

Energy & Industry



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Energy & Industry

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Over 28 year history of Sazeh Pardazi Iran Consulting Engineering Co. (SPI) since its establishment in 1989, we have been always intended sustainable development and balanced rely on our advanced technical knowledge, enjoying talented staff, having a positive attitude to the future and a willingness to challenges.

In this way, we always try to keep in mind the sense of responsibility to our colleagues and clients, understanding of facts and respect to humanity, and now, with about 500 completed projects both in Iran and overseas, with hope to a bright future, we are still thinking on development.



Energy & Industry (EI)

Achievement of years of experience in the oil, gas, petrochemical and industrial projects, and successful implementation of several major projects in these fields, has created a powerful section, with supporting of PMO and all the required specialized disciplines and can provide a variety of management and engineering services.

In this section, with utilization of our professional experts, we provide engineering services, management consulting, procurement, Commissioning and startup services and collaboration with other companies to carry out EPCC & EPCCF projects as well, in the following areas:

- Oil, gas and petrochemical units (OGP)
- Offsite and utility
- Tank farms
- Jetty
- Pipeline
- Industrial projects
- Infrastructures



Ranking

Rankings of the construction company, obtained from the planning and budget organization

Grade 1 in specialties:

- Oil, gas refineries and petrochemical plants
- Oil and gas pipelines
- Coasts, ports and marine structures
- Structure
- Geotechnic
- Residential, commercial, office, industrial and military buildings
- River engineering

Grade 2 in specialties:

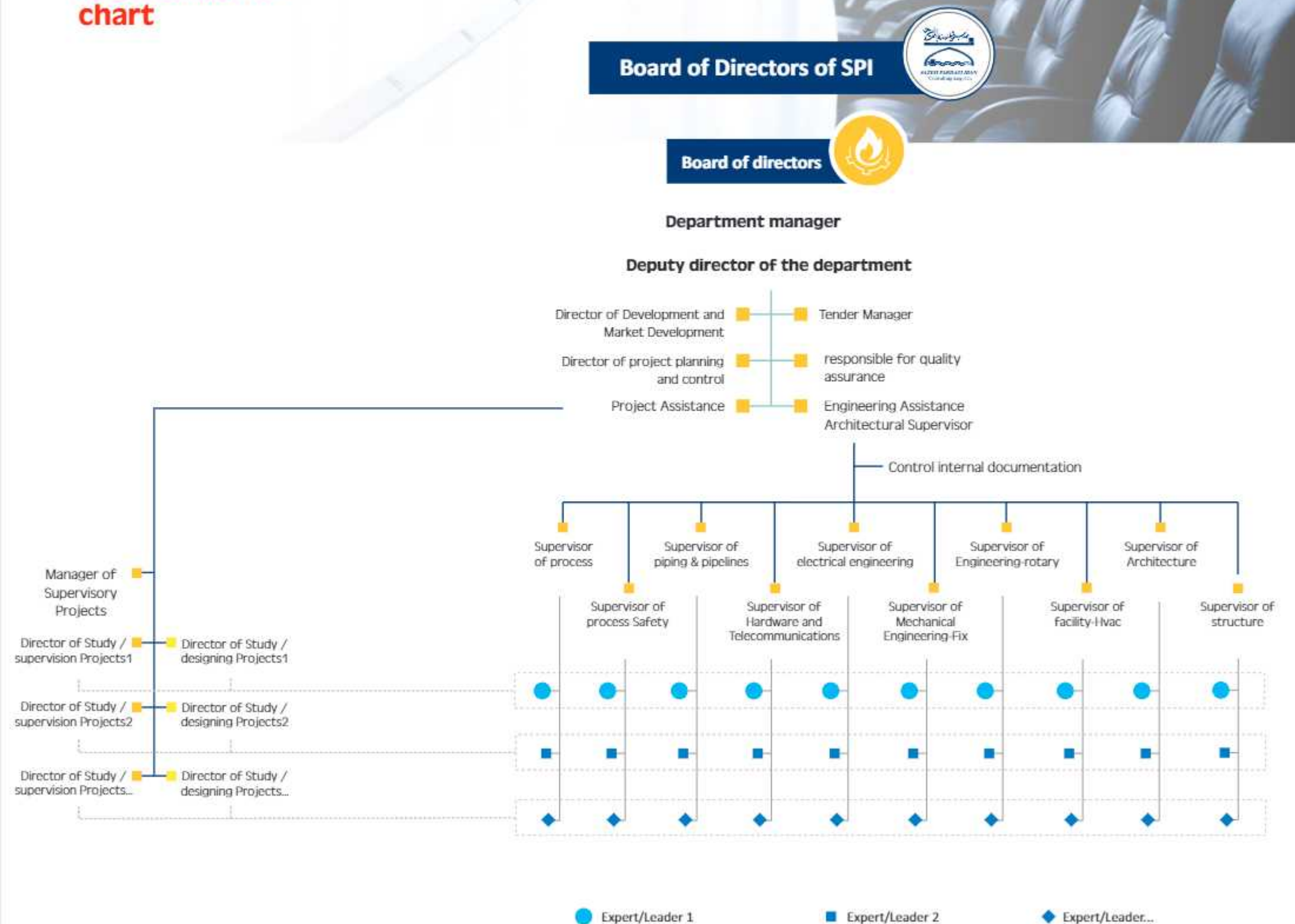
- Surveying of hydrography
- River engineering
- Irrigation and drainage networks

Grade 3 in specialties:

- Environmental studies
- GIS Geographic Information Systems
- Water and sewage plants
- Dams
- Roads and Bridges



Organizational chart



Oil, Gas and Petrochemical units

- Flare gas recovery (F.G.R)
- Siraf Refinery
- Kangan Petrochemicals, Phase 2
- South Pars Phase 13 Refinery
- Phases 15 and 16 of South Pars
- Receipt, storage and export of West Karoun crude oil
- Qom gas compressor station
- Complementary design of Ilam gas refinery phase 1
- Ilam Refinery Development Plan
- Rehabilitation and renovation of the foundations of the Kharg region factories
- Mehr Petrochemical Complex
- Hormoz Urea fertilizer complex

Conceptual Design and Feasibility Study Of South Pars Phase 4 & 5 and Jam Petrochemical Flare Gas Recovery System (FGR)

Brief description of the project:

Project has been defined to avoid wasting and burning of gases were sent to the flare Assaluyeh refinery, Jam Petrochemical Complex and the proper use of them to create a clean environment based on the domestic and international protocols, as well as reuse this gas for energy production or Petrochemical products with the aim of recycling lost capital and the subject of this project is: the technical, economic and feasibility studies for the recycling and consumption of gases sent to the Flare at the third refinery (phases 4 and 5) and the Jam Petrochemical Complex is the subject of this project.

Description of Contract Services:

General studies in the field of recycling, compression and return to the cycle of production of gases to the Flare as follows:

- Investigating the intensity of continuous flow of gases submitted to the above-mentioned flares with the concentration of specific and important components in designing and determining the maximum and minimum effective values in design with multiple sampling
- Evaluating a variety of gas recovery methods by technical and economic point of view and selecting the best method for operational, process safety, feasibility and cost optimization
- Considering a seal drum system: In order to ensure a safe process and prevent the penetration of oxygen into the Flare network on the path of each main header of the flare is considered.
- Considering a Flare Gas Recovery System (FGRS): For the Recycling of Flare Gas at any of the Main header Flare Networks
- Finally, injection of recovered gases into 32-inch sour gas pipeline

Employer: Pars Oil and Gas Company(POGC)

Contract type: Study / research

Start: 2014

Finish: 2017

Project title: Flare gas recovery (F.G.R)

Employer: Pars Oil and Gas Company(POGC)

Location: Assaluyeh

Basic Design (BE) for SIRAF Condensate Refinery-export line & jetties

Brief description of the project:

The SIRAF refinery is located in TONBAK area and 50 kilometers west of Assaluyeh; the feed of these refineries is being supplied from the refinery complexes in this area. The SIRAF refineries consist of 8 refineries with nominal capacities of 60,000 BSPDs, including process and utility units.

The SIRAF refinery is located in TONBAK area and 50 kilometers west of Assaluyeh; the feed of these refineries is being supplied from the refinery complexes in this area. The SIRAF refineries consist of 8 refineries with nominal capacities of 60,000 BSPDs, including process and utility units.

The project is based on the project requirements and in order to transfer the products from the border of the refineries to the berth (Pars 2) and loading on ships which including the design of the pipeline for transferring the products, determine the number of berth and their locations, number of required loading arms, the measurement equipment and other required systems. With the development of the project, designing a section of required water intake of refineries was added to the contract as well.

Project title: Siraf Refinery

Employer: Enery and industry engineering & design Co.

Location: BUSHEHR province

Description of contract services:

- Design of 5 berths and pipe rack of the transmission route of above products in addition of loading arms and necessary facilities for proper service in order to export the above products as follows:
- Provide port traffic report and estimate the number of required Berth
- Pip Rack design of transmission Pipeline of products and other services from refinery to the Berth
- Design of export jetties (15 docks)
- HAZOP studies and its results in project documentation
- Site selection and Basic Design (BE) of the water intake platform of the SIRAF refinery for supplying water to the desalination system and the fire station in the Pars 2 port

| | |
|----------------|--------|
| Employer: | (EIED) |
| Contract type: | Study |
| Start: | 2016 |
| Finish: | 2017 |

Consulting Engineering Services for development plan of Phase 2 KANGAN Petrochemicals

Brief description of the project:

Consulting services on design and preparing the executive plans for infrastructure projects and other engineering services, technical support, in order to layout of petrochemical units, preparation of subcontracting plans, providing tender documents, technical meetings Q & A with bidders, investigating of contractors' documents, planning and project control of the entire project, by considering to the latest international standards version, as well as providing technical support services, engineering and finalization of Plot plans for the second phase of KANGAN Petrochemicals that is located in 25 | Km from KANGAN city and in Pars Special Economic Zone along with KANGAN Petrochemical Phase 1, which includes 4 units of OLEFIN, MEG HDPE LDPE and export tank farm and mechanized warehouses of polyethylene and utility units in an area of 55 hectares

Description of contract services:

- investigating the layout of petrochemical units according to the latest license
- Checking the amount of required utility and determine how to supply it
- Inspection of a joint pipe rack with phase1 and proper design of the pipelines related to Phase 2
- Determining the Common Border with Phase I of the KANGAN Petrochemical Complex
- Preparing Export Philosophy
- Provide project control services and document control and submit all design documents including technical specifications and drawings and all documents.
- Investigating, Determining the Flare Complex Lines and Locating them for executive activities and Optimizing them
- Preparing Rough Grading Road Maps for Complex 1
- EIA Data Collection
- Investigation and layout of complex units taking into account safety and process considerations, comparison of different states and their optimization

| | |
|----------------|-----------------------|
| Employer: | Kangan Petrochemicals |
| Contract type: | Study |
| Start: | 2018 |
| Finish: | 2018 |

Project title: Kangan petrochemical

Employer: Development of Kangan Petrochemicals Co.

Location: BUSHEHR province





Procurement, construction, installation and pre-commissioning of electrical and instrumentation systems and control systems of South Pars Phase 13 by PC

Project title: **Electrical and instrumentation systems of South Pars Phase 13**
 Employer: **Petro pydar iranian Co**
 Location: **Bushehr province**

Brief description of the project:

Procurement, construction, installation and pre-commissioning of electrical and instrumentation systems and control systems

| | |
|----------------|-------------------------|
| Employer: | Petro pydar iranian Co. |
| Contract type: | EPC |
| Start: | 2006 |
| Finish: | 2016 |

Description of contract services:

- Preparing 116 Km route for Cabling including installation of Cable Tray, Cable Ladder and Conduit
- 943 Km Cabling of various types of power cables, instrumentation and control as well as testing operation
- Installation of different kind of control panel including F & G, ESD, DCS, HIPPS, more than 2,500 electrical boards, LCS and JB, all instrumentation equipment, Electrical Heat Tracing System and

Electrical and instrumentation systems and control systems of South Pars Phase 15 and 16 by PC

Brief description of the project

Purchase, execution, installation, pre-commissioning and commissioning of electrical systems, instrumentation, control system operation and equipment. Instrumentation equipment of the 15th and 16th phase of South Pars.

Description of Contract Services:

- Workshop engineering and solving the technical problems in the implementation process,
- Procurement of all goods in the description from the purchasing step to the delivery at the site
- 62 Kms cabling route including installation of Cable Tray, Cable Ladder and Conduit,
- 1200 Kms cabling of various types of power cables, instrumentation and control
- Installation of 195 kinds of control system panels including F & G, ESD, DCS, ...
- Installation of 915 electrical control panels, LCS and JB, 717 instrumentation equipment, Implementation of refinery lighting system and street lights ,...

| | |
|----------------|---------|
| Employer: | Sepanir |
| Contract type: | EPC |
| Start: | 2010 |
| Finish: | 2014 |

Project title: **Electrical and instrumentation systems of South Pars Phase 15 & 16**
 Employer: **Sepanir**
 Location: **Assaluyeh**



Feasibility studies, Basic and conceptual design on receipt, storage and export of West KAROUN Crude Oil (at the amount of 700,000 barrels per day)

Brief description of the project:

Conducting feasibility, conceptual and basic design for receiving, stocking and exporting West Karoun crude oil through Kharg oil terminals and performing the project's overall assessment, preparing the tender documentation and other documents that are required for EPC tenders in Kharg Island..



Brief description of the contract:

At present, most of Iran's oil are exported through oil terminals and especially Kharg oil terminals in three types of crude oil. In this project, export of the fourth type of crude oil with the title of "Karun oil" is carried out through the Kharg oil terminal.

- Investigating feasibility of using the existing capacity of KHARG terminals
- Conduct of geotechnical, surveying and laser Scan studies to collect information
- Conceptual design of the project based on feasibility studies
- Basic design (BE) of Tank Farm, pipe line from tank Farm to east manifold and from there to the berth and quay No. 1 (capacity 100 thousand barrels per day)
- Design of required pump station
- HAZID, HAZOP, EIA
- Apply for estimating the value of main equipment of project
- Preparation of Job Description and EPC Tender Documents

▲ Project title: **West Karoun Crude Oil**
 Employer: **Iranian Oil Terminals Company**
 Location: **Kharg- Hormozgan**

| | |
|----------------|-------------------------------|
| Employer: | Iranian Oil Terminals Company |
| Contract type: | Study |
| Start: | 2018 |
| Finish: | current |

Development of Natural Gas Compression Qom II Station by EPC

Brief description of the project:

Engineering, procurement, construction (execution, install, commissioning),installation of a new series of natural gas turbine compressors with a flow rate of 30 MMSCMD

Description of Contract Services:

- The contract description for adding a row of German Siemens Compressors to the three existing compressors and increasing the capacity of line 2 is as follows.
- Design, purchase, installation of a series of turbo compressors of natural gas with a capacity of 30 MMSCMD, in addition to providing air cooling coolers and other related mechanical, piping, instrumentation and ...
- Installation of them according to project description

Employer: Iranian Gas Transmission Company.

| | |
|----------------|------|
| Contract type: | EPC |
| Start: | 2011 |
| Finish: | 2013 |

▶ Project title: **EPC of Natural Gas Compression Qom II Station**
 Employer: **Iranian Gas Transmission Co.**
 Location: **Qom**





Details design of phase 1- Ilam Refinery

Project title: **Ilam Refinery - Phase 1**
 Employer: **Iranian Gas Engineering & Development Co.**
 Location: **Ilam province**

Brief description of the project:

conduct basic design, making some changes to the first phase of the Ilam gas refinery and validating the design information for the second phase of the refinery and making the necessary changes to update the tender documents of phase 2 of the refinery

| | |
|----------------|-------------------------|
| Employer: | Iranian Gas Engineering |
| Contract type: | Study |
| Start: | 2017 |
| Finish: | 2018 |

Description of Contract Services

- Reviewing the process units of the refinery in order to fix presented deficiencies in the Value Engineering Report
- Exploring the philosophy of Startup and Shut Down
- Preparing Cause & Effect - P&ID and Data Sheet,
- Performing the basic design (BE) to add new equipment in order to fix deficiencies,
- Preparation of job description, price list and MTO for EPC Tender

Updating Estimation of project, providing the Tender booklet by EPC method and impliment the Value engineering of 2th phase of Ilam gas refinery projects

Brief description of the project

Ilam Gas Refinery is located in 25 km northwest of ILAM and 12 km west of CHAWAR city. The refinery is planned in two phases, the first phase was constructed and is in operation. The design of the first phase of this refinery was carried out by Canadian company Propec. The project's objective is to increase production capacity in the second phase to 3.4 million cubic meters per day, so the total capacity of the refinery will reach 10.2 million cubic meters per day.

Description of contract services:

Updating Estimation of project, providing the Tender booklet by EPC method and impliment the Value engineering of 2th phase of Ilam gas refinery projects

Employer: Iranian Gas Engineering & Development Co.

| | |
|----------------|-------|
| Contract type: | Study |
| Start: | 2014 |
| Finish: | 2015 |

Project title: **Ilam Gas Refinery**
 Employer: **Iranian Gas Engineering & Development Co.**
 Location: **Ilam province**



Renewal and rehabilitation of the foundations of the KHARG region factories

Brief description of the project:

investigate the process of 4 factories DOROUD 1& 2, ABUZAR and FOROUZAN located in KHARG island performing site visits, collecting information and investigating the existing information and presenting improvement plans with considering to process and safety conditions of piping and tank farm and fixed and rotary equipment for the foundations and supports of pipe holders and current equipment in the factory

| | |
|----------------|---------------------------|
| Employer: | Iran Offshore Oil Company |
| Contract type: | Study |
| Start: | 2017 |
| Finish: | in progress |

Description of contract services:

- Site study, surveying, GPS and determination of levels and plans for foundations and substations
- Collection of basic information and gravity and dynamics conditions of equipment and conducting assessment and modeling and analyzing the static and dynamic effect of equipment on foundations.
- Providing the studies report of phase 1 and design for selective options and evaluate possible and feasible options based on process, economic and executive considerations, and...
- Preparing the Tender documents as a PC method, working schedule, supplier list and ...



Project title: **Renewal and rehabilitation of the foundations of the Kharg factories**
 Employer: **Iran Offshore Oil Co.**
 Location: **Khark Island**



Consulting Engineer Services for Mehr Petrochemical Complex

Project title: **Mehr Petrochemical Complex**
 Employer: **Mehr Petrochemical Co.**
 Location: **Assaluyeh**

Brief description of the project:

Engineering services for reviewing and designing the water pipeline for petrochemicals Co., (C.W), designing and providing a plan of the external and internal walls of the site, supervision on contractor operations for both projects of Mehr Petrochemical Complex, located in Phase 2 of Assaluyeh Petrochemical Complex.

| | |
|----------------|------------------------|
| Employer: | MEHR Petrochemical Co. |
| Contract type: | Study / Supervision |
| Start: | 2008 |
| Finish: | 2009 |

Description of contract services:

Providing third-stage consulting services for high-level supervision, workshop supervision and for all executive projects, as follows:

- piping operation
- sea water line operation
- Weir Structural Operations
- Operative management of cathodic protection
- Instrumentation Operations
- Initialization Operation of the Bridge structure
- Procurement engineering and inspection services
- Reviewing the engineering design was prepared by other consultants and conduct design services
- Local laboratory services



Offsite and Utility:

- Off-Site and Utility in Phase II of Petrochemical Complexes in Assaluyeh
- Connecting plan of Phase I and II of Assaluyeh Petrochemical Complex
- Cooling system of Assaluyeh petrochemical Phase 2
- Cooling System of MAKRAN Petrochemical Complex
- Cooling Tower system of development project for Bandar Abbas refinery
- Offside of Assaluyeh Styren Park
- IRAN-LNG TONBAK Complex Cooling System

Project title: **Assaluyeh petrochemical complex phase2**
Employer: **NPC/Damavand Petrochemical Co.**
Location: **Assaluyeh - Phase II**

Offsite and Utility of Assaluyeh petrochemical complex phase2

Brief description of the project:

Engineering Studies of Offsite and Utility for Phases 2 of Petrochemical complex in Assaluyeh

Reviewing of conceptual studies carried out by Technip Company, Basic and Detailed Design, Preparation of tender Documents

Description of contract services:

- Engineering Studies of Offsite Phase II
- Basic and environmental studies
- Review of conceptual studies carried out by Technip Inc.
- Locating flares in the northern area of the petrochemical site
- Site locating of Petrochemical Units (Preparation and Review of Plot Plans)
- Basic and detailed design in all engineering disciplines within the offsite area
- Purchase engineering
- Preparing Tender Documents

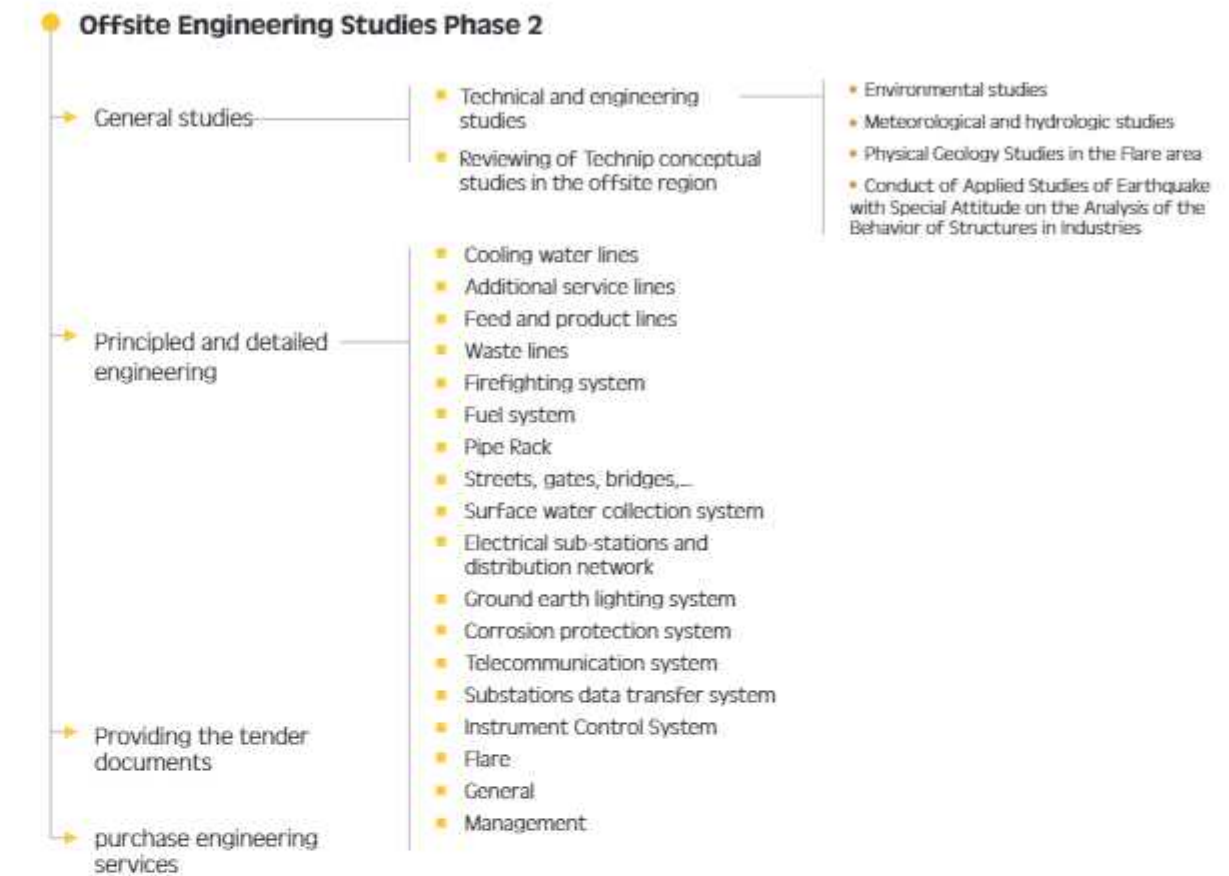
Employer: NPC/Damavand Petrochemical Co.

Contract type: Study

Start: 2009

Finish: 2012

Services chart



Units in Phase 2 of Petrochemicals:

- | | |
|---|--------------------------------------|
| Methanol VI (Dena) | Styrene Park |
| Methanol VII (Kimia Pars Khavarmianeh) | Tank Farm |
| Olefin 5 (morvarid) | PHD/PP (Mehr Petro Kimia) |
| Olefin 11 (Kavian) | Parse Phenol (MEG) |
| Olefin 12 (Khalij Fars) | Urea Ammonia I (Hengam) |
| Bushehr Petrochemical Plant | Urea Ammonia II (Lavan) |
| West Ethylene Pipeline Compressor Station | Urea Amonia III (Hormoz) |
| Administration & Common facility | Methanol Ammonia 1 (Arg Shimi Parsa) |
| WWT & incineration Plant (Damavand) | Methanol Ammonia 2 (Arg Shimi Parsa) |
| ASU Plants (Damavand) | Methanol I (Dipolymer Arian) |
| Water Center (Damavand) | Methanol II (Marjan) |
| Power Plant (Damavand) | Methanol III (Sabalan) |
| FFPS & FBS (Damavand) | Methanol IV (Arman) |
| | Methanol V (Veniran) |

Connecting plan of Phase I and II of Assaluyeh Petrochemical Complex

Brief description of the project:

Basic and detailed design, providing the tender documents, Construction of Concrete Structures for Connecting Phase I and II of Assaluyeh Petrochemical Complex

Description of Contract Services:

- Basic and detailed design in all engineering disciplines in the connection area
- Purchasing engineering
- Providing the tender Documents



Project title: Connecting plan of Phase I and II
 Employer: NPC- Damavand petrochemical.
 Location: Assaluyeh

| | |
|----------------|-----------------------------|
| Employer: | NPC- Damavand petrochemical |
| Contract type: | Study/ supervision |
| Start: | 2006 |
| Finish: | 2012 |

Feasibility studies of cooling system in Assaluyeh petrochemical Phase 2

Brief description of the project

Investigating different methods of cooling according to conditions of Assaluyeh region and technical-economical comparison of options

Description of contract services:

- Reviewing, comparing and analyzing the available reports and technical information were provided by other engineering companies for Cooling system of Phase 1 and 2
- Investigating and analyzing the implemented cooling system in phase 1 and by considering it, providing the optimum cooling system for phase 2
- Investigating and confirming the proposed Cooling technical information provided by the Employer for all phases of the project
- Identify the best and most suitable cooling system for Phase 2
- Determine the raw materials, size and other general specifications of the equipment were used in the proposed cooling system to monitor and record meteorological information
- Meteorological modeling with regard to the effects of the petrochemical developed region on the relative density of humidity in phase 2
- Finally, presenting the final report and the conclusions

| | |
|----------------|---|
| Project title: | cooling system in Assaluyeh petrochemical Phase 2 |
| Employer: | PIDEM Co. |
| Location: | Assaluyeh |
| Employer: | PIDEM Co. |
| Contract type: | Study |
| Start: | 2007 |
| Finish: | 2008 |





Cooling system studies and Methods of feed and product transmission at Chabahar Petrochemical Complex (MAKRAN)

Brief description of the project:

According to the approved layout of the MAKRAN Petrochemical Complex which is located about 20 km from the open waters and necessary to use the capacity of the available ports for transportation of the required materials and products of petrochemical company, these studies are defined by purpose of investigating the status of the available cargo and Possibility to use them or construct separate ports. In addition by the purpose of supplying the water and the required cooling systems of mentioned units in this complex, which includes more than 15 petrochemical units, a separate feasibility studies with modeling of the Chabahar Gulf flows and investigating the various technologies of the cooling system was done by the consultant.

Description of contract services:

Perform the studies as follows:

- Collect information
- Feed and product transmission system
 - Investigate effective measures in selecting methods
 - Investigate and select different methods of transferring liquid feed
 - Investigation and selection of different methods for the transferring of solid and liquid products
 - Explore how to use the existing berths

- Cooling syst Cooling system
 - Check and compare cooling systems and select the best option
 - Water supply options
 - Cooling system report
 - Provide the final report

| | |
|----------------|------------------------------|
| Employer: | Negin Makran development Co. |
| Contract type: | Study |
| Start: | 2012 |
| Finish: | 2012 |

Project title: **Cooling System of Mokran**
 Employer: **Negin Mokran Development Co.**
 Location: **Chabahar**

Feasibility studies, basic design and preparation of tender documents for the EPC tender of cooling tower and associated devices for the project of increasing gasoline production capacity in Bandar Abbas refinery

Description of project vendor:

Investigating various methods of cooling in the development plan of the refinery, choosing the best option, carrying out the basic design (BE) and preparation of documents

| | |
|----------------|-------|
| Employer: | PIDEC |
| Contract type: | Study |
| Start: | 2009 |
| Finish: | 2011 |

Service description:

Provide technical and engineering consulting services for the feasibility study, basic design and preparation of EPC tender documents for the cooling tower system and its peripheral devices in the development plan of Bandar Abbas Refinery

Project title: **cooling System of Bandar Abbas refinery**
 Employer: **PIDEC**
 Location: **Hormozgan**



Offsite styrene Park

Brief description of the project:

Implementation of conceptual, basic and detailed engineering services required by the employer in the lands called as Styrene Park and located in Assaluyeh and in the area of the Damavand and MOBIN Petrochemical Complex, in order to provide the utility and feed required for the units located in the Styrene Park located in the South Pars Energy Zone of Assaluyeh

Description of contract services:

- Conceptual design, basic and detailed engineering studies related to process, safety, civil, structural and architectural, mechanical and HVAC, instrumentation, electrical and telecommunications department.
- Purchasing Engineering
- Providing Tender documentation
- Supervision and follow-up to purchases that is related to different parts such as: Flare Line\ Flare in the Offsite part of Styrene Park, Surface and Rainwater Collection network, Industrial and Sanitary Wastewater Collection network, Pipet Rack, Common Area Lighting Network, Fire fighting System, control room, power station, facilities of pipe line feed and offsite utility, butadiene pipeline and distribution network, utility lines required for projects JAM,SADAF,ENTEKHAB, DALAHO and the common part at the boundary of the B/L styrene park, Pentane pipeline
- In addition, the design of styrene monomer pipelines of tank farm area of Petrochemical co., at outside of the offsite part of the Styrene Park and at the area of MOBIN Corridor to the border of Styrene park and the butadiene pipe line from border of Jam petrochemical to styrene park was prepared by consultant.



Employer: Gohar Ofogh industrial park

| | |
|----------------|-------|
| Contract type: | Study |
| Start: | 2015 |
| Finish: | 2016 |

▲ Project title: **Offsite styrene Park**
 Employer: **Development of Gohar Ofogh industrial park**
 Location: **Assaluyeh**

Design and structural engineering of cooling system of IRAN LNG

Brief description of the project:

First and second step studies and engineering services during the implementation of a cooling water system with estimated 5000 cubic meters per hour for two power units (including five gas units with a capacity of 762 MW and two steam units with the capacity of 160 MW and totally 7 units with 1130 MW in order to cooling the water of steam unit of Iran LNG site in the TONBAK area.

Description of contract services:

- All Identification Operations, Studies of Phase I and II and Providing all plans and executive documents related to the cooling system included:
- Pump station
- Water transfer facility from the pumping station to the turbine hall
- Transferring hot water from the turbine hall to the sea
- Designing for the laying of water pipelines of cooling system and pressure tank farm with all specifications and related accessories to the cooling system.

| | |
|----------------|--------------------|
| Employer: | Neyr Pars |
| Contract type: | Study/ Supervision |
| Start: | 2008 |
| Finish: | 2011 |

▼ Project title: **Cooling System of Iran LNG**
 Employer: **Neyr Pars**
 Location: **Assaluyeh**





Pipelines and Tank Farm

- Pipe lines of product and loading facilities of NGL in SIRRI Island
- Export Tanks Farm site of MAKRAN Petrochemical
- Transmission Pipelines Corridor Of MAKRAN Petrochemical Complex
- Strategic tank farm for Assaluyeh gas condensate
- SHAHID RAJAEI bitumen tanks farm
- Bandar Abbas oil terminal
- pipelines and loading equipment of oil products in Chabahar port
- Ship Waste Water Treatment and discharge Facilities in Shahid Rajaei Port
- Bandar Abbas bitumen factory
- Export and Transfer of Petrochemical Products in PARSIAN Port
- water pipelines between phase 15-16 and South Pars and combined power cycle plant of south pars and waste water discharge into the sea
- Pipelines corridor and oil terminals of SHAHID RAJAEI port(Persian Gulf Port)

New LPG and Condensate Loading Facilities on Existing SIRRI Island Jetty (EPC)

Brief description of the project:

Project includes designing, purchasing and supplying equipment, installing and pre-commissioning and commissioning, carrying out all practical tests and Basic designing for new LPG and gas condensate loading facilities at the existing SIRRI Island jetty with the aim of exporting 336,000 tons of LPG and also 490 tons of pentane and 52,000 tons of gas condensate per year, as well as designing, purchasing, installing and commissioning of sea water transfer facilities required by the refinery.

Brief description of the contract:

- Designing and purchasing and installing the equipment of loading facilities for the products of SIRRI Gas refinery
- design, purchase and installation of seawater pumps supplying the water needed for the SIRRI gas refinery
- Designing and purchasing and installing the Prover System for measuring the flow of transferred products to the ship

Employer: Oil Industrial Engineering and Construction Co. (OIEC)

Contract type: Engineering design, procurement, construction - EPC

Start: 2006

Finish: 2016

Project title: **LPG and Condensate Loading Facilities on Sirri Island**
 Employer: OIEC
 Location: Sirri Island

Tank Farm, Interconnection Pipelines, Wharf and Feed Discharge Utilities and Loading Facilities for MAKRAN Petrochemical Complex

Brief description of the project:

Regarding the plan to construct the NEGIN MAKRAN Petrochemical complex in the Chabahar Free Zone and to produce about 23 million tons of solid and liquid products by the manufacturing complexes of it, the subject of the project is performing engineering services, basic design of construction of tank farms, pipelines inside the port, facilities and equipment for unloading feed and loading of products of the MAKRAN complexes.

The main products that are to be produced in the Petrochemical complex are solid and liquid products that the liquid products include Methanol, Ammonia, Ethylene, Propylene, MEG, DEG, Benzene, Para-Xylene and Butadiene. Solid products also include HDPE, LDPE, urea and polypropylene. Five berths are considered for ships and 4 km pipe rack, from the location of tank farms to the berths. Due to the temperature and pressure specifications of the products, atmospheric and under pressure tanks are designed that include a variety of spherical reservoirs, fixed ceilings and movable ceilings. Safety studies and determining the safe distance between tanks are important in this project. The solid materials warehouse and the way the transportation of materials to the berth is another important thing in this project.

Description of Contract Services:

- Providing basic design in different disciplines
- Providing process diagrams (PFD) and piping and instrumentation diagrams (P&ID)
- Providing technical specifications of equipment with technical data sheets
- Carrying out safety studies
- HAZID & HAZOP studies
- Designing vapor return system
- Designing flare system
- Estimating necessary utilities
- Providing 3D-modeling of piping
- Basic architectural Designing of the buildings
- Designing the foundation of equipment
- Designing pipe racks from the tank farm area to the berth



Project title: **Tank Farm, MAKRAN Petrochemical**
 Employer: **Negin MAKRAN Development Co.**
 Location: **Chabahar**

- All Designing related to the electrical, telecommunications and instrumentation of the projects
- Designing pipelines for transmission of products from the tank farm area to the berth and SURGE studies

Employer: **Negin Mokran Development Co.**

Contract type: Study

Start: 2015

Finish: 2016

Basic Design and Detailed Engineering for Feed & Products Transmission Pipelines Corridor of MAKRAN Petrochemical Complex

Brief description of the project:

MAKRAN Petrochemical complex that is located in the neighborhood of Chabahar gulf and in the Chabahar Free zone, includes 15 manufacturer complexes of Methanol, methanol-ammonia, urea-ammonia, aromatics and olefin which are in designing and execution step. In order to transport the liquid products of the complexes with a capacity of approximately 15 million tons per year, as well as the required feeds for the complexes, the above project was implemented to conduct engineering services, basic design, detailed engineering and preparing the tender documents in order to construct a pipeline corridor for transportation of feed and products of the complexes in MAKRAN Petrochemical complex (Chabahar).

With regard to the products such as ethylene, propylene and ammonia at temperatures of 140 °C, -60 °C and -35 °C, respectively, and toxic and flammable products in this project, and also the proximity of the project with residential areas, the sensitivity of the project was double in terms of safety issues and it was necessary to consider the latest safety standards and other engineering requirements in the project. The project was also a unique project due to the presence of the listed materials next to each other and the lack of a similar project. Width of corridor was about 60 meters in order to reduce possible incidents of each line on other lines, and the safety margin of the corridor was considered to be 80 meters from the sides. Crossing the corridor from coastal areas has also been another dilemmas and sensitivities of the project. In this project, seven stations LBV (LINE BREAK VALVE) were predicted that in the event of an accident, it automatically cuts the in progress of the product and minimizes the impact of the incident on other lines. The leakage detecting system is also designed to detect leakage in the pipeline. The size of the pipelines is from 2 to 24 inches and it is made of carbon steel and stainless steel. According to the employer's request to have more accurate information at the time of the EPC tender and selection of the international contractor, the project was completed to the detailed stage and all tender documents were prepared on the basis of detailed maps and documents.

| | |
|----------------|------------------------------|
| Employer: | Negin Makran Development Co. |
| Contract type: | Study |
| Start: | 2015 |
| Finish: | 2016 |

Description of Contract Services:

- physiographic studies
- meteorological studies
- hydrologic studies
- geological studies
- seismic studies
- safety studies
- Surveying
- Environmental hazard control
- Hydraulic and Surge Calculations
- Providing PFD, P&ID and choosing proper materials
- Designing LBV stations
- Designing cathode protection system
- Providing all documents related to the different engineering disciplines to detail stage

Project title: **Pipelines Corridor Of Makran Petrochemical Complex**
 Employer: **Negin Makran Development Co.**
 Location: **Chabahar**



Feasibility and economic Studies for Construction of tank farm of MAKRAN Petrochemical Complex (Chabahar)

Brief description of the project:

Carrying out Economic and Feasibility Studies for Construction of Tank farm, transmission pipe lines inside the port, berth and unloading and loading equipment in the SHAHID BEHESHTI Port in order to export the solid and liquid products of the MAKRAN Petrochemical complexes



Description of Contract Services:

The following studies are carried out in order to investigate the technical and economic plan of the construction of export tank Farms and development of SHAHID BEHESHTI port for storing, exporting and importing products and feeds of MAKRAN Petrochemical complex.

- Basic Design (BE) in all engineering disciplines and estimating the amount and cost of progress investment of project
- Finalizing Revenue generation method of project and financing its construction by using COMFAR software

Project title: **Tank Farm, MAKRAN Petrochemical**
 Employer: **NEGIN MAKRAN Development Co.**
 Location: **Chabahar**

| | |
|---|-------|
| Employer: NEGIN MAKRAN Development Co. | |
| Contract type: | Study |
| Start: | 2014 |
| Finish: | 2016 |

Feasibility studies on the construction of strategic tank Farms-20-million barrels of gas condensate in Assaluyeh

Brief description of the project:

Since the low storage quality of gas condensates in the country caused to a reduction in production in gas refineries, so the construction of strategic tank Farms for storing gas condensates is on the work schedule of the country. Five locations have been considered for storage in which that Assaluyeh area is in priority. In this project, various technical and financial aspects of investment were investigated by an economic feasibility study.

Description of Contract Services:

Feasibility studies on the construction of strategic tank farms 20-million-barrels of Assaluyeh gas condensate including:

- Site Locating studies
- Market studies
- Basic design
- Economic financial studies for the development of the station by adding a new line to the existing facilities

| | |
|----------------|----------------------------|
| Employer: | Jahad Darya Company |
| Contract type: | Study |
| Start: | July 2013 |
| Finish: | September 2013 |

Project title: **tank Farms of gas condensate in Assaluyeh**
 Employer: **Jahad Darya Company**
 Location: **Assaluyeh**



Bandar Abbas Oil Terminal

Brief description of the project:

Constructing Foundation and infrastructure and preparing installation site for 49 steel tank farms of heavy oil products with capacities of 40000, 20000, 10,000, 5000 cubic meters

Description of Contract Services:

Supervision of excavation operations, bedding, foundation implementation, deployment of anchor bolts, embankment, implementation of geo membranes, asphalt and insulation

| | |
|----------------|---|
| Employer: | Karane Energy Development / Dostdar Zamin |
| Contract type: | Supervisory |
| Start: | 2015 |
| Finish: | 2017 |

Project title: **Bandar Abbas Oil Terminal**
 Employer: **Karane Energy Development / Dostdar Zamin**
 Location: **Hormozgan - Bandar Abbas**



Shahid Rajaee Oil Terminal - (bitumen tanks)

Project title: **Shahid Rajaee Bitumen Tanks**
 Employer: **Energy Tejarat Sam Co.**
 Location: **Chabahar**

Brief description of the project:

Providing detailed, basic engineering services, supervision services, as well as purchasing engineering in the construction of SHAHID RAJAEI Oil Terminal in order to export the products of Energy Tejarat Sam Company as well as attending in the export market of petroleum products. This project includes two bitumen tank Farms, five Fuel Oil tank Farms and one Base Oil tank, that each of them has a capacity of 3000 tons associated with pumping station and facilities and related buildings located in SHAHID RAJAEI Port. Providing:

- site locating
- Basic and detailed Design in all engineering discipline
- Process designing and providing related documents PFD, P&ID, ...
- Providing tank Farm construction plan
- Providing test methods and manufacturing methods
- Providing 3D-model and piping execution plans and equipment
- Designing Electrical and control system of the complex
- Providing purchasing documents of equipment

| | |
|----------------|--|
| Employer: | Energy Tejarat Sam Co. |
| Contract type: | Study / Supervision / Purchasing Engineering |
| Start: | 2015 |
| Finish: | 2018 |



Design and installation of loading arms on the quay number 2, SHAHID BEHESHTI port (Chabahar)

Brief description of the project:

Berth No. 2 SHAHID BEHESHTI Port of CHABAHAR belongs to the Ports and Maritime organization of SISTAN and BALUCHESTAN Province and the discharge operation of required oil products of region will be done by fuel carrier that will enter aside of this berth. The National Iranian oil products Distribution Company (NIOPDC), in coordination with the the Ports and Maritime organization of SISTAN and BALUCHESTAN Province planned the following to improve and increase the quality and speed of product discharging:

- Installation of two loading\unloading arms / 12-inch, available in the stock of this company, operational structure, equipment and control boards required on the berth
- Construction of two new 16-inch pipelines and connecting to arms in order to transport petrol and gasoline to Chabahar oil depot
- Investigation of the available berth structure for the possibility of installing loading arms and equipment and if necessary, carrying out necessary repairs and providing Structural Strengthening Plan

▲ Project title: **loading arms on the Shahid Beheshti port**
 Employer: **NIOPDC**
 Location: **Chabahar**

- Construction of the operation structure on the deck of the berth

Description of Contract Services:

Performing engineering services in different parts of process and mechanics, electrical and instrumentation, civil and structures, base design, survey, providing technical documents and providing EPC work descriptions.

| | |
|----------------|--------|
| Employer: | NIOPDC |
| Contract type: | Study |
| Start: | 2016 |
| Finish: | 2018 |

Construction of Shahid Rajaei Port Wastewater Treatment facility

Brief description of the project:

Based on international standards, the ships are not allowed to discharge their wastewaters to the sea, so the wastewater of washing process of tanks of ships include bilge water, slope and sludge are received from the ships in the ports and they will return to the sea after purification and this is the subject of the above project and include: detailed and basic design, purchasing engineering

Description of Contract Services:

- Basic design (BE) in all engineering disciplines for the Ship Wastewater Treatment System and for separating water from oil
- Receiving and collecting available information from the employer, local site visiting and checking
- Locating of refinery by considering the Tie Points and facilities and the adversaries in the region
- Mechanical designing of equipment (fixed and rotary) and completing the Basic design including pumps, filters, tanks, and drums formed by process unit
- Detailed designing of transmission pipelines and utility and process lines
- Providing preliminary plat from the main structures of the refinery

- Detailed designing including carrying out final for constructing ship wastewater refinery with a capacity of 400 cube meters per a day by considering to the related standards
- Detailed architectural and structural designing of all building by obeying all related necessities
- Detailed designing of control system related to the refinery
- Detailed designing of power supply system, power distribution
- Estimating detailed executive items of work including MTO, ...
- Purchasing engineering
- Investigating technical suggestion of the manufacturers
- Providing technical bidder evaluation (TBE)
- Investigating the documents of manufacturers (VDR)

| | |
|----------------|---------------------------------|
| Employer: | Parsam Gostar Darya |
| Contract type: | Design / Purchasing engineering |
| Start: | 2016 |
| Finish: | 2018 |

▶ Project title: **SHAHID RAJAEI Port Wastewater Treatment facility**
 Employer: **Parsam Gostar Darya**
 Location: **Bandar Abbas - RAJAEI Port**



Bandar Abbas bitumen production factory



Brief description of the project:

Supervising on the operations of construction of Bandar Abbas Bitumen Factory with the capacity of 1500 tons per day which includes three tanks for the storage of raw materials and three tanks for the finish products.

Project title: **Bandar Abbas Bitumen Factory**
 Employer: **Bana Gostar Karaneh Co.**
 Location: **Shahid Rajaei Port**

Description of Contract Services:

First part of the contract: Supervision on the operations of construction of Bandar Abbas Bitumen Factory with the capacity of 1500 tons a day which includes three tanks for storage of the raw materials (VB) and three tanks for the finish products. Main required raw materials of bitumen, Vacuum Bottom, is transferred from the Bandar Abbas refinery to the bitumen production plant by a 10" pipelines and then it is produced as a bitumen with different grades in a unit consisted of two convertor tower and then it is stored in three 1500-ton tanks to be exported in different packaging to the foreign countries or local market by the SHAHID RAJAEI Port. Project facilities include Tank farms, heat exchangers, compressors, loading and unloading systems, control room, laboratory, repairs, office building, electrical facilities and instrumentation.

Second part of the contract: Supervision on the operations of gasoline pipeline from Persian Gulf Star oil refinery (PGSOC) to SHAHID RAJAEI Oil Depot. This project includes supervising on the piping operation with the length of about 5 km of 26 inches pipeline for transferring gasoline.

| | |
|----------------|-------------------------|
| Employer: | Bana Gostar Karaneh Co. |
| Contract type: | Supervision |
| Start: | 2016 |
| Finish: | 2017 |

Engineering Services, Basic & Conceptual design for exporting and transferring of petrochemical products in PARSIAN port

Brief description of the project:

PARSIAN port includes 19 berths that in the first phase of this exploitation we just consider 4 of them. due to the allocation of 1 bulk liquid bunker in the exploitation phase, this is necessary to be considered, the requirements of exporting existing petrochemical products (4 leading units), in the berth No.3. So conceptual studies and basic design for a berth are in the first stage and conceptual studies of all petrochemicals units are in the second stage of project description

Description of Contract Services:

Conceptual studies:

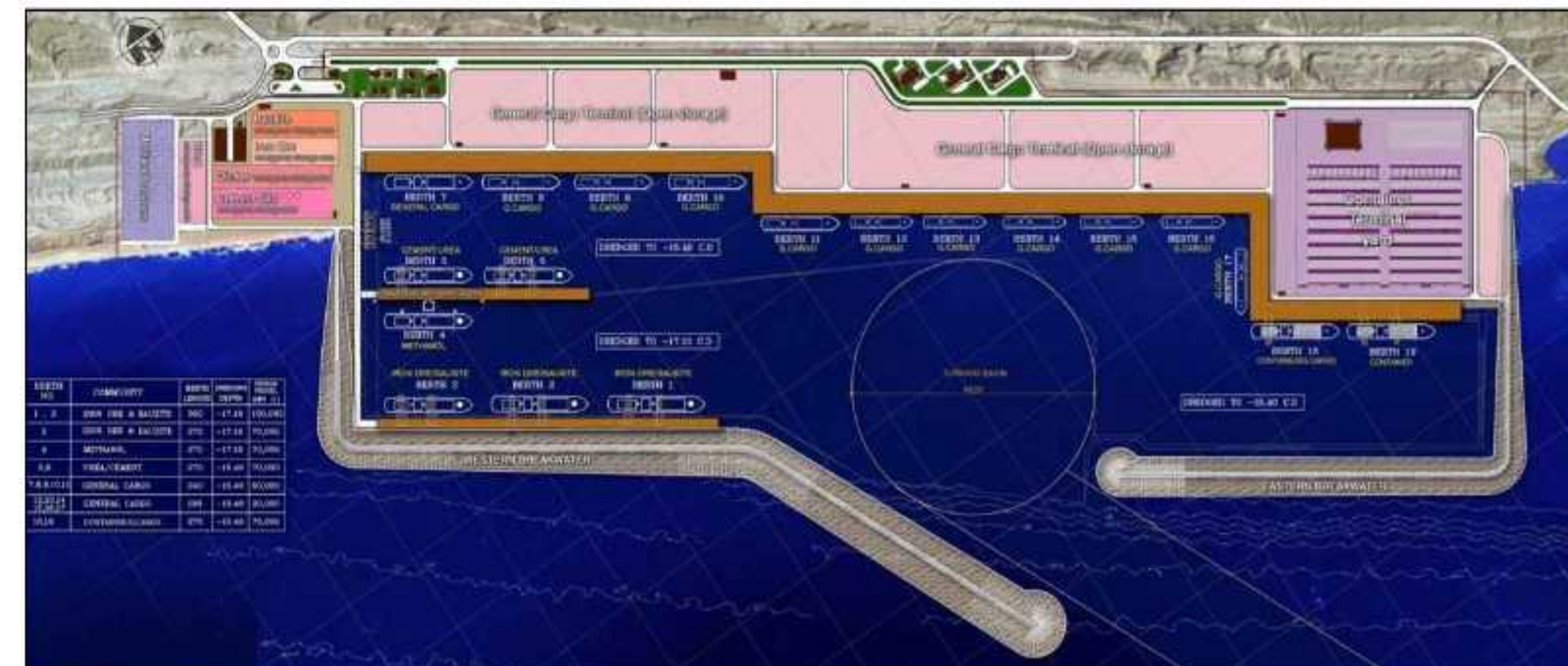
- Familiarity with the employer's aims and general policies
- Providing Fundamentals of Conceptual Studies
- Describing the parts and items of the plan
- Phasing
- Providing separate conceptual report of berth No. 3 (at first phase) and berth No. 1,2,3 (at final phase)

Base studies:

- Providing Design Basics
- Basic general design
- Basic design of berth No. 3

| | |
|----------------|---------------------------|
| Employer: | IMIDRO by agent of SPEIDC |
| Contract type: | Study |
| Start: | 2018 |
| Finish: | In Progress |

Project title: **exporting of petrochemical products in Parsian port**
 Employer: **IMIDRO by agent of SPEIDC**
 Location: **PARSIAN region- HORMOZGAN**



Engineering studies for water pipelines between phase 15-16 and South Pars combined cycle power plant and discharge of wastewater to the sea

Brief description of the project:

Engineering studies including basic and detailed designing of civil and piping parts, for water transmitting pipelines between desalination available at 15-16 phase and the new desalination at South Pars combined cycle power plant and discharge of wastewater to the sea

| | |
|----------------|-----------|
| Employer: | FARAB Co. |
| Contract type: | Study |
| Start: | 2017 |
| Finish: | 2018 |

Description of Contract Services:

In order to supply the fresh water for concentrated South Pars power Plant and other consumers in this region, three desalination unit of MED type, each of them with a capacity of 2667 cube meters a day, constructed in the South Pars power Plant that the length of the pipeline between phase 15-16 and this plant is about 8 km with about 70cm diameter.

Services of this project include basic and detailed designing in the Civil and piping disciplines and hydrological studies of the sea and the part of the path which is in the sea by different parts.



Supervision on design and execution services for oil terminal of SHAHID RAJAEI port and pipeline corridors (Persian Gulf port)

Brief description of the project:

Supervision on design and execution services for oil terminal of SHAHID RAJAEI port and pipeline corridors (Persian Gulf port)

Description of Contract Services:

- Managing and controlling oil projects (MC)
- Investigating and commenting on all designing and safety documents of phase 1, 2 of oil investors
- Investigating new investors' technical documents for making a contract and also executive operations, developmental requests and ...
- Handling investors' technical and executional requests and ...
- Investigating investors' technical and economic justification reports
- Consultancy services to the employer in order to make managing decisions in oil zone
- Investigating the safety of chemical materials and their maintenance and transportation situation and the possibility of constructing chemical storage units (otherwise of petroleum)
- Investigating the traffic of petroleum zone path
- Investigating the safety situation about oil berth of SHAHID RAJAEI Port Complex and subsidiary ports
- An audit of oil sites which are under exploitation and providing a solution to improve safety
- Supervisory on the execution of operations and installing and safety issues

| | |
|----------------|------------------|
| Employer: | PMO of HORMOZGAN |
| Contract type: | Supervision |
| Start: | 2018 |
| Finish: | In Progress |



- supervisory on constructing oil, bitumen factories, mini refineries, constructing terminals and LPG berth of investors in SHAHID RAJAEI Port Complex
- Investigation of temporary common corridors among the investors and designing of them in the event of a notice from the employer
- Investigation of Persian Gulf pipeline corridors and updating the path of corridors and accessing to the berth
- Supervision on implementing of the general corridor of Persian Gulf Port
- Surveying the port lands
- Holding training course for improving the employer's qualitative knowledge with a subject related to the oil and gas and petrochemicals
- General investigation of oil products market and providing seasonal report and consultancy to the employer



Industrial projects

- Copper Mine and Copper Concentrate factory- Kerman- DARALU
- SUNGUN copper complex condensation development- phase 3
- Sulfuric Acid, Oxygen and Utility plant of SUNGUN Copper
- Crushing and material handling system for KAHNOOJ Titanium Project
- SARCHESHMEH Copper Complex Fertilizer Plant
- Anodizing Manufacturing Plant- Iran Aluminum (IRALCO)
- Research-applied studies of developing aluminum industry and downstream industries
- Bandar Abbas pelletizing factory
- OFOGH ALBORZ cabling factories
- Transit Silos of Imam Port
- Transit Silos of NOSHAHR Port

Studies, design and supervision on the DARALU Copper Mine and Copper Concentrate factory

Brief description of the project:

Project Management Consultancy of copper mine & Copper Concentrate Factory, Kerman - Dare Aloo in order to construction and implement copper mine network by considering 360 working days a year and daily two 8-hour shifts with a minimum capacity of 7 million tones sulfur copper, include Studies, design, EPC bidding, controlling engineering documents of the contractor &...

Description of Contract Services:

- Consultancy services and engineering control include: conceptual engineering, basic design ,...
- Providing basic technical documents, tender documents to choose executive contractors and collaboration in bidding
- Supervision during the project period and guarantee period in the first and second stages (including basic & detailed engineering) and third stage
- Providing notification services from the employer including geotechnics, geology, soil mechanics, water engineering, surveying , project control and planning and ... for different stages and parts of the Daralu copper construction project (producing concentrate)

| | |
|----------------|----------------------------------|
| Employer: | National Copper Industry of Iran |
| Contract type: | Study/ Supervision |
| Start: | 2011 |
| Finish: | In Progress |

Project title: Copper Mine and Copper Concentrate factory-Kerman- Daralu
 Employer: National Copper Industry of Iran
 Location: Kerman province, DARALU

Implementing consultancy services and workshop supervision on the Phase 3 Condensation Development of SUNGUN Copper Complex

Brief description of the project:

Project Management Consultancy of phase III SUNGUN copper complex condensation development, with a capacity of 12 million tones in-feed per year for the required concentrate of melting sets and achieve the production target capacity (700,000 tons of cathode copper per year) including preparing tender documents, monitoring the performance of consultants and contractors, supervision of basic and detailed engineering and procurement of equipment in addition to supervising the erection and commissioning of the whole project.

- Supervision on purchasing and construction of equipment- workshop supervision
- Supervision on commissioning of project up to temporary delivery time
- Supervision on 6-month exploitation services

Employer: National Copper Industry of Iran

Contract type: Study/ Supervisory

Start: 2012

Finish: 2017

Description of Contract Services:

- sultancy services and workshop supervision including Basic studies, providing tender documents, choosing, following up and supervision on the performance of the EPC Contractors and consultants
- Supervision on detailed, basic and purchasing engineering



Project title: SUNGUN copper condensing plant
Employer: National Copper Industry of Iran
Location: Eastern AZERBAIJAN, VARZAGHAN

Constructing melting, acid and oxygen plants of SUNGUN Copper Complex

Brief description of the project:

Description of the task: Basic and Detail Design of sulfuric acid plant, oxygen and other utilities of Sungun Copper Complex. In addition to its interconnecting and semi- industrial buildings.

Design studies and supervision on the construction of utility, acid sulfuric, and oxygen units and semi-industrial and non-industrial buildings for servicing SUNGUN melting and refinery complex

The general subject of the project is about constructing an anodic copper production factory with a capacity of 200000 tons a year and 750000 tons 98.5% acid sulfuric

Employer: National Copper Industry of Iran

Contract type: Study/ Supervisory

Start: 2011

Finish: In Progress

Description of Contract Services:

Doing consultancy services and controlling the preliminary engineering documents of the plan including completion of basic design documentation, provision of technical and base engineering documents, and provision of bidding documents in order to choose executive contractors

- Collaboration in holding the bidding
- Supervision during the project period and insurance courses divided into the first and second stages (including the provision of base engineering and detailed engineering) and third stage (including super supervision, workshop supervision
- Providing notification services from the employer in other parts of the SUNGUN copper production construction project

Project title: Sungun copper melting acid and oxygen
Employer: National Copper Industry of Iran
Location: Eastern AZERBAIJAN



Engineering, supply, construction and installation of KAHNUJ Titanium Plan crusher factory and material transformation system



Project title: **KAHNUJ Titanium crusher factory**
 Employer: **IMIDRO**
 Location: **Bandar Abbas Province**

Brief description of the project:

Carrying out engineering services, supplying equipment and material, installing and setting up the equipment and exploitation management and all the services for construction of crusher factory and material transformation system at 25 km of KAHNOUJ-Bandar Abbas road

Employer: **IMIDRO (cooperating with OXIN SANAT)**

Contract type: **Study/Purchasing/Installation/setting up**

Start: **2018**

Finish: **In Progress**

Description of Contract Services:

- Designing and detailed and base engineering, and implementing
- Using the collaboration of foreign technology owners
- Providing, supplying and preparing equipment
- Construction and installation
- Pre-setting up and setting up the equipment
- Doing operational tests
- Testing the product by the help of strategic personnel
- 1-year exploitation management

Managing the plan of constructing SARCHESHMEH Copper Complex Fertilizer Plant

Brief description of the project:

Considering the presence of plants for melting in the SARCHESHME Copper Complex, furnace outlet gases pollute the environment, for preventing this, the complex is responsible to construct plants that produce acid sulfuric from the furnace outlet gases. The acid produced in these plants has a low cost in the industry market. One of its uses is to use it in producing fertilizer which has a good sales market in our country. So, constructing this factory can make a value added on the acid sulfuric derive from the complex, so this would be the subject of mentioned project.

Employer: **National Copper Industry of Iran**

Contract type: **PMC**

Start: **2011**

Finish: **2014**

Description of Contract Services:

Management plan for building a fertilizer factory in SARCHESHMEH Copper Complex in the range of:

- **SARCHESHMEH Copper Complex Fertilizer Factory**
- **Completing local rail-way**
- **Fertilizer export terminal near the Gulf of PERSIAN**

Project title: **SARCHESHME Titanium fertilizer**
 Employer: **National Copper Industry of Iran**
 Location: **Kerman Province**





Installing equipment of the Arak Anode Making Plant Construction Plan

▲ Project title: **Iran Aluminum Anode Making (IRALCO)**
 Employer: **Iran Aluminum Co.**
 Location: **Markazy Province, Arak**

Brief description of the project:

Making anode project of Aluminum Company of Iran is located on the KHEIRABAD Industrial Park in Arak in order to produce 100000 tons anodes consumable for Aluminum Factory. Describing consultancy services including general services, project management, project control and super supervision, engineering, investigating, workshop supervision and supervision on installation and setting up and exploitation and engineering services in the insurance courses of the project and also implementing the management system and controlling the project information.

| | |
|----------------|---------------------|
| Employer: | Iran Aluminum Co. |
| Contract type: | Study / Contractual |
| Start: | 2015 |
| Finish: | 2016 |

Description of Contract Services:

- General, management services and super supervision
- Planning and controlling the project
- Engineering services
- Investigation services
- Workshop supervision services and supervision on installation, setting up and exploitation
- Engineering services in the insurance course of the project
- Implementing the management system and controlling project information based on the SharePoint software

Developing the Aluminum Industry and downstream industries

Brief description of the project:

development studies of the aluminum industry and downstream industries with the trend of: economic and infrastructure studies, Market Survey, sale and marketing, environmental and safety, investigations and technical assessments and timing, locating, general investigation of the product and raw materials

Description of Contract Services:

- Investigating and introducing the product: specifications and features and applications, cognition of the consumer society, special benefits and capabilities and base products
- Sale and marketing: an overview about the market state and inside, regional and international sale and the range of the required products of the market.

- Estimating the raw materials that are necessary for the plan and strategy of supplying materials and the source of supplying and the balance in the distribution of them

- Locating: providing suggested places for implementing the plan based on the necessary sub structures, specialized human resources in the region, environmental issues, being close to the target markets, accessing the resources of supplying raw materials easily and....

- Technical assessment: describing production process and production path, studying first-hand technologies in the world and choosing the best technology and equipment, diagram of production of products and maps, estimating the nominal and practical production capacity, specification of the factory and equipment

- Timing: predicting and providing the plan timing

- Economic studies of the plan: estimating the total cost of investment

| | |
|----------------|----------------------|
| Employer: | IMIDRO |
| Contract type: | Design / Supervisory |
| Start: | May 2015 |
| Finish: | November 2016 |

▼ Project title: **Aluminum Industry Development**
 Employer: **IMIDRO**





Bandar Abbas pelletizing factory

Brief description of the project:

In order to increase the efficiency of steel making units, either by direct reduction or by blast furnace method, the raw materials are used as pelleted iron ore. Pelleted iron ore itself is derived from the combination of iron ore concentration and other additional materials that during a process they first are made like a small ball with a 9-16 mm diameter and then they are baked in the furnace and they become rough and tough.

This project has been done to produce 5.2 million tons pelleted iron ore a year that the contractor is China BSIET Company and Iran PCK Company with a value of about 137 million euros (EPC Contract) by the engineering and supervision of Iran Construction Company

Description of Contract Services:

- Providing the initial documents for the start of the contractor's work, collaborating with the employer to finalize the Layout and Process equipment, helping the constructor to provide the work scheduling plan and supervision on the process of purchasing, transporting, and installing the equipment.

Project title: **Bandar Abbas Pelleting**
 Employer: **MADKUSH Co.**
 Location: **HORMOZGAN Province, Bandar Abbas**

Employer: **MADKUSH Co.**

Contract type: **Design / Supervisory**

Start: **May 2013**

Finish: **November 2014**

Developmental plan of OFOGH-E ALBORZ Industry Group Company Plant

Brief description of the project:

The purpose of this plan, is to develop the Ofogh-e ALBORZ cable making plant which is located in GHAZVIN, Lia Industrial Park, with a land area of about 12000 square meters including traction and joinery units, insulation and coating (extruder) and the related utilities. Beside these Wire and Cable Production Units, there is a unit for producing granule in order to provide the raw material of the insulation unit.

Description of Contract Services:

- Carrying out the detailed and base and purchasing engineering services related to the new production line of the plant
- Determining the production process
- Designing the necessary utility systems and providing the list of utilities and equipment that are necessary for them
- Designing heating and cooling system
- Designing the necessary equipment for fire extinguishing of the whole factory and providing the related documents

- Providing the Bidding Documents for Contractors and Project Planning and Control Services
- Providing optimal locating of equipment and wire traction devices and joinery
- Providing locating of the granule production line
- Providing the preliminary maps and phase 2 architecture
- Providing the metal structure maps and the foundation of the niches and equipment
- Providing bidding documents for building niches

Employer: **Ofogh-e Alborz Industry Group**

Contract type: **Study / Purchasing engineering**

Start: **2017**

Finish: **In Progress**

Project title: **development of Ofogh-e Alborz Industry Plant**
 Employer: **Ofogh-e Alborz Industry Group**
 Location: **Qazvin Province**



Transit Silos of Imam Khomeini Port

Brief description of the project:

The subject of this project, is to provide stage-3 consultancy services (super and workshop supervision) for constructing the Grain Transit Silos of Imam Khomeini Port by the capacities of 100000 tones and also 200000 tons associated with the ship unloading systems, transferring the grains to the silos and related galleries, powerhouse and completing the power installations, subsidiary buildings, landscaping, repairing 70000-ton silos and other items related to the construction of silos.

Description of Contract Services:

- Supervision on the installation activities (power and mechanics)
- Supervision on the provision, construction, installation, and setting up ship unloading and loading devices and the grain transformation systems from the wharf to the silos
- Supervision on the landscaping / structuring activity

| | |
|----------------|--|
| Employer: | KHALIJEFARS Grains, Khuzestan Ports and Shipping |
| Contract type: | Supervisory |
| Start: | 2011 |
| Finish: | 2015 |

Project title: Transit Silos of Imam Khomeini Port
 Employer: Khalijefars Grains / Khuzestan Shipping and Ports Organization
 Location: Khuzestan Province



Transit Silos of NUSHAHR Port

Brief description of the project:

First stage consultancy service (basic studies and design), second stage (providing the executive plan) and geotechnical, geophysical and purchasing engineering services in order to construction of the 50000-ton silo in NUSHAHR Port

Description of Contract Services:

- First stage consulting services (basic studies) structural, civil, and industrial power works
- second stage consulting services (providing the executive plan) for structural, civil, and industrial power
- Consulting services for providing industrial and technological plan
- Consulting services in geotechnical and geophysical plan
- Consulting services for basic design of the instrument and control systems

- Consulting services in Safety basic design
- Consulting services on basic design of equipment and mechanical installation
- Consulting services on providing inspection documents and technical and executional specifications

| | |
|----------------|--|
| Employer: | Sinai Port & Marine Services Development Company (LLP) |
| Contract type: | Study |
| Start: | 2014 |
| Finish: | 2015 |

Project title: Transit Silos of Nushahr Port
 Employer: Sinai Port & Marine Services Development Company (LLP)
 Location: Mazandran Province





Facilities and equipment of the Water intake

- MOBIN Seawater intake Engineering Services
- Engineering Services for SOUTH PARS Phase14-Water intake and Pipe line
- Fifth Olefin Water intake (MORVARID Petrochemicals)



MOBIN Seawater intake Engineering Services

Brief description of the project:

Designing of huge structure of MOBIN water intake with the capacity of 106 m³/s, in order to provide the necessary water for the different cooling system of phase 1 petrochemical industry development including ninth, tenth, eleventh Olefin, Aromatics, Methanol and Ammonia.

This project has been done by the collaboration of Norwegian companies Aker Kvaerner and Multiconsult.

Description of Contract Services:

Designing the water intake construction with necessary predictions for installing related equipment, eastern and western output wire boxes, Chlorination structure, power post, control room and preparing the site

- Input culvert length: 1000 m
- Dimensions of main water intake: 100m*170m

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| Employer: | Sadra |
| Contract type: | Study |
| Start: | 2002 |
| Finish: | 2003 |

Project title: **Mobin Seawater intakes**
 Employer: **SADRA**
 Location: **BUSHEHR Province, Assaluyeh**



Designing and engineering water intake of fifth Olefin-Assaluyeh

Project title: **water intake of Fifth Olefin**
 Employer: **MORVARID Petrochemical.**
 Location: **Assaluyeh**

Brief description of the project:

This project is investigating the design of permanent water intake construction of Assaluyeh fifth Olefin by installing 4 new 15000 m³/h pumps and 4 existing 7000m³/h pumps on the water intake.

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| Employer: | Morvarid Petrochemical. |
| Contract type: | Design |
| Start: | 2014 |
| Finish: | 2015 |

Description of Contract Services:

Construction of permanent water intake near the coast, installing 8 pumps on the water intake and transforming water from the sea through the pipelines as well as purchasing engineering. In this regard, the following were considered:

- Designing the sea water intake
- Designing and transforming the pipelines from a depth of 20 meters under the sea to the water intake
- Designing the pumping facilities
- Designing filtering system
- Designing the power building, instrumentation, exploitation and ...

Engineering Services for SOUTH PARS Phase14-Water intake and Pipe line

Brief description of the project:

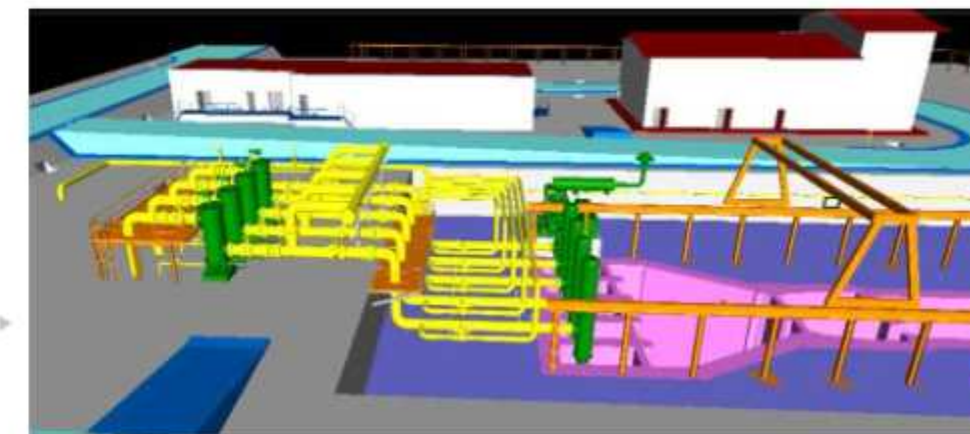
Performing required engineering services included detailed and basic design and providing tender documents for assigning to the EPC contractor and related to the water intake and the pipelines of transferring the sea water and all necessary equipment and subsidiary facilities to the phase 14 south pars refinery and also the related pipelines from outfall and storm basin to the sea, the considered basin for this reason, has the capability of removing water in a range about 10000 m³/h that the removal system from this basin has three pumps with a normal capacity of 6400 m³/h and design of 7800 m³/h. one of the Other designing elements of this project include water pipeline at the depths of the sea and the return water line of the refinery (outfall) and storm basin line. The considered type of the lines is GRP in the land and HDPE in the sea and the design has been carried out based on the non-metal pipelines.

Description of Contract Services:

- Providing engineering services in order to transfer the water through the existing water intake in the phase 12 and with considering the installation of 4 pumps and 15-km pipelines
- Modeling of the existing basin (CFD model), providing a conceptual plan related to the water transferring from phase 12
- Constructing the independent water intake
- In this project, hydro thermodynamics, hydrography, geotechnical, process, piping including 3D-modeling PDMS, civil, structural, power, telecommunications and instrumentation, safety and ..., providing the EPC tender documents were also among the items in the contract.

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| Employer: | MAPNA - NEYRPERSE |
| Contract type: | Study |
| Start: | 2015 |
| Finish: | 2017 |

Project title: **South Pars Phase14-Water intake and Pipe line**
 Employer: **MAPNA - NEYRPERSE**
 Location: **Assaluyeh**





Oil and Gas, petrochemical and industrial infrastructure

- Dynamic compaction of Assaluyeh Phase 2 lands and Land Extraction of Phase 2
- Integrated management and modeling of Assaluyeh Petrochemical Sites
- Export harbor of Assaluyeh Petrochemical Complex
- KIAN Petrochemical Complex
- HORMOZ Urea Fertilizer company

Supervision on the Operations of Dynamic compaction of Assaluyeh Phase 2 lands and Land Extraction of Phase 2

Brief description of the project:

Providing third-stage (supervision) engineering services related to the executional operations of Dynamic compaction of Land Extracted from the Sea in the phase 1 and 2 of Assaluyeh Petrochemical with an area of about 320 hectares in order to construction of petrochemical complexes located in the western edge of the northern coast of the Gulf in the south part of the BUSHEHR Province

Description of Contract Services:

Carrying out studies and providing the improving plan of Land Extracted from the Sea by dynamic compaction method, providing stroke patterns and super and workshop supervision on the contractors' operation, providing software services of geotechnical operations and project control and surveying, suggesting operational pattern in each region and providing the density reports of each region

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| Employer: | PIDEM Co. |
| Contract type: | Study/ Supervision |
| Start: | 2003 |
| Finish: | 2015 |

Project title: Dynamic compaction of Assaluyeh Phase 2 lands
 Employer: PIDEM Co.
 Location: Assaluyeh – Hormozgan Province



Integrated management and modeling of Assaluyeh Petrochemical Sites

Brief description of the project:

- Carrying out studies and preparing a plan for the construction of bridges, passages and culverts, retaining walls and other concrete structures on the area of second phase of Petrochemical Complex of Assaluyeh, and establishing a surveying and GIS management system and providing geotechnical services in the project of land preparation in the second phase of Petrochemical Complex of Assaluyeh
- Providing of additional services including the establishment of a surveying team, the implementation of the GIS management system, the establishment of a local laboratory and the provision of geotechnical services at petrochemical complex of pars special energy zone.

Description of Contract Services:

Engineering services for Specialized studies and preparation of executive plans and monitor the operations of land preparation and construction of phase two and Camp number two (16 hectares), and

▲ Project title: **Management and modeling of Assaluyeh Petrochemical sites**
 Employer: **PIDEM Co.**
 Location: **Assaluyeh**

also offer additional services such as GIS, establishment of local laboratories and providing geotechnical services in petrochemical plants in Pars Special energy Zone.

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| Employer: | PIDEM Co. |
| Contract type: | Study/ Supervision |
| Start: | 2004 |
| Finish: | In Progress |

Consulting services for the construction of export harbor of petrochemical complexes in Assaluyeh

Brief description of the project:

Carrying out studies and preparing the breakwater design and berth of the harbor in phase-2 of Assaluyeh Petrochemical Complex.

Description of Contract Services:

Studying and designing berths and export harbor of petrochemicals located in the Assaluyeh Special energy zone

- detailed studies of the recognition stage
- Engineering studies
- Carrying out consulting services as a technical and assessment arm of employer during the process of explaining the bases, designing and implementing the project
- Compilation and provision of information, necessary coordination for controlling generalities and technical-engineering aspects from the contractor

- Control and supervision during the progress of the general stages of the project, studying and designing the first and second stages of the port and the facilities and structures belonging to the large port of special energy zone

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| Employer: | PIDEM Co. |
| Contract type: | Study/ Supervision |
| Start: | 2000 |
| Finish: | In Progress |

▼ Project title: **Export harbor of petrochemical complexes in Assaluyeh**
 Employer: **PIDEM Co.**
 Location: **Assaluyeh**



KIAN Petrochemical Complex

Brief description of the project:

Surveying, geotechnical studies, design and supervision of the operations of land leveling and dynamic compaction

Performing surveying operation and providing topographic plat of the site, geotechnical studies, designing dynamic density and providing stroke pattern, workshop supervision on operations of dynamic compaction of KIAN Petrochemical Company located in phase 2 Assaluyeh petrochemical with an area of 74 hectares.

- Super and workshop supervision on mentioned operations after choosing executional contractors
- Designing and providing plat and executive specifications of retaining walls and required guard structures and the relation with the utility corridor of the second phase of Assaluyeh Petrochemical Complex as well as providing plat and executive specifications



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| Employer: | KIAN Petrochemical |
| Contract type: | Study/ Supervision |
| Start: | 2015 |
| Finish: | In Progress |

Project title: **KIAN Petrochemical Complex**
 Employer: **KIAN Petrochemical**
 Location: **Assaluyeh**

Description of Contract Services:

- Performing the required surveying operations
- Geotechnical and soil mechanics studies as well as providing related reports
- Designing dynamic density and stroke plan
- Providing the tender documents of Operational Dynamic Consolidation, soil operations, flattening and fencing

Improvement lands of the HORMOZ Urea Fertilizer Company

Brief description of the project:

Performing surveying operation and providing topographic plat of the site, geotechnical studies, designing dynamic density and providing stroke pattern, workshop supervision on operations of dynamic compaction of HORMOZ Petrochemical Company

Employer: Development Management of HORMOZ Urea chemical fertilizer

Contract type: Study/ Supervision

Start: 2013

Finish: 2015

Description of Contract Services:

- Performing the required surveying operations
- Geotechnical and soil mechanics studies as well as providing related reports
- Designing dynamic density and stroke plan
- Providing the tender documents of Operational Dynamic Consolidation, soil operations, flattening and fencing
- Super and workshop supervision on mentioned operations after choosing executional contractors

Project title: **Improvement lands of the HORMOZ Urea Fertilizer Company**
 Employer: **Development Management of HORMOZ Urea chemical fertilizer**
 Location: **Bandar Abbas**



International co-operations

Engineering and constructing don't have any boundaries, the aim is to build. If we can, we will be present beyond our boundaries, and if it's necessary, we will use others' engineering ability to build ourselves.

Co-operation with international and authorized companies for the interior projects and also taking part in exterior projects beyond our country, has been always a policy of Sazeh pardazi Iran (SPI) constructing engineers company.

In this regard, we did our job well and achieve some successful result and we are still looking forward to more effective engagement in engineering projects abroad.

The company registration and the establishment of an office in Oman and Iraq shows the intention of the company to establish a regional base in these two neighboring countries and the presence in other countries is also being investigate.

Local offices

- Central office: Tehran, 20th Street, Kurdistan Highway
- Office No.1: Tehran, 17th Street, Kurdistan Highway
- Surveying office: Tehran, Enghelab Square
- Khuzestan province
- Assaluyeh
- Yazd

Oversea Offices

- Oman
- Iraq



Certificates and Memberships



ISO 9001:2008



ISO 9001:2008



جایزه تعالی



OHSAS 18001:2007



HSE



ISO 14001:2004

ISO 9001:2008



HSE
ISO 14001:2004
OHSAS 18001:2007

