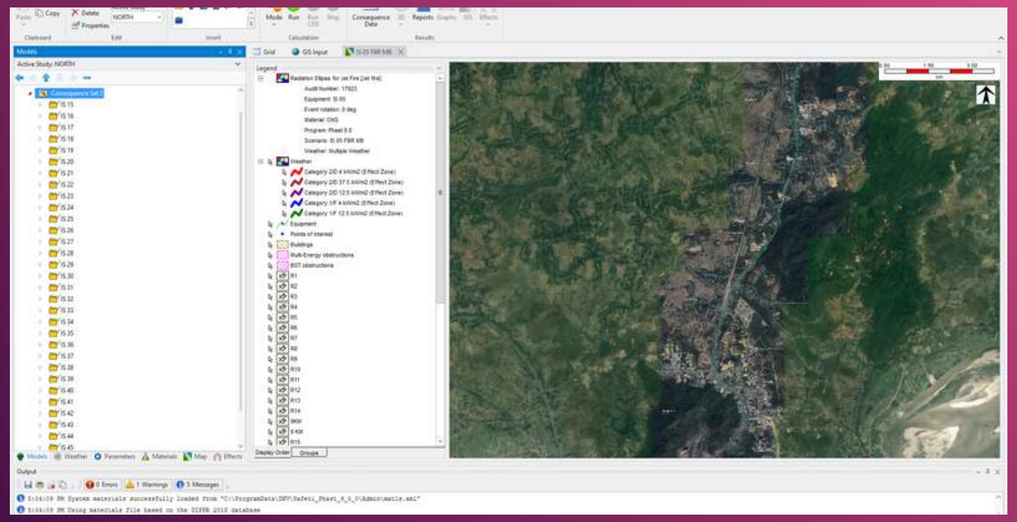
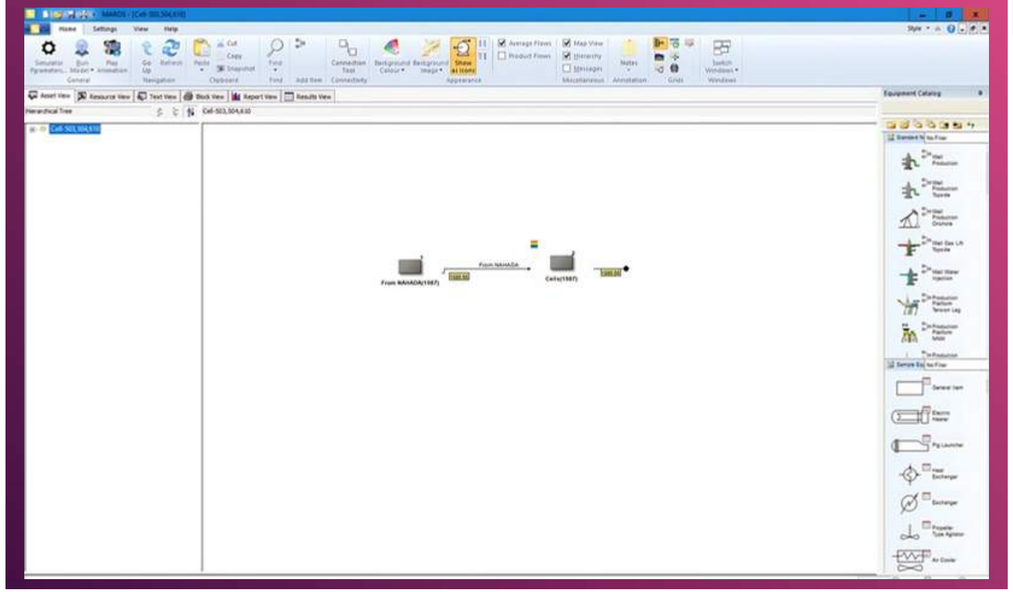
SOLUTIONS IN ACTION

Sample F&G Mapping Study 3D

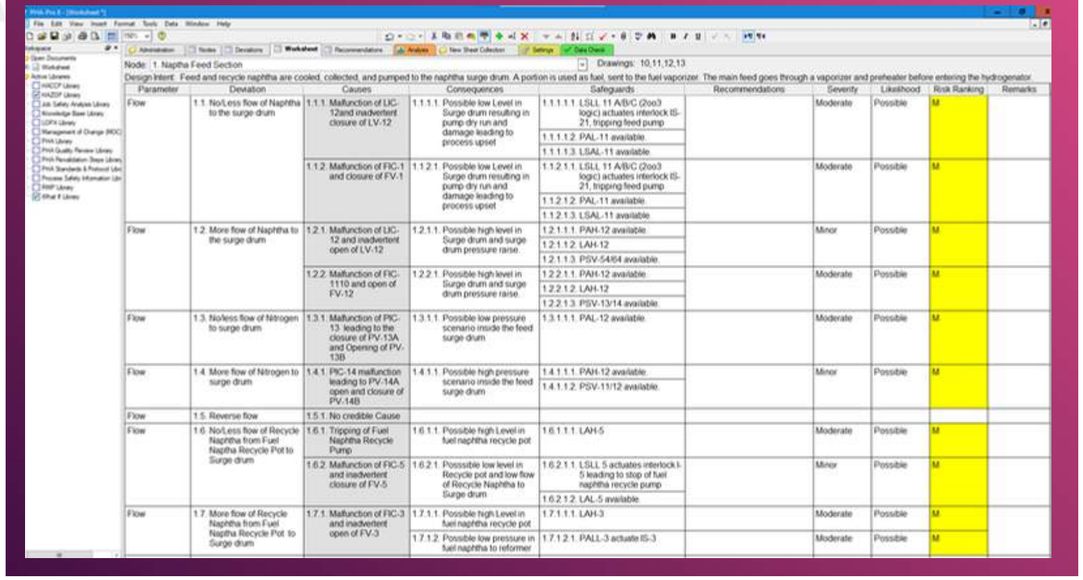
Sample QRA using DNV Phast & Safeti



RAM Study using DNV MAROS



Sample HAZOP Worksheet



Node: 1. Naptha Feed Section — Drawings: 10,11,12,13

Design Intent: Feed and recycle naphtha are cooled, collected, and pumped to the naphtha surge drum. A portion is used as fuel, sent to the fuel vaporizer. The main feed goes through a vaporizer and preheater before entering the hydrogenator.

Parameter	Deviation	Causes	Consequences	Safeguards	Recommendations	Severity	Likelihood	Risk Ranking	Remarks
Flow	1.1. No/Less flow of Naphtha to the surge drum	1.1.1. Malfunction of LIC-12and inadvertent closure of LV-12	1.1.1.1. Possible low Level in Surge drum resulting in pump dry run and damage leading to process upset	1.1.1.1.1. LSLL 11 A/B/C (2oo3 logic) actuates interlock IS-21, tripping feed pump		Moderate	Possible	M	
				1.1.1.1.2. PAL-11 available.					
				1.1.1.1.3. LSAL-11 available.					
		1.1.2. Malfunction of FIC-1 and closure of FV-1	1.1.2.1. Possible low Level in Surge drum resulting in pump dry run and damage leading to process upset	1.1.2.1.1. LSLL 11 A/B/C (2oo3 logic) actuates interlock IS-21, tripping feed pump		Moderate	Possible	M	
				1.1.2.1.2. PAL-11 available.					
				1.1.2.1.3. LSAL-11 available.					
Flow	1.2. More flow of Naphtha to the surge drum	1.2.1. Malfunction of LIC-12 and inadvertent open of LV-12	1.2.1.1. Possible high level in Surge drum and surge drum pressure raise.	1.2.1.1.1. PAH-12 available.		Minor	Possible	M	
				1.2.1.1.2. LAH-12					
				1.2.1.1.3. PSV-54/64 available.					
		1.2.2. Malfunction of FIC-1110 and open of FV-12	1.2.2.1. Possible high level in Surge drum and surge drum pressure raise.	1.2.2.1.1. PAH-12 available.		Moderate	Possible	M	
				1.2.2.1.2. LAH-12					
				1.2.2.1.3. PSV-13/14 available.					
Flow	1.3. No/less flow of Nitrogen to surge drum	1.3.1. Malfunction of PIC-13 leading to the closure of PV-13A and Opening of PV-13B	1.3.1.1. Possible low pressure scenario inside the feed surge drum	1.3.1.1.1. PAL-12 available.		Moderate	Possible	M	
Flow	1.4. More flow of Nitrogen to surge drum	1.4.1. PIC-14 malfunction leading to PV-14A open and closure of PV-14B	1.4.1.1. Possible high pressure scenario inside the feed surge drum	1.4.1.1.1. PAH-12 available.		Minor	Possible	M	
				1.4.1.1.2. PSV-11/12 available.					
Flow	1.5. Reverse flow	1.5.1. No credible Cause							
Flow	1.6. No/Less flow of Recycle Naphtha from Fuel Naphta Recycle Pot to Surge drum	1.6.1. Tripping of Fuel Naphtha Recycle Pump	1.6.1.1. Possible high Level in fuel naphtha recycle pot	1.6.1.1.1. LAH-5		Moderate	Possible	M	
		1.6.2. Malfunction of FIC-5 and inadvertent closure of FV-5	1.6.2.1. Possible low level in Recycle pot and low flow of Recycle Naphtha to Surge drum	1.6.2.1.1. LSLL 5 actuates interlock I-5 leading to stop of fuel naphtha recycle pump		Minor	Possible	M	
				1.6.2.1.2. LAL-5 available.					
Flow	1.7. More flow of Recycle Naphtha from Fuel Naphta Recycle Pot to Surge drum	1.7.1. Malfunction of FIC-3 and inadvertent open of FV-3	1.7.1.1. Possible high Level in fuel naphtha recycle pot	1.7.1.1.1. LAH-3		Moderate	Possible	M	
			1.7.1.2. Possible low pressure in fuel naphtha to reformer	1.7.1.2.1. PALL-3 actuate IS-3		Moderate	Possible	M	

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Our expertise covers Environmental Impact Assessments (EIA), Environmental Management Plans (EMP), Environmental Monitoring & Audits, and Risk Assessments. With a strong focus on sustainable development, we provide customized solutions that minimize environmental footprints while ensuring operational efficiency.

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ENVIRONMENTAL IMPACT ASSESSMENT & ENVIRONMENTAL MANAGEMENT

- Environmental, Social, and Governance (ESG) Assessments
- GHG Protocol & Carbon Footprint Audit
- Construction Environmental Management Plan (CEMP)
- Demolition Environmental Management Plan (DEMP)
- Operational Environmental Management Plan (OEMP)
- Waste Management Plan (WMP)
- Environmental & Social Impact Assessment (ESIA)
- Environmental Management Framework (EMF)

Statutory Approvals

- Environmental Impact Assessment (EIA)
- Coastal Regulation Zone (CRZ) Clearance
- Consent to Establish (CTE) – New & Expansion
- Consent to Operate (CTO) – New & Expansion
- CGWA Groundwater Clearance
- Land Use & Layout Approvals

MODELLING STUDIES

- Air Dispersion Modelling
- Noise Modelling – Environmental Acoustics, Workplace Noise, Vehicular Traffic Modelling
- Noise & Vibration Modelling Studies
- Hydrogeological Modelling
- Life Cycle Assessment (LCA) Studies

Environmental Audit & Compliance

- Environmental Impact Identification (ENVID) Studies
- Water & Waste Audits
- Environmental Due Diligence & Compliance Support

SPECIAL STUDIES

- Site Selection & Liability Assessment
- Land Use / Land Cover Mapping (LULC)
- Flood Risk Assessment & Storm Water Management Studies
- Baseline Environmental Studies (on-site)– Air, Surface Water, Groundwater, Soil, Noise
- Hydrology Studies & Groundwater Studies
- Ecological and Biodiversity Studies
- Emission Estimation & Regulatory Compliance

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FLAGSHIP PROJECTS

- Noise Study and Acoustic Modelling for AL WAKRA & WUKAIR SEWAGE TREATMENT PLANT [AW.0001] – **Ashghal**
- EIA Studies for FEED FOR 33KV/22KV Cable Replacement – **Total Energy**
- Vibration Measurement at Oryx GTL project – **Oryx GTL**
- EIA and CEMP Study– Synthetic Natural Gas (SNG) Farm (G2) at Wadi–2, Lusail City – **Petroserv Limited**
- ENVID Study for EPIC FOR NEW DIESEL ENGINE DRIVEN 3.3 KV EMERGENCY GENERATOR SETS AT QATARENERGY REFINERY – **QatarEnergy**
- Noise and ENVID Studies for NFPS Onshore Building and Infrastructure Project COMP9 – **QatarEnergy LNG**
- ENVID Study for FEED for Develop Long Term Contractors (LTC) Yard at QatarEnergy LNG North Project – **QatarEnergy LNG**
- ENVID Study for EPIC FOR REPLACEMENT OF DESALINATED WATER NETWORK – **Qatar Energy**
- ENVID study for EPIC of Instrument Air Compressor Package for BMS – **Qatar Energy**
- CEMP Study for EPIC of Instrument Air Compressor Package for BMS – **QatarEnergy Refinery**

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ASSET INTEGRITY SERVICES

We develop Integrity and Maintenance Management Plans that identify the best methods and the optimized frequency of inspection for reducing costs while maintaining your assets in their best-possible state.

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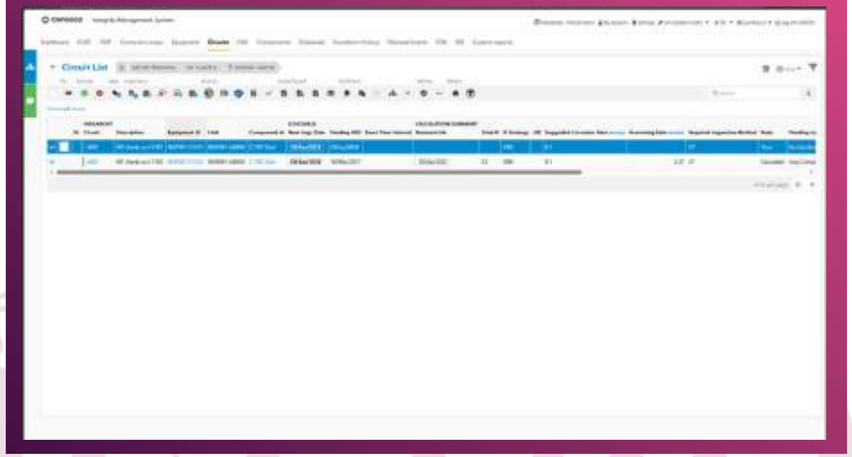
ASSET INTEGRITY SERVICES

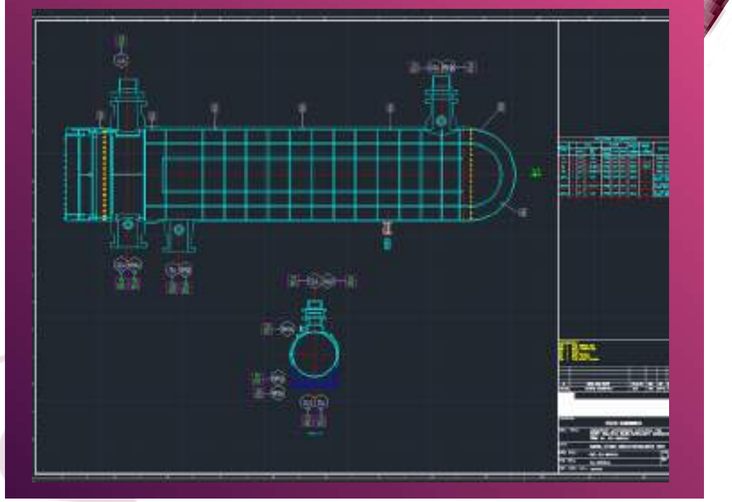
- Risk Based Inspection (RBI)
- Asset Management Consulting Services
- Material Management Consulting
- Master Data Services
- Structural Integrity Assessment
- Reliability Centered Maintenance (RCM)
- Root-Cause Failure Analysis
- Equipment Criticality Analysis
- Shut Down / Turn Around Optimization
- Non Destructive Testing

SOLUTIONS IN ACTION – RBI

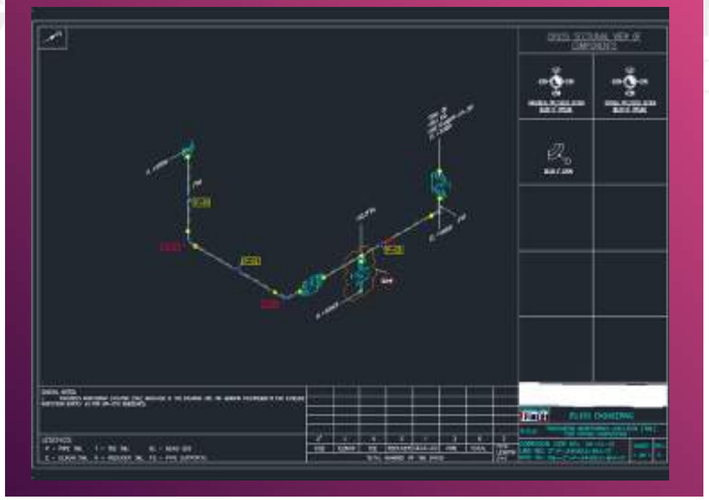
Sample Circuit List



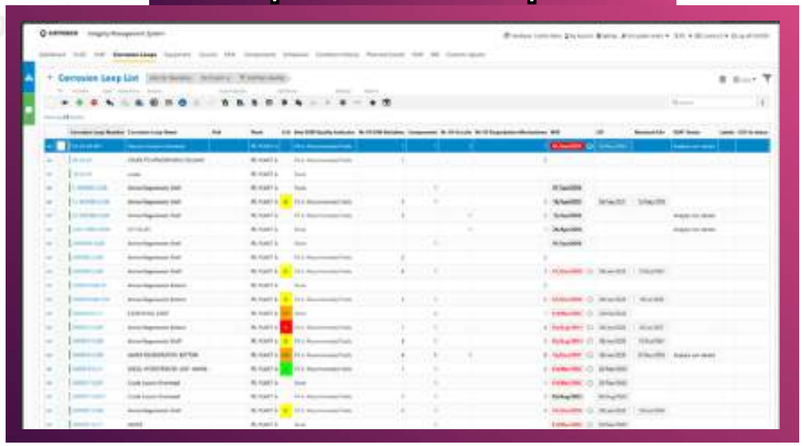
CML marked Equipment AutoCAD drawing



Sample CML Marked AutoCAD drawing



Sample Corrosion Loop List



FLAGSHIP PROJECTS

- Thermography Inspection Study – Technical Safety & Risk Engineering services on Call-off basis. (Laffan Refinery CCB Thermography) – **Qatar Gas Operating Company Ltd**

- Consultancy Services for the development of Maintenance Manual, Procedures for Mechanical , Electrical, Instrumentation Fire and Gas, HVAC Facilities and Petrol Station Equipment's installed – **WOQOD Facilities** & Operational areas.

- RBI Studies for MGP Brownfield Modification for Onshore Depletion Compression – **OQ, Oman**

- Data Acquisition and Risk Based Inspection (RBI) Analyses for New Equipment of AGRP at Dukhan Fields – **Qatar Petroleum, Qatar**

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Our Quality System

As an ISO 9001:2015, ISO 14001:2015, and ICV-certified organization, iFluids Engineering WLL delivers industry-leading standards in quality and compliance.

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MQA

MQA Certification

Certificate of Registration

This is to certify that

IFLUIDS ENGINEERING AND CONSULTANCY W.L.L.

OFFICE NO.308, 3RD FLOOR BIN DIRHAM BUILDING, B-RING ROAD DOHA, QATAR

Has been assessed and certified by MQA Certification Services
As meeting the requirements of:

ISO 9001:2015

(Quality Management System)

For the Following Scope of Activities:

FEED, DESIGN ENGINEERING, PROCESS SAFETY, ENVIRONMENTAL STUDIES, ASSES INTEGRITY, SPECIALIZED STUDIES & TRAINING SERVICES.

:: Certificate No. :: QMS/24M04509

Date of initial registration:	**14 September 2024**
First Surv. Audit on or before:	**13 September 2025**
Second Surv. Audit on or before:	**13 September 2026**
Re-certification Due:	**13 September 2027**

This Certificate is property of MQA and remains valid
Subject to satisfactory surveillance audits.

Authorized Signatory
MQA CERTIFICATION SERVICES
130 Thessaly Rd, Nine Elms, London
SW8 5EJ, United Kingdom

UKAF-CB-011

To check validity of the certificate please visit at www.mqacertification.com

CERTIFICATE CERTIFICADO SERTIFIKAT CERTIFICATE

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Certificate of Registration

This is to certify that the Environmental Management System of

IFLUIDS ENGINEERING AND CONSULTANCY W.L.L

OFFICE NO.308, 3RD FLOOR BIN DIRHAM BUILDING, B-RING ROAD DOHA, QATAR

has been assessed independently by us and found to comply with the requirements of

(Environmental Management System)

ISO 14001:2015

for the following scope:

FEED, DESIGN ENGINEERING, PROCESS SAFETY, ENVIRONMENTAL STUDIES, ASSES INTEGRITY, SPECIALIZED STUDIES & TRAINING SERVICES

Certification Calendar:

Certificate No: 170924ESAFFX/QAT49120
Registered on: 17.09.2024
Issued on: 17.09.2024
Expires on: 16.09.2027
1st Surveillance on/before: 16.09.2025
2nd Surveillance on/before: 16.09.2026

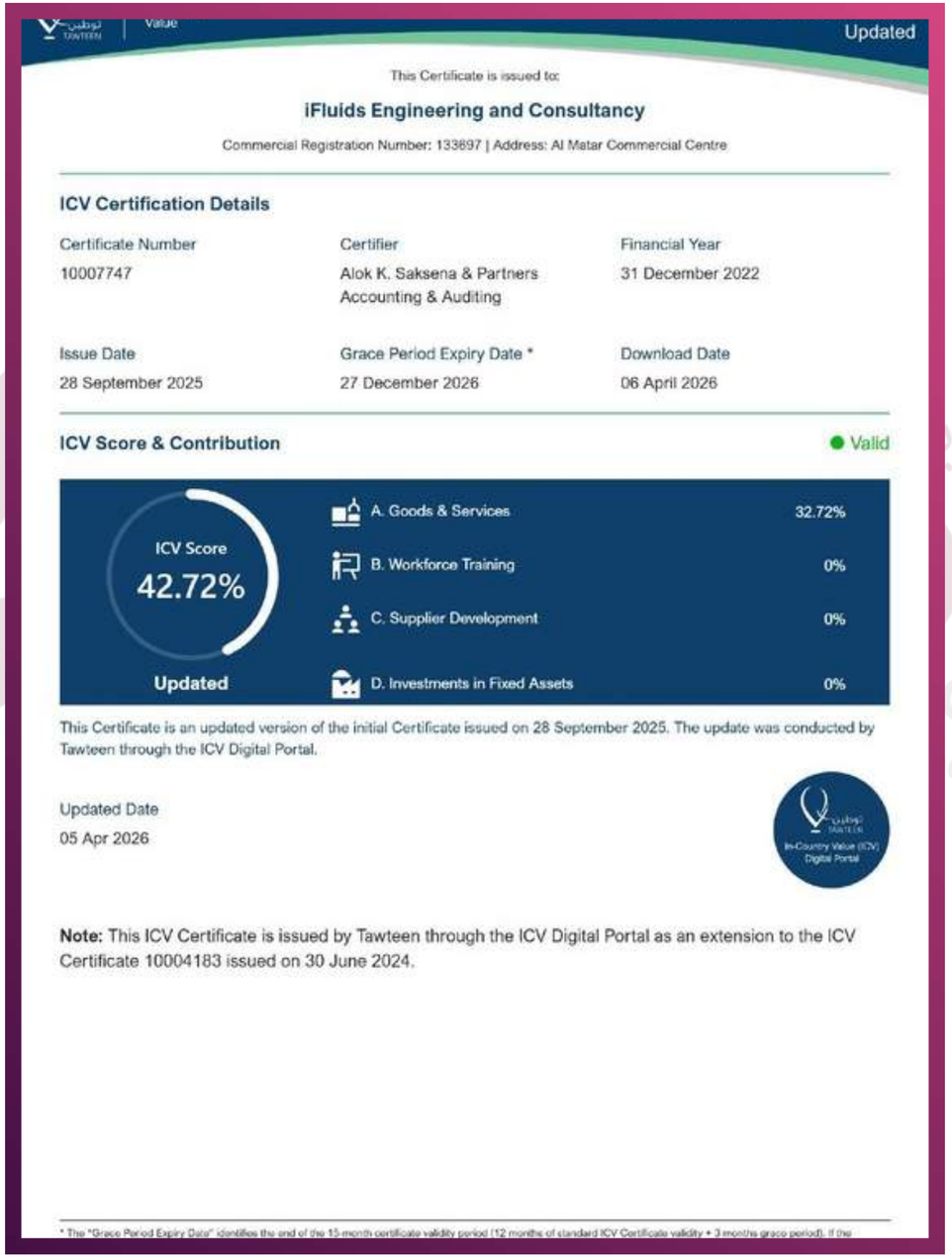
Executive Director
RADIANCE QUALITY CERTIFICATIONS
Regd. Office : 20-22 Wenlock Rd, Hoxton, London N1 7GU, UK

Regd. off. 20-22 Wenlock Rd, Hoxton, London N1 7GU, UK

Terms & conditions

1. Validity of this certificate is subject to the organization maintaining its system in accordance with respective management systems standards along with RQC requirements.
2. This certificate remains the property of radiance quality certifications to whom it must be returned upon request.

ICV CERTIFICATE



Value

Updated

This Certificate is issued to:

iFluids Engineering and Consultancy

Commercial Registration Number: 133697 | Address: Al Matar Commercial Centre

ICV Certification Details

Certificate Number	Certifier	Financial Year
10007747	Alok K. Saksena & Partners Accounting & Auditing	31 December 2022

Issue Date	Grace Period Expiry Date *	Download Date
28 September 2025	27 December 2026	06 April 2026

ICV Score & Contribution

● Valid

This Certificate is an updated version of the initial Certificate issued on 28 September 2025. The update was conducted by Tawteen through the ICV Digital Portal.

Updated Date
05 Apr 2026

In-Country Value (ICV) Digital Portal

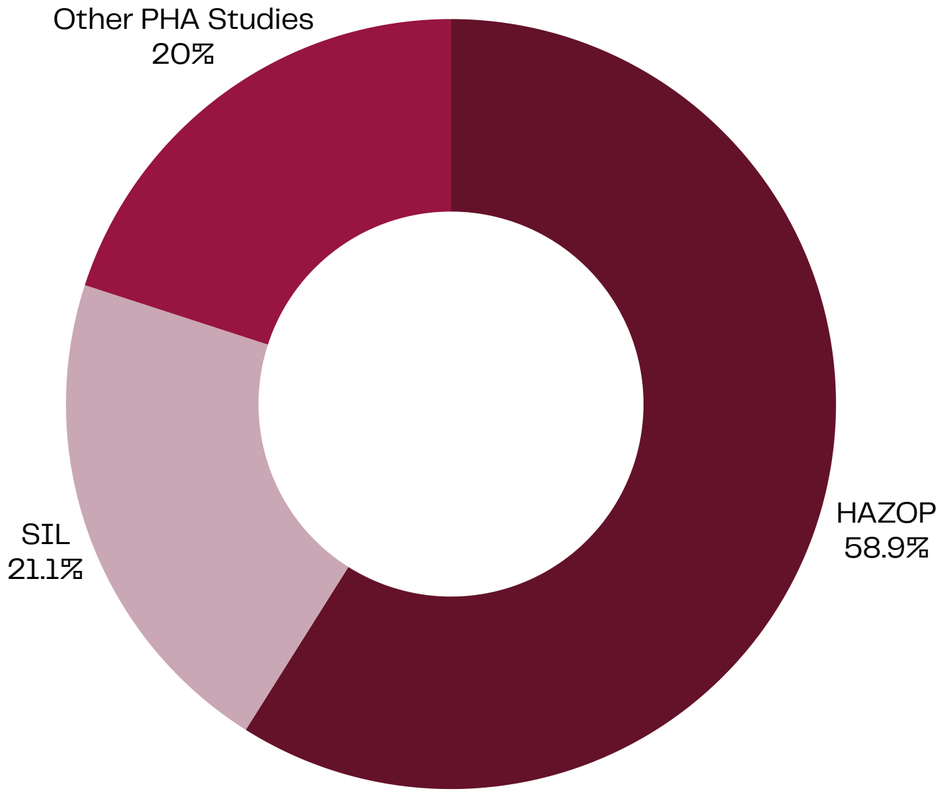
Note: This ICV Certificate is issued by Tawteen through the ICV Digital Portal as an extension to the ICV Certificate 10004183 issued on 30 June 2024.

* The "Grace Period Expiry Date" identifies the end of the 15-month certificate validity period (12 months of standard ICV Certificate validity + 3 months grace period). If the

Why iFluids Engineering WLL

At iFluids Engineering WLL, we don't just deliver services we build long-term partnerships based on trust, technical excellence, and results.

With over a decade of specialized experience in process safety, engineering consulting, and risk management, we've become a trusted name across critical industries like Oil & Gas, Petrochemicals, Power, LNG, Pharma, and Infrastructure.



We bring :

- Deep domain expertise in Oil & Gas, Petrochemicals, LNG, and Pharma
- From Concept and FEED to detailed engineering, safety (SIL/CFD), and asset integrity
- Global tools, local compliance knowledge
- Skilled professionals and trained individuals
- A proven record across Qatar and the Middle East

Software Capabilities

Name of the Software	Application	Discipline
AutoCAD	Drafting tool	All
Caesar II	Pipe stress analysis	Piping
CarrierHAP	HVAC calculations & design	HVAC
COMPRESS	Pressure Vessel Design	Mechanical
DNV-GL MAROS	RAM Study	Loss Prevention
DNV Phast	Process hazard analysis including QRA	Loss Prevention
ECE 5 Electronic Corrosion Engineer (ECE)	Corrosion modelling	Metallurgy and Corrosion

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Software Capabilities

Name of the Software	Application	Discipline
exSILentia	SIL Study	Instrumentation
ETAP	Power system study	Electrical
FLACS	CFD Modelling for Explosion Risk Assessment	Loss Prevention
FlareSIM	Flare radiation study	Process
FE Pipe	FEA	Mechanical
FLACS	CFD (Computational Fluid Dynamics) modelling	Loss Prevention / HVAC
ICAPS®	Systems Completion Database	Systems Completion

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Software Capabilities

Name of the Software	Application	Discipline
MOSES	Analysis and simulation for transportation and installation of offshore structures	T&I
MicroStation	General drafting tool	All
NavisWorks Freedom (free to download)	3-D Viewing software	All
NavisWorks Simulate	3-D Viewing software	All
Nozzle Pro	FEA Analysis	Mechanical
OLGA	Pipeline transportation analysis for 3 phase flows	Process
OMEGA Project Interface Management	Interface management	Interface

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Software Capabilities

Name of the Software	Application	Discipline
PipeNET Spray	Hydraulic analysis of firewater systems	Loss Prevention
PipePhase	Steady-state, multi-phase, fluid flow simulator	Pipeline
Primavera P6 Professional	Scheduling / Planning	Project Control
PSCAD	Analysis of power systems transients	Electrical
PV Elite 2020	Pressure vessel and heat exchanger design	Mechanical
SACS Connect	Design of offshore structures	Structural
SmartPlant Materials	Material management	Piping and Mechanical Engineering

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Software Capabilities

Name of the Software	Application	Discipline
SmartPlant Foundation Server	3-D model database management	All
SmartPlant P&ID	Process Design and Documentation	Process
SmartPlant Instrumentation	Instrument Index and Tag Management	Instrumentation and Controls
SmartPlant Electrical	Single-Line and Schematic Diagrams	Electrical
SmartPlant Review	Review of 3-D model	All
Staad Pro	Structural analysis	Civil

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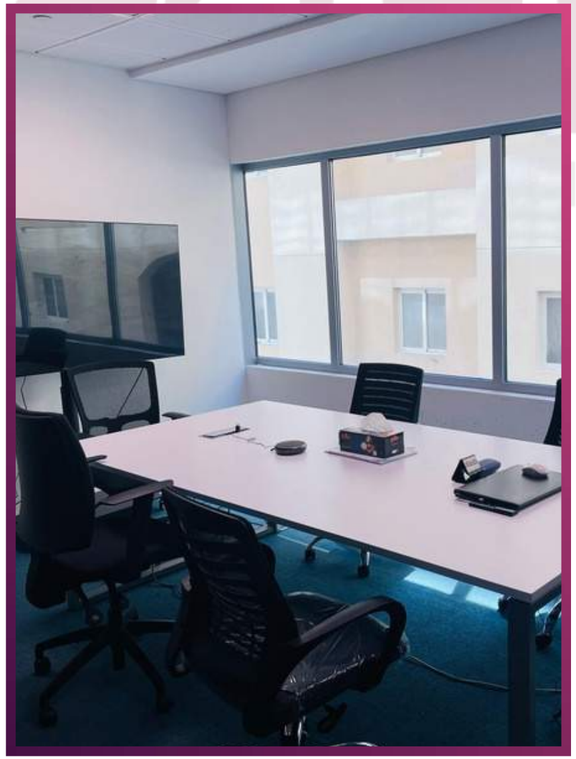
OFFICE INFRASTRUCTURE



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- 3D Software – Compatible Workstations & Laptops
- Fireproof Local + External Data Backup Systems
- Video Conferencing (VC) & Public Address (PA) Systems
- Licensed Engineering Software
- High-Speed Peripherals: Plotters, Printers, Copiers
- Custom In-House Applications for optimized project execution
- Built with sustainability in mind, our facility embraces environmentally responsible design and operations.
- Advanced Access & Surveillance Systems for fire safety and control
- Ergonomic Design to improve comfort and reduce environmental impact

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Clientele

قطر للطاقة
QatarEnergy

قطر للطاقة
QatarEnergy
LNG

قطر ستيل
QATAR STEEL

قطرغاز
QATARGAS

قافكو
QAFCO
شركة قطر للأسمدة الكيماوية
QATAR FERTILISER COMPANY

N KOM
شركة ناقلات كيبيل للأعمال البحرية المحدودة
Nakilat - Keppel Offshore & Marine Ltd

ORYX GTL
أوريكس للتحويل الغاز إلى السوائل المحدودة
ORYX GTL Limited

وقود
WOQOD

شركة
نفط الشمال
North Oil
Company

DOLPHIN ENERGY
دولفين للطاقة

TotalEnergies

Clientele

غزال Gasal

wood.

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Advanced Engineering & Construction WLL

DEBAJ
INDUSTRIAL SERVICES W.L.L

CTJV

hayat
communications

IMCO

worley
DELIVERING SUSTAINABLE CHANGE

Aquatech

midmac
مدماك

MADINA GROUP
Operational Excellence
MADINA QISC QIS SEVEN

PETRORISK

Clientele

trags

DOPET

T.EN TECHNIP ENERGIES

SAMSUNG

SAMSUNG C&T

A.E.E

QATAR FACTORY

kent

Honeywell

ROOTS

Energy & Engineering Services W.L.L

MEDGULF

BLACK CAT

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ENGINEERING & CONSTRUCTION W.L.L

Methodic Engineers

البلاغ

AL-BALAGH

AL-BALAGH

TRADING & CONTRACTING CO. W.L.L

ALM PROJECTS

CHIYODA ALMANA

ENGINEERING LLC

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Website

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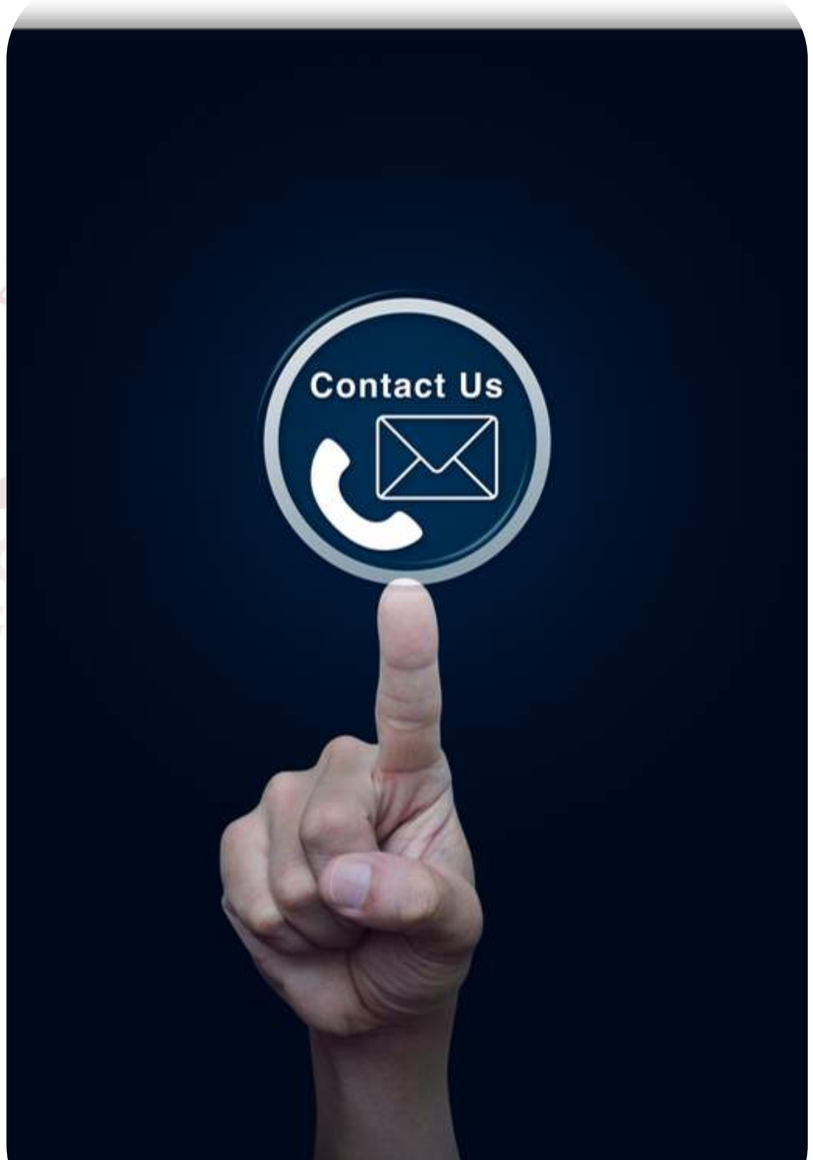
Address

**Office No.308 , 3rd Floor, Bin Dirham Building, B– Ring Road.
(Landmark : Lulu Express Building), Qatar.**



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