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# Hirbodan

The Experience You Can Trust



Total Solutio



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# History

# Since July 1, 2000

Hirbodan is Engineering, Procurement, Construction and Management Consulting firm, active in Petrochemical, Oil & Gas and Power Generation industries.

Hirbodan was founded in year 2000 by a group of people with adequate science and experience of project management, engineering and execution. Throughout the last years, Hirbodan had experienced a very intensive period of activity regarding growth and progress, marked by the completion many projects, comprising of all stages started from design to commissioning in Iran and overseas.

The first priority of Hirbodan is to fulfill all requirements and expectations of clients, while the profitability and competitiveness of company is guaranteed as well. On the other hand, tendency will be increased for Hirbodan to be the Contractor of Choice.

The company is having short and mid-term planning to enhance her capacities and explore the possibilities of being a pioneer in making the best use of world-class state-of-the-art technologies. Having the rich Gas resources in our country, we are studying the projection of down-stream of Natural Gas technologies and our R&D section is well-directed toward materializing supreme goals in this area





# International & National Certificates

# International Certificates

ISO9001: 2015 | ISO14001: 2015 ISO45001: 2018 | HSE-MS

# Memberships

- Member of Iran Management Consultant Association, Since 2009
- Member of Petroleum Industry Engineering & Construction Companies, Since 2010
- Member of Banking & Credit Investment Consultant Center, Since 2009
- Member of International Consultant and Contractors Association of Iran, Since 2002

# National Certificates

- Competence Certificates from Plan & Budget Organization:
- Consulting Services ranking 1st in the field of oil and gas, petrochemical and power plant.
- Contracting ranking 1st in the field of oil and gas, petrochemical and power plant
- EPC ranking 1st in the field of oil and gas, petrochemical and power plant.
- Project Management Services ranking 1st in the field of oil and gas, petrochemical and power plant industry















# Our Policies

# Safety & Health Policy

Hirbodan places the highest priority on maintaining the safety and good health of all personnel participating in or affected by Hirbodan's operations and preventing property losses as Hirbodan serves its clients, industry and the world community.

In the fulfillment of the aforementioned policies, Hirbodan, hereby, declares:

To deliver compliance with the HSE regulations, standards and procedures that are defined within the Contracts and the integral Conditions:

To seek, where appropriate, to apply higher standards in order to achieve parity with the best practice developments within the industry.

Hirbodan will pursue these objectives and spirit of these policies through:

Visible and proactive management commitment.

Commitment, involvement and co-operation of all employees and subcontractors.

Effective training, motivation and communication programs.

Maintenance of realistic, measurable and progressive HSE targets and objectives.

To put these objectives and spirit of these policies into effect, Hirbodan shall be guided by the following corporate beliefs:

That success in the management of health, safety and environmental protection is a prime business objective that is equally as important as other prime business objectives.

That accidents, incidents, injuries and environmental disturbance are unacceptable and preventable.

That everyone shares the responsibility for their own health and safety, and the health and safety of their colleagues at work.

That health, safety and environmental protection are line management responsibilities.

That all necessary HSE arrangements must be in place, before launching a plan, and that plan shall be stopped if it fails to meet the requirements of HSE arrangements and is not compatible with such principles.

It is Hirbodan's purpose to, in realizing our Clients' projects; fulfill our Clients' needs in the most optimal way by fully applying our knowledge and experience and through incorporating state-of-the-art technology.

In order to achieve this purpose, we affirm the following quality policy:

We will deliver plants and services fully complied with agreed requirements as well as statutory and regulatory requirements, thus achieving our clients' satisfaction and confirming their trust in Hirbodan.

We will continually improve the effectiveness of our quality management system

# Quality Policy

# Environmental Policy

Hirbodan is committed to achieving environmental excellence in both its corporate operations and the services it renders its clients, as a reputable and professional engineering contractor. To meet this commitment, Hirbodan, hereby, establishes the following principles which shall be applied, throughout its operations.

We shall spare no endeavor to preserve the natural environment through preventing the spread of pollution and conserving the energy and natural resources.

We shall provide our clients with the latest technical solutions that conserve energy and natural resources and reduce pollution and other adverse environmental impacts.

We shall fully comply with both, environmental laws and regulations and the environmental requirements our clients are concerned with.

We shall do our utmost to reduce the production of waste through measures taken that emphasize reuse, recycling.

We shall apply the following specific principles to the execution of our EPC projects:

Design Phase: We shall reduce the adverse environmental impacts of completed plants by minimizing a plant operating consumptions of energy and natural resources and minimizing its emissions of pollutants and its production of waste.

Procurement Phase: We shall give preference to vendors that adopt environmentally friendly manufacturing operations.

Construction Phase: We shall plan construction activities to minimize polluting emissions, adverse impacts on the surrounding environment, the consumption of energy and resources, and the production of waste, and as its consequences, we shall ensure that our subcontractors adopt work practices consistent with this principle.

To ensure the thorough consistent and effective implementation of this policy throughout its operations







# **Engineering and Construction**

Since its existence, Hirbodan Company, has successfully fulfilled a vast variety of key projects under the most sever climate conditions, enjoying hundreds of administrative and operational staff both nationwide and worldwide. The core of integrated policy in Hirbodan puts priority on declining and minimizing sub-contractors of the main parts of a project which will lead to predicting any barriers causing delay on project performance and boosting company flexibility against any sudden changes to occur on the way ahead of the project. This will enable the company to put an end to all the projects on the proper due time through implementing appropriate changes in project timetable and schedule whenever required.

# Project Management Consulting

The services provided by Hirbodan Company, in regard with project management, include engineering, procurement and construction. The project team is led by a project manager, and consists of highly skilled engineers and staff from a vast variety of disciplines, all of whom are fully devoted to the development of the basic plan including schedule, cost, quality and safety. A plant is a complicated integrated system consisting of different components and functions and it is so vital that all of them possess economic efficiency, reliability, safety, higher function and consideration to the environment.In order to satisfy such requirements, Hirbodan project team enjoys an extensive experience and techniques procures equipment, materials, and multi-national manpower resources on a global scale to complete the construction work on schedule and based on the due date and time. With high-level engineering technologies and a unique project management system. Hirbodan delivers a plant that meets the client's satisfaction to full extend.

Hirbodan supply chain organization provides its customers with global procurement and contract services which are unsurpassed in the industry. We support large, complex projects in remote locations of the world through our chain of suppliers from more than 40 countries. We exploit the most proper processes, automation tools, market data and skilled professionals to meet our commitment to our customers. We find ourselves accountable for safe purchase and delivery of high quality goods and services, from reliable and diverse suppliers and subcontractors, where they are needed, on time, and at the lowest total cost of ownership. With our procurement and contract specialists and experts, we provide complete end-to-end supply chain management services.

### Our Activity:

- Contracts management
- Expediting
- Global market watch
- Import-export and regulatory compliance
- Inventory and warehouse management
- Materials management
- Purchasing
- Supplier variety
- Supplier quality & shop inspections
- Traffic and logistics

# Procurement Services

Our engineering services include all common engineering disciplines such as process, electrical, mechanical, instrument & control, automation, civil, structural, architectural, piping, and pipeline as well as technical safety. Hirbodan Engineering offers highly competitive services for all innovative and reliable engineering process throughout plants and plant components. Our goal is to deliver safe, efficiently managed and costeffective projects to meet client requirements. Our engineering services include economic analyses, feasibility studies, process design, and detail engineering, project engineering and construction engineering. That is why we are recognized for our expertise in a wide range of disciplines, including civil &construction geotechnical, electrical, instrumentation and controls, mechanical, piping and process engineering.

Among our services in the scope of design and engineering, we can refer to:

- Conceptual Study & Design
- Front End Engineering & Design (FEED)
- Basic Engineering
- Detail Engineering
- 3D Modeling, Simulation & Numerical Analysis
- Tendering
- Site Technical Services
- Value Engineering & De-bottle Necking
- HAZOP Study and Risk assessment

# Design and Engineering



Hirbodan has gained and established such valuable and precious experiences through making and holding up research, study, investigation and investment in development opportunities, both in Iran and other countries and by means of creating fruitful connections with other research centers and our counterparts. In its background history, Hirbodan has always tried to provide and represent its innovations, capabilities and potentials to all those interested in such realms of science and technology globally to create future value and achievements. We continue to evaluate new opportunities and enthusiastically welcome and embrace all new creative plans and projects, in the realm of energy, which meet our investment criteria and are consistent with Hirbodan Company policy.

# **Development**





# Oil & Gas Projects



### **Project Description**

EPC of in-field facilities for Cheshmehkhosh, Dalpary, East Paydar Oil Fields

# **Project Specifications**

Project Name: Cheshmehkhosh, Dalpary, East Paydar Oil Fields Project

Owner: Petroleum Engineering and Development Company (PEDEC)

**Client:** ZN VOSTOK

Field of Activity: Oil & Gas Upstream

**Contract Type: EPC** 

Reign: Ilam & Khuzestan - Iran

## **Project Scope**

- New production well pads + Flow lines: 13 wells
- New Disposal well pads+ Water pipelines: 2 wells
- Existing production well pads, reconstruction: 27 wells
- Existing disposal wells, reconstruction: 2 wells
- Water intake, AGMUs with Pigging area, MPPs, SCADA, Security CCTV System
- New appraisal well pads+ Flow lines: 7 wells







## **Project Description**

**Bandar Abbas Refinery Development Plant** 

# **Project Specifications**

**Project Name:** Bandar Abbas Refinery Development Plant

**Client:** Bandar Abbas Oil Refining Company

Field of Activity: Oil & Gas

Contract Type: Project Managment Consultancy (PMC) & Finance Managment

Reign: Khuzestan - Iran



## **Project Scope**

- Decrease Fuel Oil Production through construction of 14 new process units
- Constructions of utility and off-site units
- Lube Oill II, III unit
- Coke unit





## **Project Description**

Isfahan Refinery Development Plant

# **Project Specifications**

**Project Name:** Isfahan Refinery Development Plant

**Client:** Isfahan Oil Refining Company

Field of Activity: Oil & Gas

**Contract Type:** Project Managment Consultancy (PMC)

Reign: Khuzestan - Iran

# **Project Scope**

- RFCC
- PRU
- LPG
- LPG-MEROX
- Prime G
- HPU









The Aghajari Gas Injection Project was held in Khuzestan Province by Hirbodan Company, recommended by Petroleum Engineering and Development Company (PEDEC) in the form of EPCC contract

# **Project Specifications**

**Project Name: Aghajari Gas Injection** 

**Client:** Petroleum Engineering and Development Company (PEDEC)

Partner(s): Kayson and Chagalesh Consulting Engineers

Field of Activity: Oil & Gas

**Contract Type:** Engineering, Procurement, Construction and Commissioning (EPCC)

Region: Khuzestan - Iran

# **Project Scope**

Installation of 7 Turbo Compressors (300 MMSCFD each)

50 km 24" Injection Pipelines

**Auxiliary Equipment** 

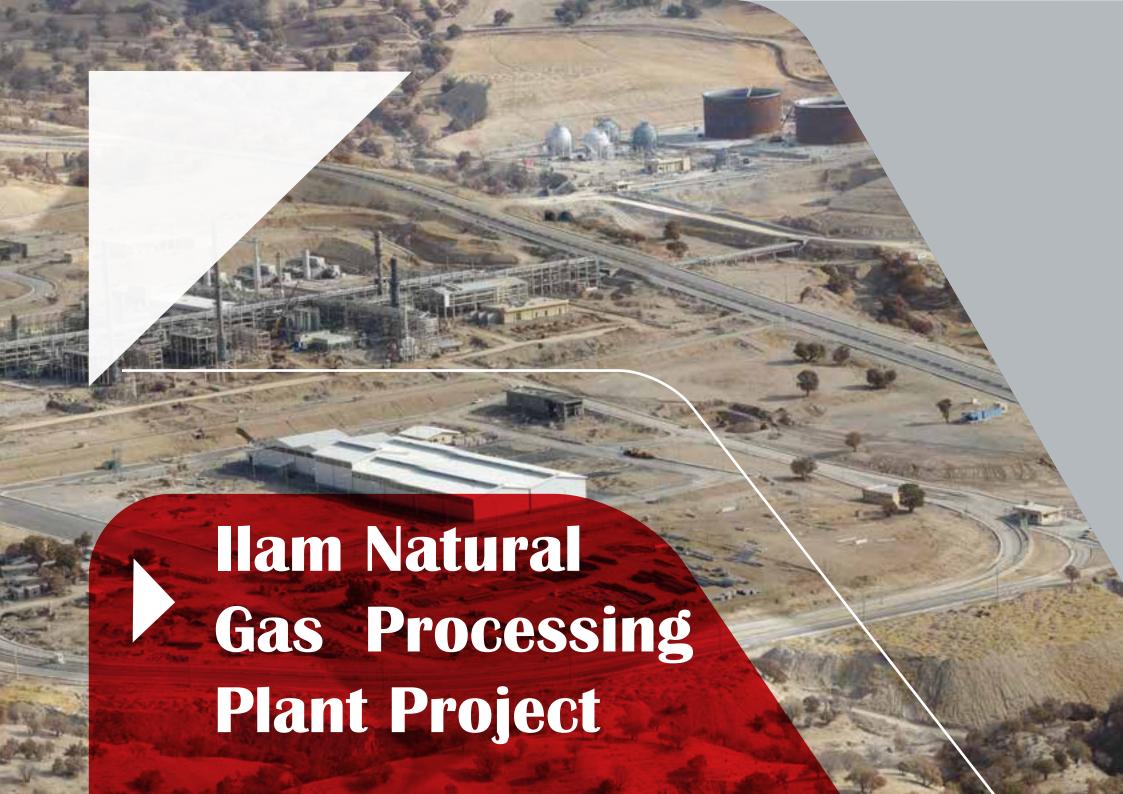
**Construction and Pre-Commissioning** 

**Commissioning and Start-up** 









The National Gas Processing Plant Project was held in Ilam Province by Hirbodan Company, recommended by National Iranian Gas Company (NIGC) in the form of PMC contract

# **Project Specifications**

**Project Name: Ilam Natural Gas Processing Plant** 

**Client:** National Iranian Gas Company (NIGC)

Field of Activity: Oil & Gas

**Contract Type:** Project Management Consultancy (PMC)

Region: Ilam - Iran

- Gas Condensate Stabilization Unit
- Gas Treatment Unit including Sulfur Removal, Gas
- Dehydration, Mercury Guard and Ethane Extraction Units
- NGL (C2, C3+) Fractionation facilities
- Gaseous Ethane Cut Treatment for Carbon Dioxide Removal

- Spherical and Floating Roof Storage Tanks
- Natural Gas Compression, Metering and Export
- 75 MW Power Plant
- 4 Sets of Auxiliary Boilers
- Fire Fighting and Safety Systems
- Residential Camps & Buildings
- 28 km Water Supply Pipeline









Daily production from these phases will reach 50 MMSCMD of natural gas and 80,000 barrels of gas condensate. Management consultancy services were performed by Hirbodan and Aker Kvaerner companies

# **Project Specifications**

Project Name: South Pars Gas Fields Development Phases 9 & 10

**Client:** Pars Oil and Gas Company (POGC)

Partner: Aker Kvaerner (Norway)

Field of Activity: Oil & Gas

**Contract Type:** Project Management Consultancy

Region: Asaluyeh, Iran

- Well Drilling
- Offshore Platforms
- 2 × 32" Sub-Sea Gas Pipeline
- Onshore Gas Sweetening
- Treatment Facilities
- Utilities







The Ahvaz-Bangestan Oil Desalting Plant Project was held in Khuzestan Province by Hirbodan Company, recommended by National Iranian South Oil Fields Company (NISOC) in the form of EPCC contract.

# **Project Specifications**

Project Name: The Ahvaz-Bangestan Oil Desalting Plant Project

**Client:** National Iranian South Oil Fields Company (NISOC)

Field of Activity: Oil & Gas

**Contract Type:** Engineering, Procurement, Construction and Commissioning (EPCC)

Region: Khuzestan - Iran

- 2 Plate Heat Exchangers
- 2 Indirect Fired Crude Oil Preheaters
- 2 Desalter Packages
- Wastewater Treatment (IGF)
- Chemical Injection Package
- Distributed Control System (DCS)

- Emergency Shutdown System (ESD)
- Switchgear Room









The Indirect Fired Preheaters and Plate Heat Exchangers Project were held in Khuzestan Province by Hirbodan Company, recommended by National Iranian South Oil Fields Company (NISOC) in the form of EP contract.

### **Project Specifications**

Project Name: Indirect Fired Preheaters and Plate Heat Exchangers Project

**Client:** National Iranian South Oil Fields Company (NISOC)

Field of Activity: Oil & Gas

**Contract Type:** Engineering & Procurement (EP)

Region: Khuzestan – Iran

- 5 Plate Heat Exchangers, each with 4100 kw duty for "Ahvaz-Asmari 1, 2, 3 & 4 Desalting plants" with Chemical Injection Package (CIP).
- 5 Indirect Fired Preheaters, each with 11.5 MMBtu/h duty and 55,000 b/d design capacity for "Bangestan 1, 2, 3 Desalting plants".
- 2 Indirect Fired Preheaters and Plate Heat Exchangers, each with 11 MMBtu/h duty and 30,250 b/d design capacity for "Bibi Hakimeh Desalting plant".

- 2 Indirect Fired Preheaters and Plate Heat Exchangers, each with 15 MMBtu/h duty and 55,000 b/d design capacity for "Pazanan 1 & 2 Desalting plants".
- 6 Indirect Fired Preheaters and Plate Heat Exchangers, each with 15 MMBtu/h duty and 55,000 b/d design capacity for "Marun-Asmari 1~6 Desalting plants".
- 1 Indirect Fired Preheater and Plate Heat Exchanger, each with 15 MMBtu/h duty and 55,000 b/d design capacity for "Rag Sefid 2 Desalting plant"









The Increasing Imam Taghi Oil Pump Station Capacity Project was held in Razavi Khorasan Province by Hirbodan Company, recommended by National Iranian Oil Engineering and Construction Company (NIOEC) in the form of EPCC contract.

# **Project Specifications**

**Project Name:** Increasing Imam Taghi Oil Pump Station Capacity

**Client:** National Iranian Oil Engineering and Construction Company (NIOEC)

Partner: Oloum Bonyan

Field of Activity: Oil & Gas

Contract Type: Engineering, Procurement, Construction and Commissioning (EPCC)

Region: Razavi Khorasan — Iran

- Performing 20 km of 8" Pipeline
- Construction of 3 × 20,000 m3
- Storage Tanks
- Supplying 3 Transfer Pumps
- Supplying 2 Booster Pump











Iran-Iraq Gas Export Pipeline Project, a PMC contract in nature, was awarded to Hirbodan Company. This contract is the first BOT Contract (Build-Operate-Transfer) made at National Iranian Gas Company with the aim of transferring gas to West and Northwest regions of Iran followed by exportation to Iraq.

### **Project Specifications**

Project Name: Iran-Iraq Gas Export Pipeline Project

Owner: Iran Gas Engineering and Development Company (igedc)

**Client:** Naftanir

Field of Activity: Oil & Gas

**Contract Type:** Project Management Consultancy (PMC)

Location: West and Southwest of Iran

# **Project Scope**

Through this contract, Hirbodan Company was in charge of following items; exploiting the latest technologies such as Horizontal Directional Drilling (HDD):

- Construction of more than 590km Pipeline
- 5 Booster Gas Compressor Stations
- 5 Pressure Control Stations
- Two Gas Metering Stations









The purpose is to create value through facilitate the import and export of feedstock and products from the existing Qeshm Heavy Crude Oil Refinery and the under-construction Qeshm Condensate Gas Refinery.

# **Project Specifications**

Project Name: Hara Qeshm Oil Jetty and Platform

Client: Hengam Qeshm Industrial Mobilization and Development Co.

Field of Activity: Oil & Gas

**Contract Type: Construction Services** 

Region: Qeshm, Iran

# **Project Scope**

The purpose of this project is to construct a jetty for berthing of crude oil and refinery product carriers, up to 70,000 DWT on northern platform, berthing of bulk bitumen carriers, up to 7,000 DWT on southern platform and supplying of sea water up to 8000 m3/hr to the neighbor plant.

The scope of Hirbodan Services was to undertake the civil works, installation and precommissioning of pipelines and appendages in Hara secondary jetty and its onshore area.









Shiraz Refinery Development Plant

# **Project Specifications**

**Project Name: Shiraz Refinery Development Plant** 

**Client:** Shiraz oil Refinery Company

Field of Activity: Oil & Gas

Contract Type: Project Management Consultancy (PMC)

Region: Shiraz, Iran

### execution of following new units:

Light Naphtha Treating Unit: 6500 bbl/day

Isomerization Unit (included Naphtha splitter): 5000 bbl/day

Sulfur Recovery Unit: 26000 bbl/day







# **Project Scope**

Shiraz Oil Refinery Company intended to implement a new 26,000 BPSD Distillate Hydro-Treating Unit (DHT) and all required process units (Sulfur Recovery Complex and Hydrogen Production Unit) along with utilities and offsite facilities in Shiraz Oil Refinery (SOR) in line with local and international environmental standards in order to reduce the Sulfur content of Gasoil product to meet Euro 5 specifications.

Hirbodan, as a project management consultant, was in charge of supervision for the





HOMA & VARAVI Gas Compressor Station & Tabnak Gas Field Separation Unit

# **Project Specifications**

Project Name: HOMA & VARAVI Gas Compressor Stations & Tabnak Gas Field Separation Unit

Client: Persia Oil & Gas Industry Development Co.

Field of Activity: Oil & Gas

**Contract Type:** Engineering Consultancy Services

Region: Fars - Iran

### **Project Scope**

Construction of HOMA gas compressor station is aimed at increasing the recovery factor of this gas field from 45.4% to 82.8% and stabilizing the daily production of 15 million cubic meters of gas.VARAVI gas compressor station aims to increase the recovery factor of this gas field from 29.7% to 49.2% and stabilize the daily production of 9 million cubic meters of gas.

Construction of Tabnak gas field separation unit was planned to separate water and increase the quality of feed entering the Parsian

refinery with a daily production of 36 million cubic meters.

**Basic Design Endorsement** 

**Preparation of tender Documents** 

Checking of approval group about contractors report

Preparing packages for late delivery goods



Feasibility Study of the new 150,000 BPSD Oil Refinery

# **Project Specifications**

Project Name: Feasibility Study of the new 150,000 BPSD Oil Refinery

**Client:** Anahita Oil Refining Co.

Field of Activity: Oil & Gas

**Contract Type:** Consulting Services

Region: Kermanshah, Iran

# **Project Scope**

Anahita Oil Refinery is a complete new grass-root refinery with the capacity of 150,000 BPSD to be located at Kermanshah, Iran to produce Gasoline, Kerosene, and Diesel Fuel pool with the latest European fuel specification and Fuel Oil produced in accordance with NIORDC product specification with due consideration of environmental issues and energy conservation. The Main Refinery Process Units are CDU/ VDU, NHT, CCR, HCU, Isomerization, MDHDT, HPU, VBU, SRU/ SSU, LPG Recovery, Sour Gas/ Water Treating, All Utility

Units / Tankage, Buildings and Offsite are Included in the Project.



Sepehr and Jufair Field Development

# **Project Specifications**

**Project Name:** Sepehr and Jufair Field Development

**Client:** Pasargad E&P

Field of Activity: Oil & Gas

**Contract Type:** Consulting Services

Reign: Khuzestan - Iran

# **Project Scope**

These Fields are situated in the northeastern part of Abadan plain, 60 km southwest of the oilrich city of Ahvaz. The project is aimed at production capacity of 110,000 b/d with an accumulated output of 512 million barrels from the two fields over a period of 20 years.

Surface Facility Study and re-designing

- a. Early actions
- b. FEED preparation
- c. EPCs Tenders









# Petrochemical Projects



The Utilities and Offsite Plant Project in Shiraz Petrochemical Complex was held in Marvdasht – Fars Province by Hirbodan Company, recommended by Shiraz Petrochemical Complex (SPC) in the form of EPCC contract.

# **Project Specifications**

Project Name: Utilities and Offsite (U&O) Plant Project - Marvdasht

**Client:** Shiraz Petrochemical Complex (SPC)

PMC: Petrochemical Industries Development Management Company (PIDMCO)

Partners: HICO FZE / Metatech International

Field of Activity: Petrochemical Projects

**Contract Type: EPC** 

Reign: Marvdasht, Fars province, Iran

# **Project Scope**

- Demineralized water
- High-pressure steam
- Cooling water
- Air instrument
- Plant air
- High-purity nitrogen
- Fire water

 Also process plant effluents which contain chemical, biological and oily contaminants are received at utility plant to be treated.







The plant is located in Isfahan Petrochemical Company site, as the first producer of aromatics line of chemicals in Iran. Hirbodan, with assistance of foreign engineering company "Aker Kvaerner", had responsibility for the license and preparing basic engineering package.

# **Project Specifications**

Project Name: Isfahan Petrochemical Phenol – Acetone Plant

Field of Activity: Petrochemical

**Service:** Design and Engineering

**Client:** Isfahan Petrochemical Company

**Partner: Metatech Luxemburg** 

Location: Isfahan, Iran

- License of Cumene and Phenol
- Basic Engineering Package



The project scope is Counseling and provision of required employer to monitor and audit the operations of the contractor SUMEK (with Chinese citizenship) in PET-2 petrochemical plant optimization project of Tondgooyan petrochemical company.

# **Project Specifications**

Project Name: Improvement of Shahid Tondgooyan Petrochemical PET-2 Project

**Activity Field: Petrochemical** 

**Service:** Project Management Consultancy

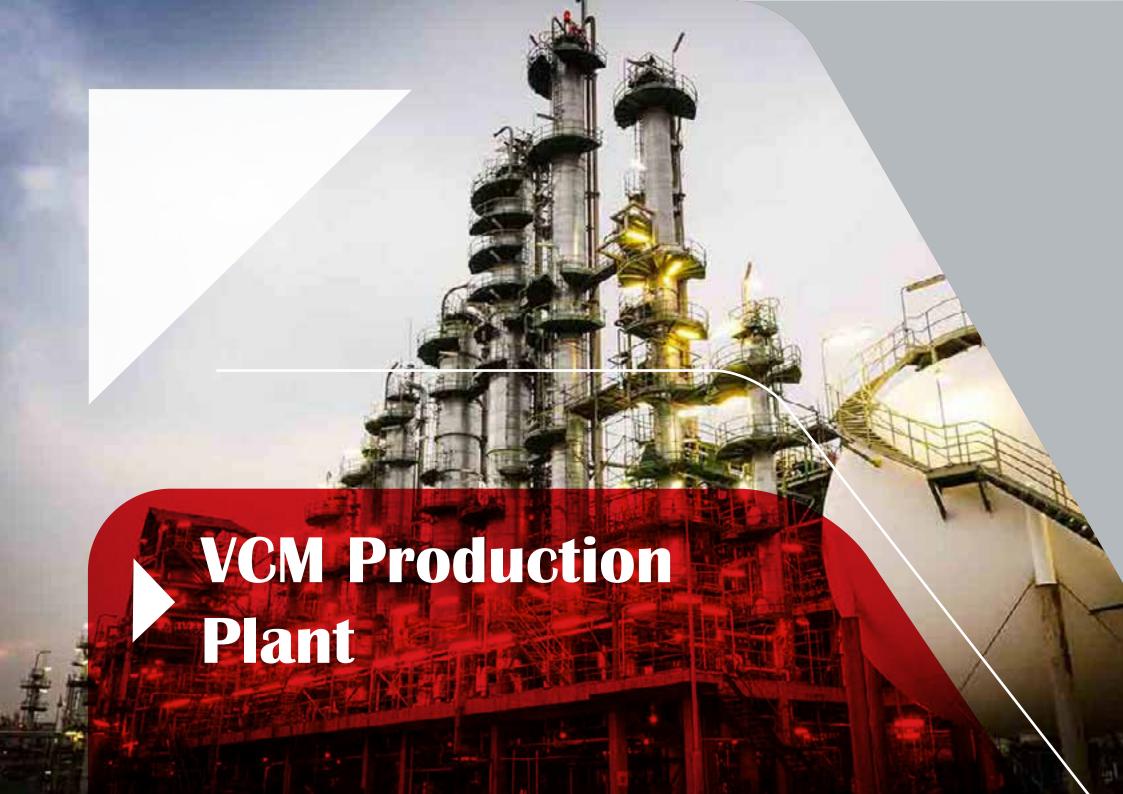
Client: Shahid Tondgooyan Petrochemical Co.

**Location:** Mahshar, Iran









Project management services and supervision of renovation of Unit No. 600 of Abadan Petrochemical were performed by Hirbodan Company. This unit converts EDC received from 500 and 1000 units to VCM. Parts of the unit were damaged by fire. Numerous contractors carried out engineering operations, equipment purchases, and installation and commissioning of the project, and Hirbodan, as a management contractor, oversaw all the contractors' operations and the reconstruction project management. The project was funded by TAPICO Holding.

# **Project Specifications**

**Project Name: VCM Production Plant** 

Client: Abadan Petrochemical Co.

Field of Activity: Petrochemical

**Contract Type:** Management Contractor (MC)

Region: Abadan - Iran

- Rehabilitation and Maintenance for Unit 600 (VCM)
- Implementation of procedures
- Project planning and control services
- Coordination services and contracts implementation management







Hegmataneh Petrochemical is the first producer of standard medical grade polyvinyl chloride in Iran based on the knowledge of domestic experts. The nominal capacity of the factory is 36 KTA medical grade PVC.

# **Project Specifications**

**Project Name: PVC Production Plant** 

**Client: Hegmataneh Petrochemical Company** 

Field of Activity: Petrochemical

**Contract Type:** Project Management Consultancy (PMC)

Region: Hamedan - Iran

# **Project Scope**

Project management Consulting including:

- Engineering
- Procurement
- Construction
- Commissioning







Vista Energy Arghavan is intended for the production of ethylene and polyethylene products and includes ethane cracker units, heavy polyethylene and linear / heavy polyethylene. The project is planned to be implemented on a land with an area of approximately 60 hectares in the Pars Kangan region.

## **Project Specifications**

**Project Name:** Arghavan Polyethylene Plant

**Client: Vista Energy Arghavan Company** 

Field of Activity: Petrochemical

**Contract Type: Consulting Services** 

Region: Kangan, Iran

- Consulting Services for Optimal Supply of the complex
- electricity and utilities
- Preparation of EPC tender documents for Utility and Offsite Plant







The project is to construct a petrochemical plant, producing Propylene and its downstream derivatives of Propylene Oxide, various grades of Poly Ether Polyols (180 KTA) and Propylene Glycols (20 KTA) from Propane feedstock, in Parsian Energy Intensive Special Economy Zone, at south of Iran.

#### **Project Specifications**

**Project Name: Polyacetal Project Complex** 

**Client:** Fajr Kerman Petrochemical Complex

Field of Activity: Petrochemical

**Contract Type: EPCC** 

Region: Kerman, Iran

#### **Project Scope**

Grant of license and rights for use of technical information and know how, basic and detail engineering, procurement and supply of equipment, construction, erection, precommissioning, commissioning, start-up and performance test for Polyacetal Complex

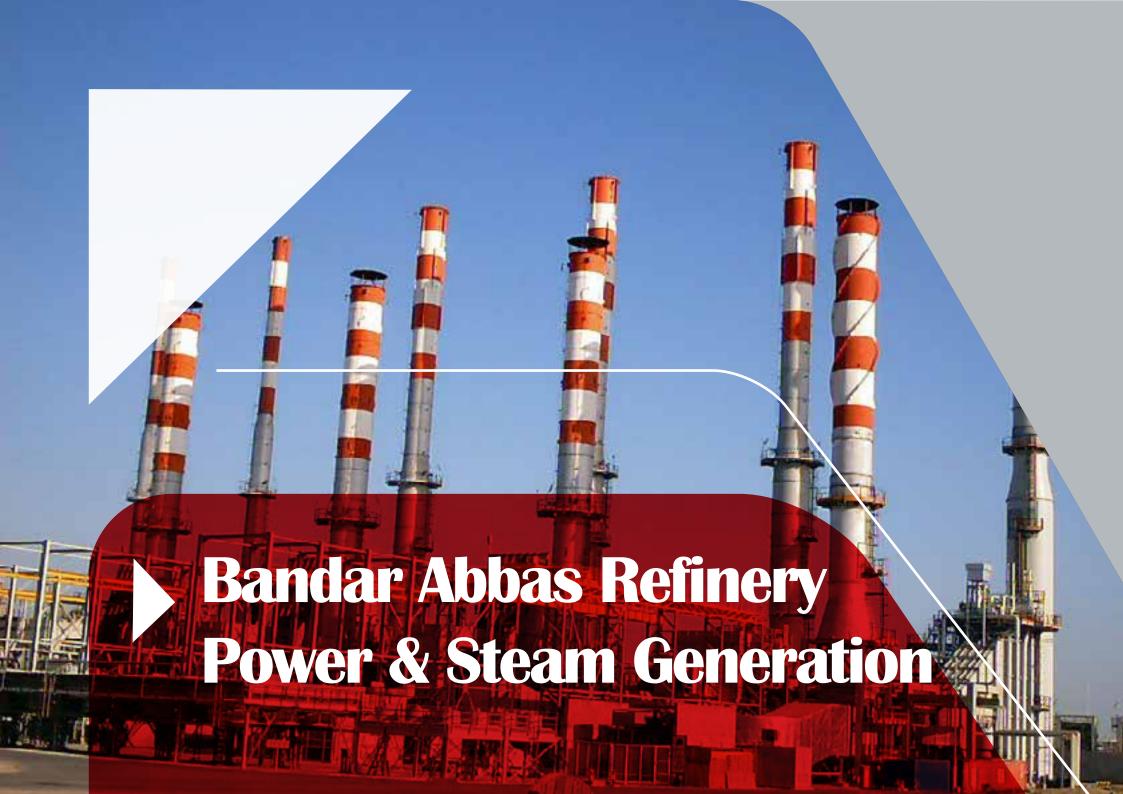
- including:
- Methanol Plant 60,000 TPY
- Formaldehyde Plant 110,000 TPY
- POM Plant 40,000 TPY

- DOX plant 22,000 TPY
- BOP including: Water Pipeline & Pump Stations, gas pipeline,
- Power Transmission Line and Substation





# Power Plants



The 42 MW Cogeneration Power Plant Project was held in Hormozgan Province by Hirbodan Company, recommended by Bandar Abbas Oil Refining Company in the form of EPCC contract.

## **Project Specifications**

Project Name: 42 MW Cogeneration Power Plant Project for Bandar Abbas Refinery

**Client:** Bandar Abbas Oil Refining Company

Partner: HICO FZE

Field of Activity: Power Generation

Contract Type: Engineering, Procurement, Construction and Commissioning (EPCC)

Region: Hormozgan - Iran

**Delivery Date: 2005** 

- 1 × 42 MW GE Gas Turbine Generator (MS6001B)
- 1 × 100 TPH (tons/h) Heat Recovery Steam Generator (HRSG)
- Dual Fuel System (DFS)
- Distributed Control System (DCS)









The 180 MW Simple Cycle Power Plant project for south pars gas field development (Phases 6, 7 and 8) was held in Asaluyeh county, Bushehr Province by Hirbodan Company, recommended by Pars Oil and Gas Company (POGC) in the form of EPCC contract.

## **Project Specifications**

**Project Name: 180 MW Simple Cycle Power Plant** 

**Client:** Pars Oil and Gas Company (POGC)

Partner: HICO FZE

Field of Activity: Power Generation

Contract Type: Engineering, Procurement, Construction and Commissioning (EPCC)

Region: Asaluyeh County — Iran

- 4×45 MW Siemens Gas Turbine (SGT-800)
- Gas Pressure Reducing Station (GPRS)
- Compressed Air Supply System
- Fire Extinguishing System
- Drainage System
- Distributed Control System (DCS)









**OMAN Refinery Power & Utility** 

# **Project Specifications**

**Project Name: Utility Plant of Oman Refinery** 

Client: Oman Refineries & Petrochemicals Industries Co. (ORPC)

Partner: HICO FZE

Field of Activity: Utility and Power Generation

**Contract Type:** Engineering, Procurement, Construction and Commissioning (EPCC)

Region: Muscat- Oman

- 2 × 25 MW Gas Turbine Power Generator (GE Frame 5)
- 2 × 100 TPH, Heat Recovery Steam Generator (HRSG)
- 1 × 30 TPH, Auxiliary Boiler
- Desalination Plant

- Polishing Plant
- Fuel Gas Conditioning
- DCS, FCS & SCADA Control System









The Power & Steam Generation Plant Project, provided for Shohaday-e-Marvdasht Petrochemical Plant, was held in Marvdasht – Fars Province by Hirbodan Company in 2015, recommended by Shiraz Petrochemical Complex (SPC) in the form of EPCC contract.

## **Project Specifications**

Project Name: Power & Steam Generation Plant provided for Shohaday-e-Marvdasht Petrochemical

Plant

**Client:** Shiraz Petrochemical Complex (SPC)

PMC: Petrochemical Industries Development Management Company (PIDMCO)

Partners: HICO FZE / Metatech International

Field of Activity: Power Generation

Contract Type: Engineering, Procurement, Construction and Commissioning (EPCC)

**Region:** Fars Province-Iran

- 3 × 27 MW Gas Turbine Generators (Hitachi H-25)
- 3 × 33 TPH (ton/h) Heat Recovery Steam Generator (HRSG)
- Distributed Control System (DCS) / Fieldbus Control System (FCS)
- Utility Distribution and Gathering System consisting of Potable and Service Water, Cooling Water, Air & N2 and Waste & Drainage System.









The subject of the project is to provide basic and detailed design & engineering services, procurement, construction and installation work, pre-commissioning and commissioning and training of plant operators in the EPC methodology including all services described in the contract to construct the gas portion of 500 MW Pasargad Qeshm Combined Cycle Power Plant with 320 MW nominal capacity located in Qeshm Island Free Zone, Hormozgan Province, Islamic Republic of Iran.

The plant configuration mainly consists of one gas turbine type AE94.3 F Class and generator type TRY-L63 and all required accessories and ancillaries. The power plant synchronized to the grid just in 18 month after contract effective date by Hirbodan.

#### **Project Specifications**

Project Name: 320 MW Simple Cycle Power Plant

**Client:** Qeshm Movaled

Field of Activity: Power Plant

Contract Type: Engineering, Procurement, Construction and Commissioning (EPCC)

Region: Qeshm - Iran

- AE94.3A Ansaldo F Class Gas Turbine, Generator Model TRY/L63 & Auxiliaries
- DCS System
- Cooling System
- BOP Systems
- 230kv Substation
- GRRS & Fuel Gas Conditioning









Neka power plant has the greatest power generation installed capacity in the country's power grid. It is composed of steam power generation units of 4x440MW, gas turbine units of Siemens V 94.2 with nominal capacity of 2x137.5 MW, as well HRSG units with 160 MW rated capacity (as closed combined cycle 435 MW totally), expansion gas turbine with 18.8 MW; then overall capacity is 2213.8 MW.The ONCE THROUGH cooling system using seawater was successfully implemented by Hirbodan as an EPCC contractor.

#### **Project Specifications**

Project Name: Shahid Salimi Neka Power Plant

**Client: MAPNA Group** 

Field of Activity: Power Plant

**Contract Type:** Engineering, Procurement, Construction and Commissioning (EPCC)

Region: Mazandaran, Iran

- Main Cooling System
- Auxiliary Cooling System
- Chlorination System
- Screen System
- Pumps
- Piping & Surface Condenser





Design and implementation of fire water system and foam system and related equipment related to Damavand power plant was done by Hirbodan. Damavand Cycle Power Plant (known as Pakdasht Martyrs Power Plant) is located in an area of 193 hectares land at 35 km of TehranGarmsar road

## **Project Specifications**

Project Name: Water & Fire Systems of Damavand Power Plant

**Client: MAPNA Group** 

Field of Activity: Power Plant

**Contract Type:** Engineering, Procurement, Construction and Commissioning (EPCC)

Region: Tehran - Iran

- Pump House
- Hydrant, Spray & Foam System
- Gasoline Reservation Tanks
- Fire Fighting System
- Deluge System







Technology Transfer for Wind Power Plant from Vestas Company

# **Project Specifications**

**Project Name:** Manjil Wind Power Plant

**Client:** Sadid Industrial Group

Field of Activity: Power Generation

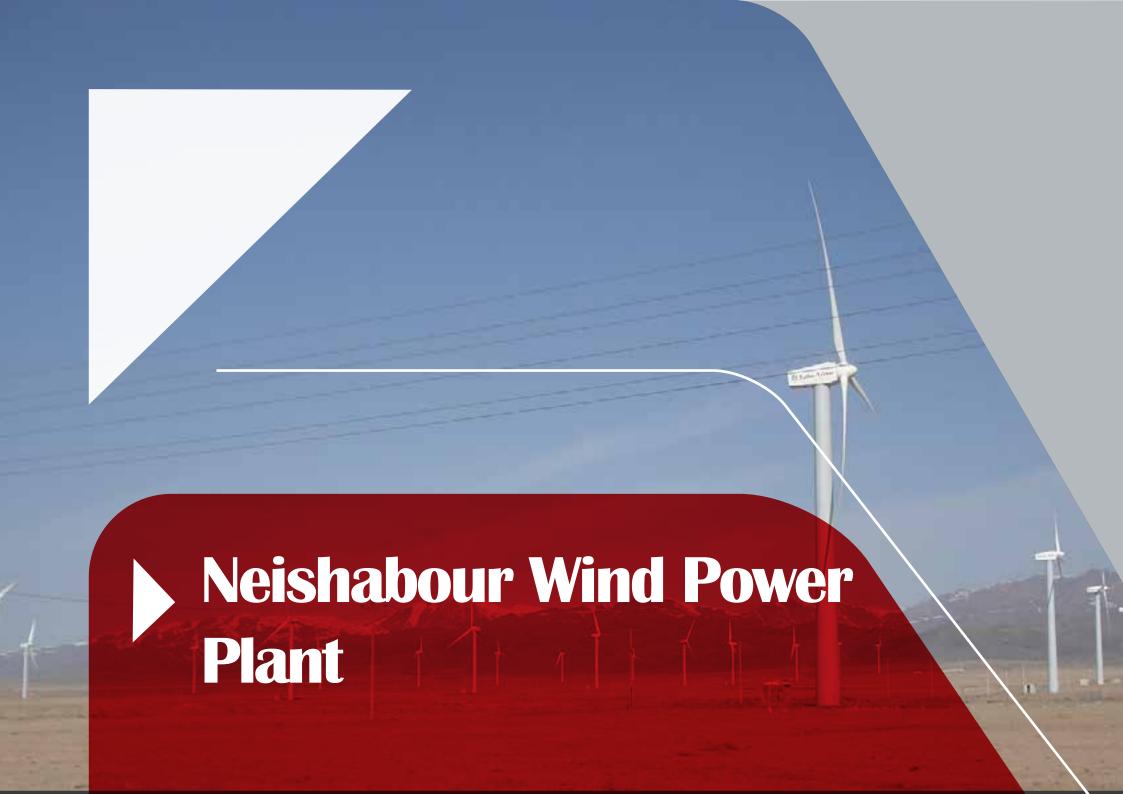
**Contract Type:** Project Management Consultancy

Region: Manjil, Iran

- Supervision for Local Manufacturing
- Supervision for Construction
- Managing 24 Different Local Sub-contractors
- Construction of Assembly Plant
- Supervision for Construction of 143 Sets of Wind Power Generators







Management and Technology Transfer for Wind Power Plant from Vestas Co.

# **Project Specifications**

**Activity Field: Power Generation** 

**Service: Project Management Consultancy** 

**Client:** Sadid Industrial Group

Location: Neishabour, Iran

- Supervision for Local Manufacturing
- Supervision for Construction
- Managing 24 Different Local Sub-contractors
- Construction of Assembly Plant
- Supervision for construction of 43 sets of Wind Power Generators







**Armenia Wind Power Plant** 

# **Project Specifications**

Activity Field: 3 MW Armenia Wind Power Plant

**Client:** Armenia Ministry of Energy

Field of Activity: Renewable Energy

Contract Type: EPCC

Region: Poushkin, Armenia

- 4 × 650 kW Wind Power Generators
- Electrical System
- Control Panel









# Other INDUSTRIAL



Largest Pipe Mill in the Middle East, Up to 56 inches Diameter and Up to 35 mm Thickness with 500,000 tons per year Capacity.

# **Project Specifications**

**Activity Field:** Mahshahr Pipe Mill Plant

**Client:** Sadid Industrial Group

Field of Activity: Industrial

**Contract Type:** Development

Region: Mahshahr, Iran

# **Project Scope**

**Project Development Phase:** 

- Idea Generation
- Market Study
- Feasibility Study
- Site Selection
- Finance Arrangement
- Basic Engineering for Method of Production

**Project Execution Phase:** 

- Detail Engineering
- Local & Foreign Procurement
- Local Equipment Manufacturing
- Construction
- Commissioning







Smelt and Acid Complex of Songun with the highest technology is one of the important projects in the copper industry in Iran. The project was considered to consist of copper smelter plant, oxygen and sulfuric acid and Accessories located in the province of East Azerbaijan side.

## **Project Specifications**

Activity Field: Smelt and Acid Complex of Songun Copper Industry

**Client:** National Iranian Copper Industry (NICI)

Field of Activity: Industrial

**Contract Type:** Project Management Consultancy

Region: Songun, Tabriz, Iran

- Planning of Smelt Acid, Oxide Plant for 200,000 ton/year
- Hirbodan Responsibility as Consulting Engineer
- Project Control & Management
- Site Inspection
- Quality Control for Preparing Machinery Plant in Iran

- Quality Control for Foreign Procurement
- Inspection of Pre-commissioning
- Inspection of Commissioning
- Control of all EPC Control Statements





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