



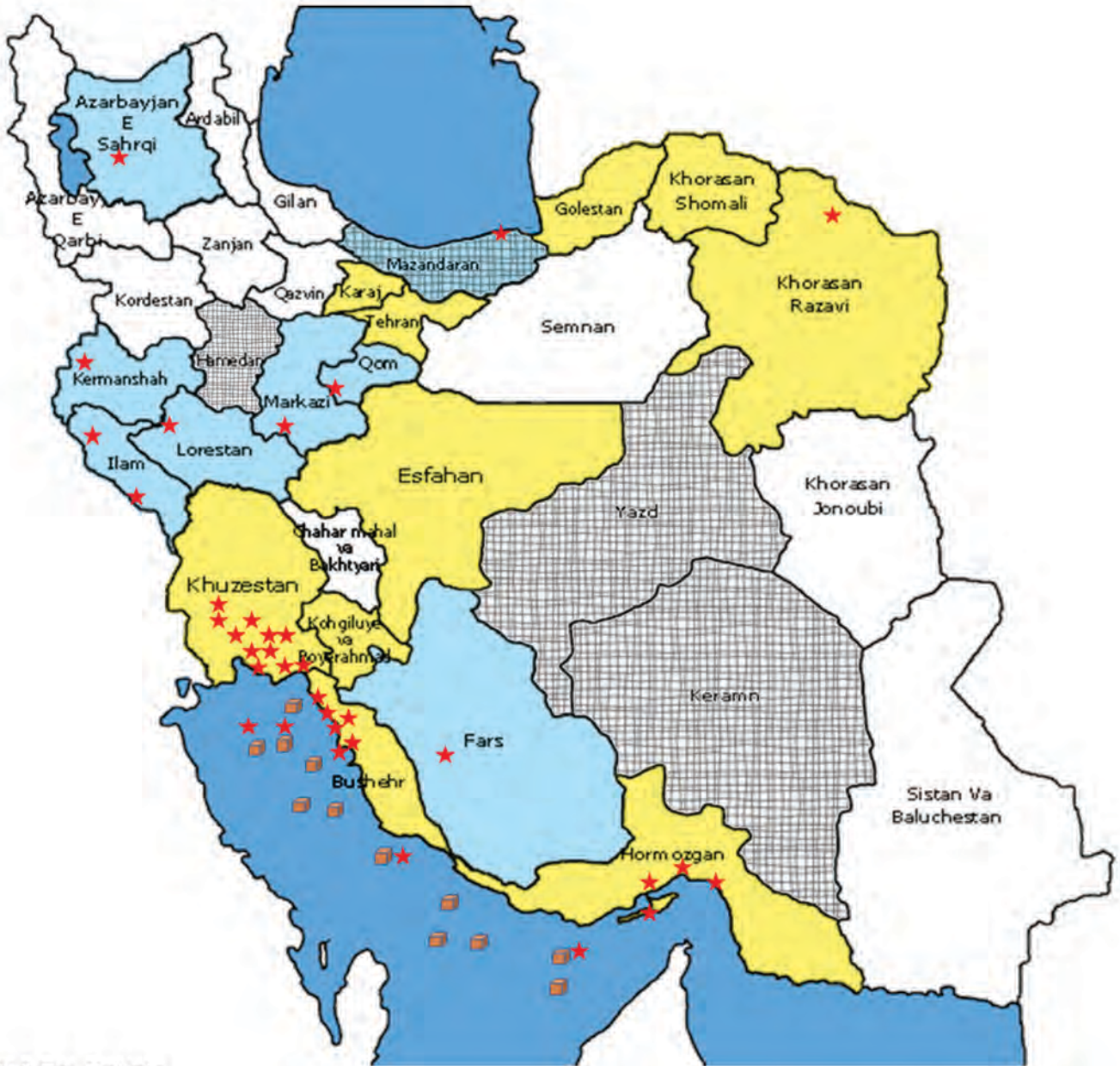
موننکو ایران
Monenco Iran



Monenco Iran

Oil, Gas and Petrochemical

Oil & Gas and Mining projects in Iran



- Oil & Gas Projects
- ★ Metering Projects In Oil & Gas Inlet And Outlet Ports
- 3Dimensional Design of Iranian Oil Companies' Offshore Platforms in The Areas of Kharg, Lavan, Sirri, Bahregan
- Other Monenco's Oil & Gas Projects with Other Clients
- Mining Projects



Oil, Gas and Petrochemical

Oil & Gas and Petrochemical consultants across the globe are looking for timely solutions to help them address the current challenges of a global economic down turn, decline the overall margins and increased emphasis in process safety compliance.

Monenco offers innovative engineering solutions that provide unique answers to these challenges in areas of auditing, metering, upstream and process safety management consulting of petrochemical plants, Oil and Gas complexes and transmission lines. Our technical team has delivered leading methodologies, best practices and robust software solutions that reflect Oil & Gas industry insights and vast experience in our core competencies.

We are, and will continue to be, second to none in understanding our client's needs and the most worthy steward of their resources. This department benefits from participation and cooperation with prominent International and regional Engineering consultancy companies in joint ventures in rendering consulting and engineering services abroad.

At the same time this partnership provides broader opportunities for serving domestic clients with higher quality. Monenco, by having the major Oil and Gas projects in the work history has established an outstanding presence in this industry and expanded the scope of services in order to spread its presence in this market. Entering into the new target markets such as metering, GTP, GTO and GTA in Petrochemical Plants, vapor control & recovery in refineries & tank farms, Bio-ethanol and Technical Inspection and Know How Transfer have been the most remarkable achievements for the department in 2016. Engineering and consultancy of new petrochemical complexes with gas as their feed and renovation and optimization of existing refineries are the targets of Oil and Gas Division. Challenging with our international competitors all around the world in the fields of oil and gas transportation, LNG storage and regasification terminals and small scale refineries - mini refineries - are extended global services of this division.

Expansion of services:

- CFP (Condensate Fractionation Plant)
- CRU (Catalytic Reforming Unit)
- Land Based and FSRU LNG Re-gasification Terminals
- Central Processing Facilities
- Utility and offsite in Oil and Gas and Petrochemical Plant
- Custody Metering Projects
- Vapor Control & Recovery in Refineries & Tank Farms
- GTP, GTO in Petrochemical Plants
- Bio-ethanol
- Fire protection and Alarm System for Gas Condensate & Crude Oil Tanks in Refineries and Oil Terminals
- Control & Monitoring System of Oil Fields (offshore/onshore)
- Consultancy Services and Supervision in Oil & Gas Pipeline
- SCADA Systems
- Call of Engineering Services
- Technical Inspection
- Know How Transfer

Certificates and Awards

- ▶ Certificate of qualification for consulting services from Vice President and Strategic Planning Deputy in 16 fields as follow;
 - Refinery Units for Oil, Gas and Petrochemical Industries
 - Oil & Gas Transmission Lines
 - Water and Wastewatre Installations
 - Constructions and Structure
 - Power Transmission
 - Power Distribution
 - Power Generation
 - Utilities, Electrical and Mechanical
 - Investigation and Mine Exploration
 - Transmission (Microwave, Satellite, Optical Fiber, Cable and Data)
 - Telecommunication and Information Technology Master Plans
 - Energy Optimization
 - Dispatching and Telecommunication
 - Residential, Commercial, Industrial and Military Buildings
- ▶ Approved Supplier to the Oman Oil & Gas Industry's Joint Supplier Registration System (JSRS)
- ▶ Approved Supplier in Petroleum Development Oman (PDO) vendor list
- ▶ Upgrade to 1st grade in Oil & Gas Consultancy Services by Vice President Strategic and Planning Deputy
- ▶ Obtaining the Integrated Management System certificate IMS from IMQ:
 - Quality Management System certificate ISO9001:2008
 - Environmental Management System certificates ISO14001:2004
 - Occupational Health & Safety Assessment Services OHSAS 18001:2007
 - Quality Management Systems for the Petroleum, Petrochemical and natural gas industries ISO/TS 29001:2010
 - HSE-MS



Monenco Iran and Environmental Issues

Among all environmental issues which human is challenging with, global warming is a serious issue caused by carbon dioxide produced from fossil fuels and has led international organizations to make great effort to resolve this problem and make the earth a better place to live. In spite of the hazards of carbon dioxide for environment, it is a good option to be injected to oil wells for enhancing the rate of extraction.

This environmental issue and also declined rate of oil extraction from some of old oil fields of Iran, has made Monenco Iran undertake wide range of studies in this regard and make its own share of contribution to resolve global issues by offering MAPNA, Iran Power Plant Projects Management Company, the latest methods of Carbon Capture Storage and CO2 injection to oil wells.

Monenco Iran's services include:

- Feasibility studies
- Concept selection & definition
- Pre-FEED and FEED studies
- Detailed engineering
- 3D Modeling Integration
- Project management
- Project Troubleshooting
- Construction and Commissioning Supervision and Inspection Consultancy Services
- Engineering Management
- Energy Services, Energy Audit
- Project Management Consultancy Services (PMC)
- Procurement Engineering Services
- Data gathering & As Built of Oil & Gas complexes by laser scan camera



| VENDOR APPROVAL | |
|---|--|
| PETROLEUM DEVELOPMENT OMAN | |
| Supplier Name : MONENCO CONSULTING ENGINEERS | |
| SERVICE DETAILS | |
| AVME NO | DESCRIPTION |
| CD6110 | General Civil Works |
| CA6010 | Control And Automation System Services, Eg Des |
| GA6500 | Electrical Services |
| CC6811 | Electrical Infrastructure Design for power generation, transmission to 132kV, distribution |
| CC1010 | Design, Oil & Gas Facilities |
| CC6512 | Power system studies for generation, transmission (up to 132kV) & main distribution |



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Major Projects

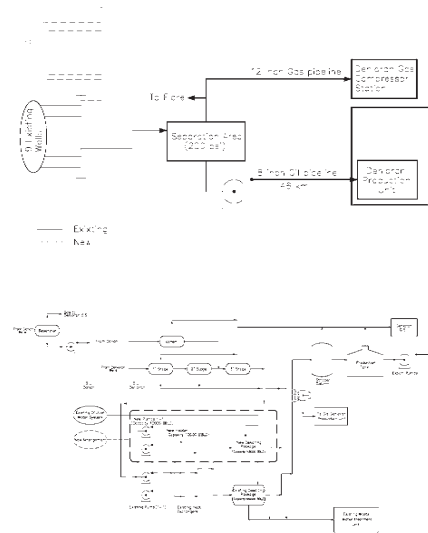
Engineering Services for Danan Oil Field Development Central Processing Facility

Client: Iranian Central Oil Field Company (ICOFC)

Capacity: 11 new wells each 5000BPD

Scope of works:

- Providing site data gathering
- Endorsement of existing documents
- Feed design
- Detail design
- Procurement Services
- Site support services



Description:

Danan Oil Field is located in 80 Km northwest of Andimeshk and 30 Km south of Dehloran cities in Dezful. Dehloran field is located at 180 km western north of Ahwaz and has 58 km distance from Cheshmeh-Khosh production unit. The scope of this project consists of engineering, procurement, drilling and related activities, construction, pre-commissioning, commissioning, start-up and performance test and geo-physics of Danan Oil Field.

Wellhead facilities for 11 new wells in Danan Field includes 2 skid mounted Chemical Injection Packages for each well, totally 22 Nos. 6" crude flow lines connects the 11 new wellheads in Danan field to the existing Danan Manifold (total 55 km). Power overhead line from Danan Manifold to the new wellheads is also in the scope of work. Dehloran new equipment includes one complete crude oil desalting unit with capacity of 10000 STBD and a water bath heater (WBH) to heat the crude for desalter in the existing dehloran desalting plant.

Detail Design of Fire Protection and Alarm System for Gas Condensate Storage Tanks (UNIT-143)/ISBL & OSBL Phase South Pars Gas Fields Development

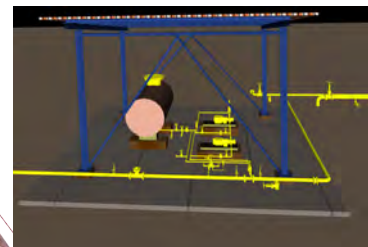
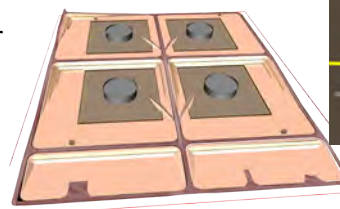
Client: South Pars Gas Company (SPGC)

Description:

South Pars Gas Complex Company intention is to improve Alarm and Fire Protection System of gas condensates tank of 143 units of Phases 4 & 5, which is now manual, by making them automatically designed in site.

This project includes all Mechanical, civil, Piping, Instrumental, Electrical and HSE works for designing of:

- Automatic fire alarm and fighting system for Floating Roof Condensate Tanks/ OSBL (capacity of each tank: 60000 m3)
- Automatic fire alarm and fighting system for Fixed Roof Condensate Tanks/ISBL (capacity of each tank: 6300 m3)
- And preparing tender documents



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Consultancy Services for Installation of 3000bbl/Day Capacity Catalytic Reforming Unit (CRU) and 4000bbl/Day Condensate Fractionation Plant (CFP) at Rashidpur Gas Field with Associated Facilities on Turn Key Basis Under EPC

Client: Sylhet Gas Filed limited - Petro Bangla

Start date: 2013

Status: Ongoing

Country: Bangladesh



Scope of Works:

Contributing PMC services to the client including:

- Providing Tender Documents for CFP & CRU
- Technical bid evaluation of contractors
- Basic design review
- Participation in technical meetings with client and contractors
- Basic & detail design review
- Procurement engineering documents review
- Supervision of construction and commissioning of two plants, etc.

Description:

The main purpose of this project is to produce high octane gasoline, Kerosene, Diesel oil. LPG is the by product that its production should be minimized. The Feed comes from BIBYANA gas field of Chevron which contains Gas Condensate. This line goes to 4000 bbl /day Condensate Fractionation plant to Fractionate Condensate to Naphtha (Motor Spirit), Diesel oil, and Kerosene. Then Naphtha (Motor Spirit) will go through the pipe to 3000 bbl /day catalytic reforming unit including Naphtha hydro treating unit (NHT). Final products of this stage are Reformate, and LPG.

Reformate will have a minimum RON 99 (Research Octane No.) that will be blended with other hydrocarbon stream (light naphtha) to reach an acceptable octane no for gasoline product, based on Bangladesh government standards and market demand.

Top-Supervision, Monitoring of Techno-Economic Feasibility Study and related Works of Consulting Firm and selection of Terminal Developer or any other Designated Entity for Construction of Land Based LNG Terminals

Client: Rupantarita Prakritik Gas Company Limited (RPGCL)

Location: Bangladesh

First Level Consultancy: Tokyo Gas - Japan

Second Level Consultancy: Monenco Iran Consulting Engineer

Capacity: 2*7.5 MTPA @ capacity 1000 MMSCFD - Land Base Energy Terminal

Capacity: 2*3.75 MTPA @ capacity 500 MMSCFD - FSRU Terminal

Descripton

Natural gas is the only indigenous commercial energy resource in Bangladesh. Natural gas currently accounts for 72% of the commercial needs. Most of the natural gas is used in generation of electricity and production of urea fertilizer, with significant uses in industrial, commercial and domestic purpose as well as fuel for CNG operated vehicles. Gas demand is increasing sharply keeping pace with the economic development and diversified use of gas. In Bangladesh gas reserve is not increasing. Presently there is gas shortage in Bangladesh resulting less power generation, low gas pressure and no new gas connection in industrial, captive and CNG sector impeded in whole gas pipeline network areas. To meet up the upcoming energy supply challenge, Government of

Bangladesh has planned to construction of two land based LNG re-gasification terminals at Moheshkhali and Kutubdia under COX's Bazar district and payra under Patuakhali district each having 7.5 MTPA@ capacity 1000 MMSCFD.



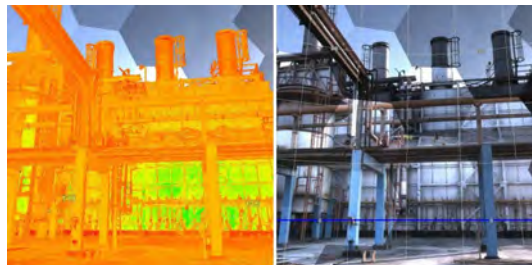
Consulting Services for Revamping of Process Units including CR1, Main Piperack, PDMS 3D Modeling and Preparation As-Built Documents by Laser Scan Technology for Abadan Oil Refinery Units

Client: Abadan Oil Refinery Main Client: Abadan Oil Refinery

Start Date: 2017 End Date: 2018 Location: Abadan

Scope of Works:

1. Piping documents preparation (Isometrics, Piping Plan and Plot Plan) by PDMS and also Process documents preparation (P&ID and PFD) for Interconnecting unit (A corridor with 30Km length and 10m width)
2. Piping documents preparation (Isometrics, Piping Plan and Plot Plan) by PDMS and also Process documents preparation (P&ID and PFD) Catalytic Reformer Unit No.1 (CR1)
3. Heat & Mass balance report preparation by HYSYS with below documents for CR1 :
 - a. Process Equipment Datasheet
 - b. Instrument Equipment Datasheet
 - c. Cause & Effect
 - d. Emergency Shut Down Diagram
 - e. Alarm Set Point List
 - f. Utility Consumption List
 - g. Flare Load List
 - h. PSV Data Sheet



Description:

Considering the age of Abadan Refinery, different maintenances have been taken place over these years on the existing facilities. Therefore, preparing updated engineering documents in accordance with the maintenances is an important matter in order to perform engineering, operation and maintenance activities. The main purpose of this project is to provide the updated engineering documents based on the changes made to the facility.

Alternative Selection, Basic and Detailed Engineering of Gachsaran Oil Wells and Subsidiary Facilities Automation Project

Client: National Iranian South Oil Company (NISOC)

Description:

This project consists of two Separation units (No. 301 and 167) and 25 Wellheads. The intention of this project is to automate Oil Wellheads and related Separators in Gachsaran region.

The purpose of this project is renovation of instruments in wellheads and Separators, installation of new Control and Safety system, Monitoring and Control in the field (for Wellheads and Separators) and allows Control and Monitoring of all events from Gachsaran Main Control Room and Gachsaran Oil and Gas Company



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Kermanshah Bioethanol Production Plant (200,000 Lit/day)

Client: Zagros Green Fuel Development company (GSZ)

Location: Kermanshah - Iran

Scope of works:

Contributing PMC services such as:

- Providing RFP & Process Engineering Licensor Company
- Providing Tender Documents for Selection EPC Contractor
- Supervision of Basic & Detail Design & Procurement engineering Services
- Supervision & Consultancy Services for Construction phase in site
- Supervision of Commissioning & operation phase in site

Description:

Zagros Green Fuel development Company's (GSZ) objective is to build a green field facility for Ethanol Production located in Kermanshah province in Iran. Maguin Company (subsidiary of French Enival Moret Company) has been selected to develop Basic Engineering package to allow a production of 200,000 liter/day at 99.8% volume. Also Monenco Iran has been selected by owner for Managing project.



Furnishing Import & Export Stations of Iran Ministry of Petroleum with Custody Metering System

Owner: Iran Ministry of Petroleum/ NEYRPERSE – Iran

Scope of works:

- Review, Endorsement, Modification, Completion and Approval of basic design
- Sites Visits and Data Gathering
- Detail design
- Procurement Engineering Services (Including budgetary and final material take off)
- Tender Bid Evaluation, Vendor Review
- Contributing Pre-commissioning, Commissioning and Construction Services
- Technical and Sites Supervision Services

Description:

In this project, production transaction points (export & import) of the ministry of petroleum will be equipped with custody meters (to measure crude oil & condensate production for 52 points across the country) and data transferring equipments to send on line information to central office in Tehran(16 points across the country).

At the first stage of this project, 10 points including 8 points for national Iranian south oil company and 2 points for Iranian offshore oil company will be equipped with Custody Metering System.

Oil
&
Gas



Utility Project of Gas Refinery Phases 15 & 16 South Pars Gas Fields Development Plant South Pars Gas Fields Development

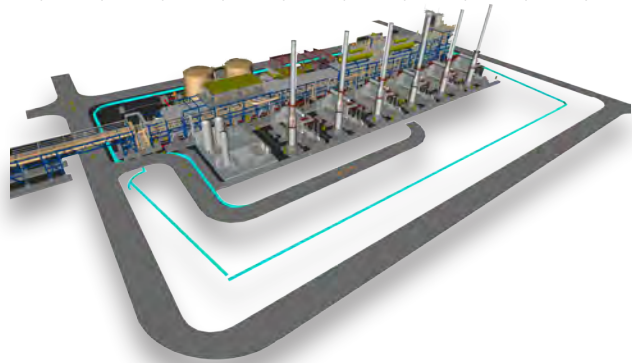
Owner: Pars Oil & Gas Co. (POGC)

Client: MAPNA

Scope of works:

- Review, Endorsement, Completion and approval of basic design
- Detail design
- Procurement Engineering
- Preparing technical bids documents and evaluation of contractors
- Engineering management Services
- Design review of vendors documents
- Interface engineering
- Claim management
- 3D modelling
- Technical office & Site Supervision

All above scope of works will be done for the following units: 120, 121, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 132/33kv Akhtar substation.



Consulting Services, Field Engineering and Construction Supervision of Unit No. 106 of South Pars Gas Field Development Phase 19 South Pars Gas Fields Development

Client: Pars Oil and Gas Co. (POGC) / Petro Pars Iran / Neyerperse

Scope of works:

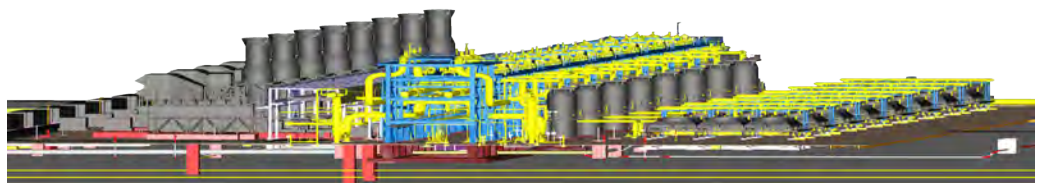
- Engineering Consulting Services , contractors design review and vendors print check
- Preparing technical reports
- Field engineering in site technical office
- Construction Supervision

Description:

Phase 19 onshore complex is located on the Iranian coast of Persian Gulf in TOMBAK. The total capacity of phase 19 onshore facilities is 2000 MMSCFD of dry reservoir fluid. The lean gas from Ethane recovery unit (105) serves compression and export gas unit (106) to recompression. Unit 106 includes six centrifugal compressors in parallel plus two spare, each compression section includes one suction drum, one compressor and associated gas turbine and one after cooler. Compressed Export gas in unit 106 is delivered at 90.8 bars via metering system to connect to IGAT9.



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Technical and Site Supervision Services for Gas Supply and Distribution Projects in Tehran

Client: Tehran Province Gas Company

Location: Tehran, Iran

Scope of works:

Technical services and supervision on the gas supply and distribution projects including industrial, urban, rural and building projects in Tehran province gas distribution company operation department in accordance to NIGS standards.

- Branches and distribution network construction projects with steel and polyethylene pipes, gas injection, industrial and non-industrial commissioning
- Constructing, installing and commissioning gas pressure reduction stations and cathodic protection
- Building and ancillary facilities projects related to gas pressure reduction stations, cathodic protection and operational buildings
- All operations required for the above mentioned construction and operation
- Land acquisition, distribution, domestic and industrial branches. Removal of old domestic globe valves and installation of valve pits. Refurbishing of gas industrial land, urban pressure reduction stations (CGS)

3D-Model Preparation for all IOOC (Iranian Offshore Oil Company) Offshore Platforms (Including Kharg, Lavan, Bahregan & Siri)

Client: Iranian Offshore Oil Company / TWI Persia

Description:

The purpose of this project is to prepare 3D- Model of all IOOC's offshore platforms (176) located in Persian Gulf. There are four main regions that we are gathering their data: KHARG, LAVAN, BAHREGAN and SIRI. We are gathering all platforms' data and scanning all existing installation in all platforms levels such as: equipments, piping, Instrument & electrical devices and all structure by LASER SCAN technology. Until now the below 3 zones have been covered for data gathering with Laser Scan & 3D Modeling with PDMS.

- Aboozar Oil Field - Kharg Island
- Foroozan Oil Field - Kharg Island
- Dorood Oil Field - Kharg Island



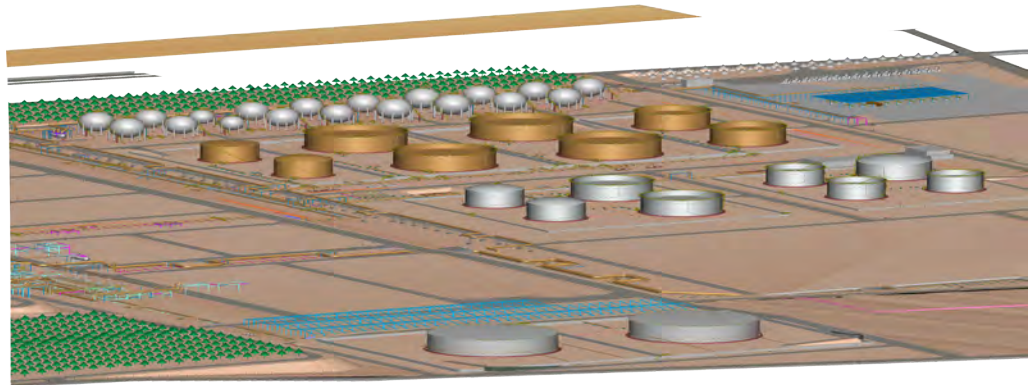
Esfahan Refinery Upgrading

Owner: National Iranian Oil Engineering and Construction Co. (NIOEC)

Client: MAPNA

Scope of works:

- Review, endorsement, completion and confirmation and approval of the basic design package
- Preparing technical bids documents and evaluation of contractors
- Design review of vendors documents
- Interface engineering
- 3D modeling
- Engineering management services
- Site supervision
- Detail design of units including Flare network, Fuel system, Air system, interconnection, Water system (Including Demin water, BFW, Plant water, Potable water, Cooling water, Fire water), Nitrogen and Storage (Including spherical tanks and fixed roof and floating roof cylindrical storage tanks)



Contributing Engineering Services for Transfer of Technology, Procurement, Installation, Commissioning of four Vapor Recovery Units

Client: National Iranian Oil Refinery and Distribution Company

Location: Ahvaz, Mashhad, Arak - Iran

Scope of work:

Monenco is responsible to contribute engineering services for transfer of technology, procurement, installation, commissioning of four vapor recovery units.

Description:

NIORDC intends to install four vapor recovery units at gasoline storage tanks at Ahvaz, Mashhad, Arak areas.

The purpose of this project is to control and recovery of the released volatile organic compound at storage tanks to avoid the emission of harmful substances due to strict emission limits have been defined in the country.



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Engineering Services of Production of Formalin, Acetaldehyde and Pentaerythritol in Shahid Rasouli Petrochemical Complex

Client: Shahid Rasouli Petrochemical Complex

Scope of works:

- Phase 1:
 - Review
 - Endorsement
 - modification
 - Completion and approval of basic design prepared by Korean company
 - Economical Study
 - Preparation Scope of Work for Phase 2
- Phase 2:
 - Detail design engineering
 - Management & Supervision over procurement
 - Training of client staff
 - Supervision over erection and commissioning of a petrochemical complex located in Mahshahr (South of Iran)

Shahid Rasouli Petrochemical Company (SRPC) is being established for producing Formaldehyde, Acetaldehyde and Pentaerythritol in Mahshahr Free Zone. The required raw materials for this complex are methanol, ethanol and caustic soda.

This plant includes three process units; one unit for production of formaldehyde from methanol with 64,000TPD capacity, one unit for production of acetaldehyde from ethanol with 5000TPD capacity and one unit for production of pentaerythritol from acetaldehyde, formalin and caustic with 10500TPD capacity.



Engineering and Tender Documents Preparation for Upgrading and Renewing of BALAL Platform ABB Control System Work Stations

Client: Iranian Offshore Oil Company (IOOC)

Scope of works:

- Supervisory system Reform in control room
- Redesign of configuration of Supervisory system at the local room WHP
- Improving monitoring and supervision software
- Reform the Architecture of ABB Monitoring System, separation of monitoring and automation layers
- Replacement of hardware for ES and OWS industrial computers
- Replacement the matching device and communication hardware on the bus MB300
- Replacement of fiber-optic cable connection

ENGINEERING SERVICES as SUPERVISION OVER SOTH PARS, PHASE 14

Owner : POGC
 Client: MAPNA (Neyr Perse)

Scope of works:

- Review and completion of detail design documents
- Preparing Mark-up drawings
- Technical Query (TQ) resolving
- Site Supervision
- Technical Office services

All above scope of works will be done for the following units: 106, 108, 109, 120, 121, 122, 123, 124, 125, 126, 127, 129, 130, 131, 132, 144, 146, 165, 176

Description:

Production Capacity from the Reservoir in south pars phase 14 is 2BSCFPD. Offshore facilities includes 44 wells with 4 offshore Platforms each producing 500 MSCFPD. Offshore Pipelines includes two 32" main pipelines transferring gas from the main platforms to onshore processing units, 260km long in all, together with two 4.5" lines used for MEG injection and Infield Pipelines includes two 18" lines to transfer gas from satellite platforms to the outlets of the main platforms, totaling 18km along with two 4.5" pipelines for MEG injection. Gas and input liquids are processed in onshore processing unit, producing the following products:

- 50 MSCMPD of refined gas
- 1.1 MT/year of liquefied gas for export
- 77 thousand barrels/day of gas condensates for export
- 1 MT/year of Ethane gas to feed the petrochemical plants

By-Product is Sulphur (by product of gas sweetening process) as 400 MT/day for export.

Khorasan Petrochemical Plant Control and Monitoring Replacement

Client: Khorasan Petrochemical Company

Scope of works:

The purpose of this project is to replace the existing control and monitoring system of power plant unit for KHORASAN Petrochemical Company with a state-of-the-art distributed control system (DCS) to reap the benefits of the latest technology. This plant consisted of four boilers, three turbine/generators, four BFW pumps, ACC system, LPS, MPS, Blow-down system, Drain system and related equipments which were controlled by a SIEMENS DCS (TELEPERM MI).

In addition to the DCS, the project scope included marshaling cabinets, monitoring system, boiler management, integration of the subsystem interfaces and upgrading related systems with new DCS.

Middle East Gas Infrastructures Opportunity Screening

Owner: PÖYRY Management Consulting (France) SAS – France

Scope of works:

- This project is to select the most reliable countries for investment in the Gas Infrastructure and Distribution. LNG plants also were investigated as the alternative for export of Gas. This project is categorized into two phases:
 - Phase 1 has two parts; Five countries have been studies and lead to selection of two countries.
 - Phase 2 is conducting a detailed analysis of the two final countries including the detailed modeling of energy and gas demand as well as description of natural gas supply, demand, transmission, distribution, LNG and storage was conducted.



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Preparation 3D Modeling and As-Built documents/Stress Analysis and Support Design for KHARG Island (Iran) loading and Storage Manifold

Client: Iranian Offshore Oil Company

Scope of works:

- Data gathering
- 3D Modeling
- Stress Analysis
- Detail design of supports



Rendering Preliminary feasibility study for increasing of capacity of Abadan petrochemical plant based on receivable feed from Abadan refinery

Client: Abadan Petrochemical Company

Scope of works:

- Updating cost estimation for performing the project
- Cost – Revenue analysis of performing the plan and priorities
- Sensitivity analysis of the plant versus price changes and product quantities
- Extraction of all data regarding capital investment of the plant, fixed – variable cost, production parameter and analysis by comfar software
- Final report, acceptable for credit & financial organizations

Description:

Abadan petrochemical company intends to perform feasibility study based on two scenarios:

1. To indicate feed price with consideration rate of 25% IRR
2. To indicate rate of interest based on feed price at present

Design and Consultancy Services for Erection and Installation of Actuator on Existing Supper Block Valves

Client: Tehran Province Gas Company

Scope of works:

- Design and consultancy services for erection and installation of actuator on existing supper block valves

Descripton

Considering of possibility of an earthquake in Tehran and the danger of fire after the earthquake or any landslides due to gas leakage caused by any failure in pipelines, the retrofitting sector of gas supply of the National Iranian Gas Company (NIGC) intends to install the actuators on main valves of rings in Tehran with remote control. In case of the occurrence of the earthquake, the actuators are operated in a short time to shut down the gas flow path. It should be noted that this project is considered as one of the national projects which is about to be implemented in the whole countries in the future.

Contributing Engineering Services for Procurement, Installation, Commissioning of Fire Protection and Alarm System of Compressor Room in Kermanshah Petrochemical Complex

Client: Kermanshah Petrochemical Company

Location: Kermanshah - Iran

Scope of work:

- Basic Design
- Detail Design
- Providing PC Tender Document

Description:

This project include all Mechanical, Civil, Piping, Instrumental, Electrical and HSE works for designing of alarm and fire protection system of compressor room in Kermanshah Petrochemical Complex ,and providing PC tender document.

Conceptual, Basic Design and Detailed Design of Heat Recovery from Olefin and VC Units in Abadan Petrochemical Company

Client: Abadan Petrochemical Co.

Location: Iran - Abadan



Description:

Abadan Petrochemical Company intends to perform heat recovery project in Abadan petrochemical in order to increase efficiency and operational performance from energy losses point of view.

The purposes of this project are Heat Recovery from process streams of olefin furnace units and VC units and heat recovery from the flue gases of these two units in Abadan Petrochemical Company.

However, Monenco is responsible for performing all Design and Engineering Services in all phases of engineering including Conceptual Design Studies, Basic Engineering Services and Detailed Engineering Services in this project.

The Standardized Approach for Energy Consumption Optimization in Desalting Units

Client: Iranian Fuel Conservation Company (IFCO) - Iran

Scope of works:

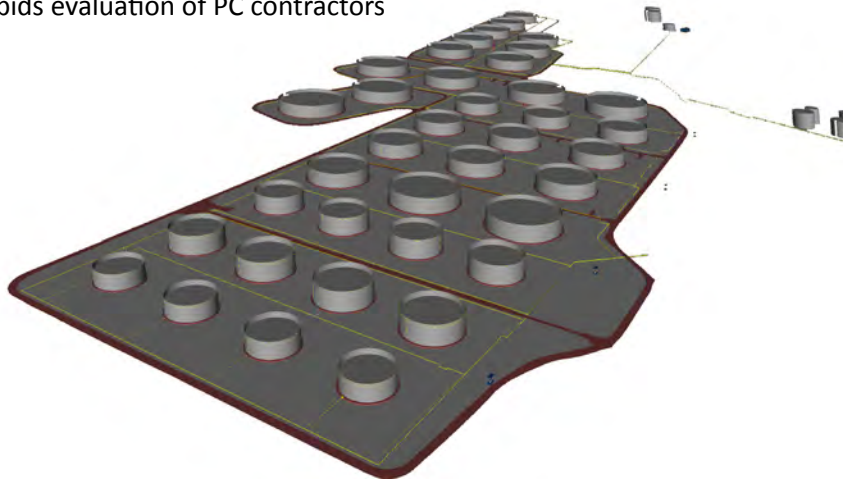
- Data gathering in all Desalting units and data analyses
- Energy Auditing in order to supervise the energy criteria and standards in 15 Desalting units
- Revising the energy standards and criteria (based on every three years Plan)
- Provision of Training Course

Fire Protection & Alarm System for Crude Oil Storage Tanks in Kharg Island

Client: Iranian Oil Terminals Company (IOTC)

Scope of works:

- Review, endorsement, completion and confirmation of the basic design package
- Preparing of Feed documents
- Detail design of units including fire pump stations, fire water network, water storage tank, water pumps, chemical package and automatic fire protection & alarm system for 44 crude oil storage tanks (including fixed roof and floating roof cylindrical storage tanks)
- Engineering procurement services
- Preparing tender documents
- Technical bids evaluation of PC contractors



Comprehensive Technical & Financial Feasibility Study, Business Plan for GTP (Gas TO Propylene), GTO (Gas to Olefin) Plant

Client: Iran Industries Development and Renovation Organization (IDRO)

Scope of works:

- Marketing study report
- Technical study report
- Economical study report
- Business plan report

Description:

Market saturation due to excess production of methanol in recent years on one hand, and the importance of olefin production as a feed which is required as substantial material for petrochemical Productions chain so low price of natural gas in the country on the other hand, and in order to increase the added value, have caused the direction of Iranian petrochemical industries to be changed to installation of GTO, GTP, MTP, MTO, plants.

Carbon Capture Storage from Power Generation Units

Client: Iranian Power Plant Management Co. (Mapna)

Scope of works:

Feasibility study and a vast investigation to find out the possibility of Co₂ absorption from flue gas of power plants, how to make storage and the ways of handling and distribution to various customers. Also to create a data base of all Co₂ production companies and consumers in Iran and neighboring countries

F/F Reservoirs and Water Systems and Fire Pumps Consulting Services of Aghajari's Operational Activities

Client: NISOC, Aghajari's Oil and gas operating company

Description:

National Iranian South Company (NISOC) is planning to rehabilitation of fire fighting system for eight production units located in AGHAJARI area. Engineering works for this project including basic and detail design as well as preparation of PC tender document is in Monenco Scope of work.

Electrical and Thermal Energy Auditing In Pars Special Economic Energy Zone (PSEEZ) and Optimization of Energy Consumption

Owner: Iranian Fuel Conservation Company (IFCO) – Iran

Scope of works:

- Thermal & Electrical Energy Auditing and providing solutions to enhance the energy consumption in supply & demand sectors of South Pars Special Zone.

Descripton

The production system was audited to specify the existing energy conversion efficiency. In this stage some parameters like power, exhaust temperature, compressor discharge pressure and temperature and fuel flow were measured to monitor the performance. Such a method is applied to boilers, as well.

TUGA Gas Pressure Reduction Stations (GPRS) and Transportation Pipeline

Owner: Mapna Turbine Engineering and manufacturing Co. (TUGA) – Iran

Description:

Project includes design and supervision on construction of gas pressure reduction stations with the following specifications:

- Pressure reduction 1000 to 500 psi with 13000 Nm³/h capacity
- Pressure reduction 500 to 60 psi with 3000 Nm³/h capacity

Consultancy and Design of Installation of Electric Actuator on the Long Handle Buried Ball Valves in 4, 6 and 8 inch sizes

Client: Tehran Province Gas Company (TPGC)

Scope of works:

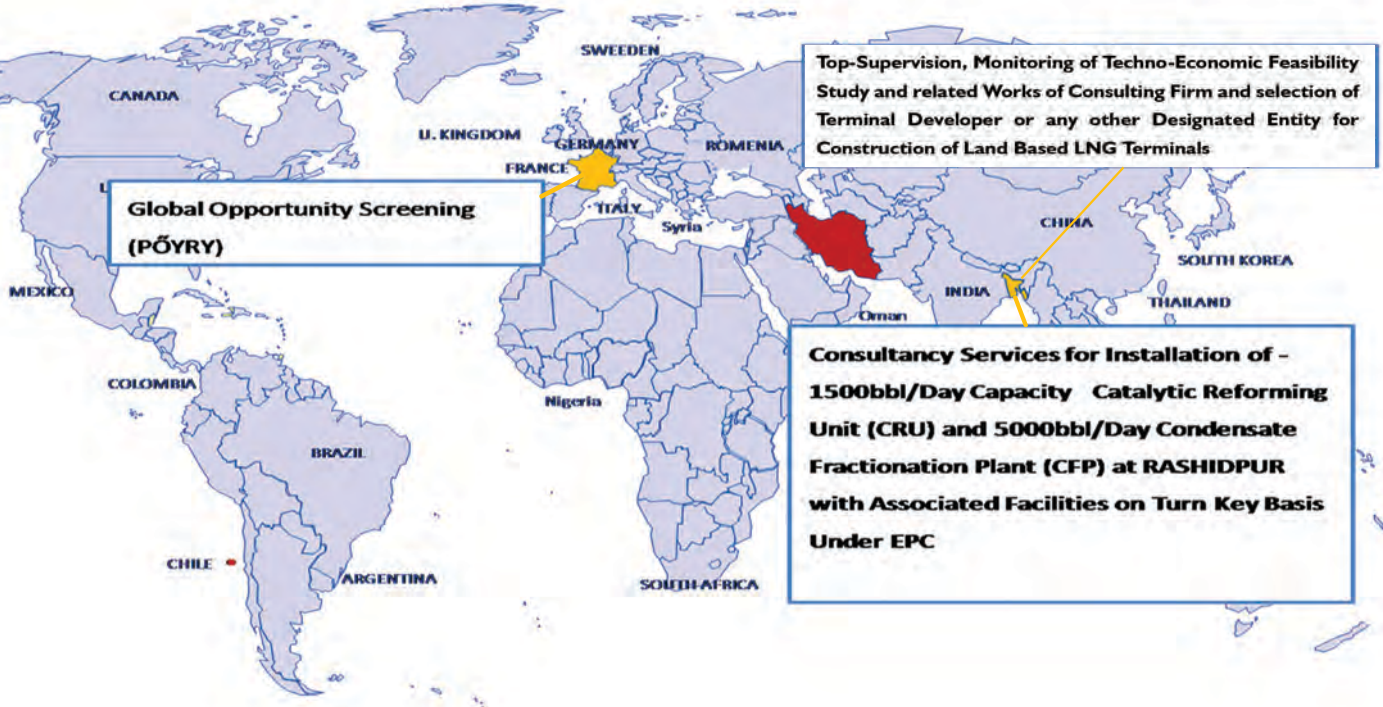
- Consulting & design of installation of electric actuator on stem extension buried ball valves

Descripton

In order to protect environment/people against spread of gas in the air during earthquake, automatic shut- off system for gas stations is required. For that purpose, it is necessary to install the electrical actuator on the ball valves on inlet of stations. Electrical actuator will initiate when earthquake happens by sending signals to the actuator to emergency shut down the gas flow. In This project, Monenco is responsible for consultancy and design of installation of electric actuator on the long handle buried ball valves.



Oil & Gas overseas projects



Foreign partners in Oil & Gas projects





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