



Engineering  
& Construction  
Company

# ENGINEERING & CONSTRUCTION COMPANY







www.tivenergy.com

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# Our Story

TIV Energy Engineering and Construction Company as a member of Namad San'at Pars (NSP) industrial group, is the leading contracting company in oil and gas field, petrochemical, utility, power plant, industrial, mining and chemical industries which implemented many design, Procurement and construction projects since 1997. At present, TIV Energy offers its services in accordance with technical, engineering and management standards in the following areas:

Providing design, Procurement and construction services in oil, gas and petrochemical projects including upstream gas sweetening units, pipelines, petrochemical and refineries and gas compressor stations. Construction of storage tanks including fixed-roof, floating, spherical, and double-walled storage tanks and tanks for storage of special products.

TIV Energy including three different departments:

**1.Utility and Process Department    2.Storage Tank Department    3.Engineering & Construction Department**

TIV Energy executes a wide range of design and construction projects for clients in the market of oil and gas industry, from single-unit revamps to petroleum refining complexes in format of EPC/EPCF

We provide Engineering Services  
in all disciplines:

- Process
- Piping & Pipeline
- Mechanical (Fixed, Rotary, HVAC)
- Architecture, Civil and Structure
- Instrument and Control
- Electrical (POWER,TELECOM)
- Safety





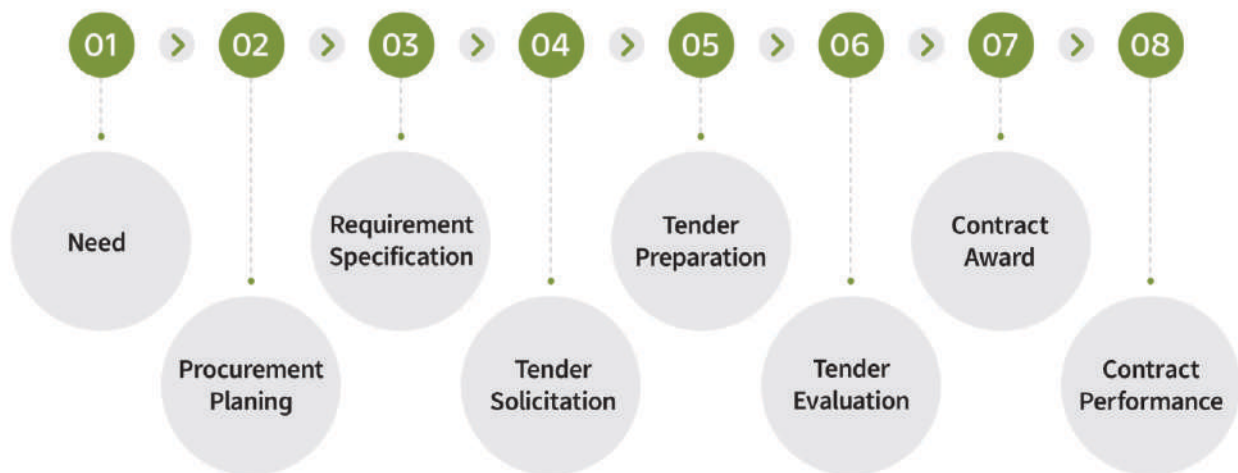


The brilliant service in TIV Energy is **Procurement and Construction** of the Equipment, Piping, Instrument and Control, Electrical and Structural requirements in ours project.



We offer a vast experience in the construction of the Oil and Gas and petrochemical plant. We provide complete solution in Vendor Technical and Commercial activities We have been involved in **Project Management** according to PMBOK activities as well as providing large number of the experienced and professional Manpower in the relevant field.

### Public Procurement Process





# Our History



1997

## Sadid Nasb

Company was established as "Sadid Nasb" by "Sadid Group"



2000

## Sadid Jahan Sanat

Company was renamed to "Sadid Jahan Sanat"



2006

## Sadid Jahan Sanat

"Namad Sanat Pars" holding took the ownership and management





2023

2020

**Production Development**

Establishment of New Manufacturing Workshop in Saveh

**Changed the Management Team**



2009

2015

**Grade 1 Certificates**

Grade 1 in "Industry & Mine" and "Equipments & Facilities", grade 3 in "Building / Civil Construction" and grade 5 in "Electrical" branches

**Tiv Energy Engineering and Construction**

The Name changed from "Sadid Jahan Sanat" to "Tiv Energy Engineering & Construction"

**Grade 1 Certificates Renewal and Update**

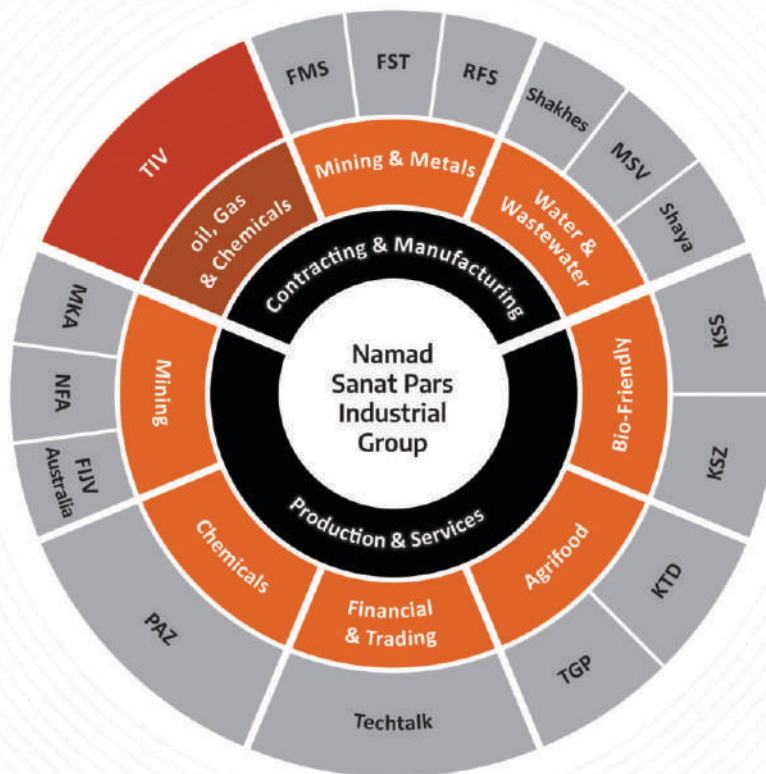
Grade 1 of general contracting in fields of "Oil and Gas", "Industry of Mine", "Equipment and Facilities" and grade 4 in field of "Water"



# Our Group Namad Sanat Pars Industrial Group

## Division Subsidiaries

TIV Energy Engineering and Construction Company as a member of Namad San'at Pars (NSP) industrial group, is a leading company in the field of oil, gas, and petrochemical industry, utility (water, electricity, steam and catalyst), power plant, industrial, mining and chemical industries which implemented many design and construction projects since 1997. At present, TIV Energy offers its services in accordance with technical, engineering and management standards in the following areas:



- Tiv Energy
- Fakoor Meghnatis Spadana
- Fakoor Sanat Tehran
- Rahbar Farayand Sirjan
- Mashin Sazi Vijeh
- Shakhes
- Shaya
- Kimia Samaneh Sabz (Amelon)
- Kimia Samaneh Zomord
- Keyhan Tejarat Daya
- Touba Gostar Passargad
- Paya Zarand
- FIJV Australia
- Namad Farayand Aria
- Mes Kavan Abbas Abad



## Mining and metals industries

- Owning mining licenses, exploration, exploitation, processing, production, and trading of copper & iron ore
- Financing & construction of concentrate, pelletizing, steel, and coal plants (EPC, EPCF, BOO, BOT, investment)
- Equipment design, manufacturing & procurement



## Agrifood industry

- Production and trading of food and agricultural products
- Owning different farms



## Water and wastewater industries

- Design, procurement, and construction of desalination plants, residential and industrial water and wastewater treatment plants, water pipelines, pumping stations and hydroelectric power plants (EPC, EPCF, BOO)



## Chemical products

- Production & trading of disposable biodegradable containers
- Production & trading of different chemicals



## Oil, gas and petrochemical industries

- Design, procurement, and construction of oil & gas pipelines, storage tanks, desalination plants and petrochemical refineries (EPC & F)
- Equipment design, manufacturing & procurement



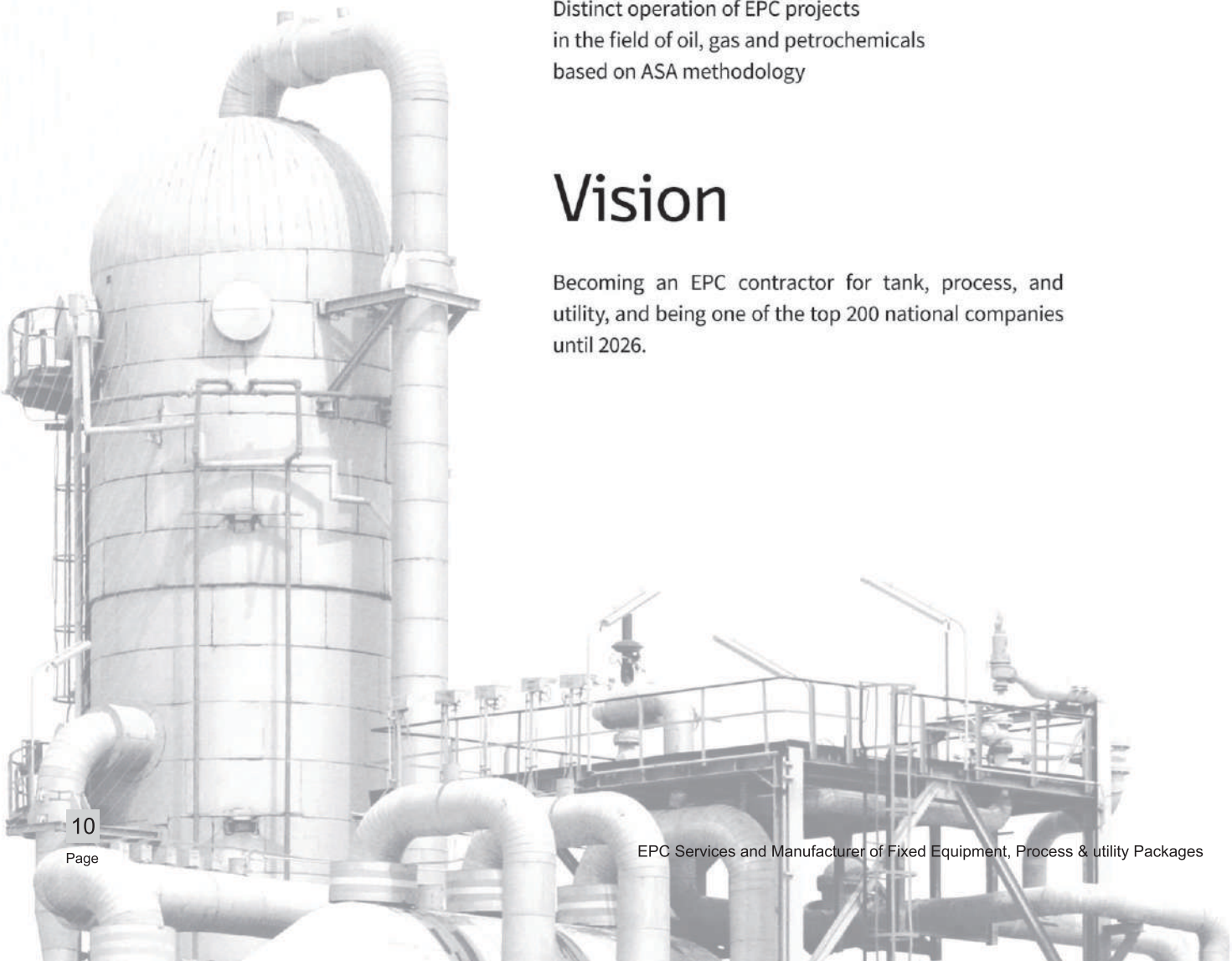


## Mission

Distinct operation of EPC projects  
in the field of oil, gas and petrochemicals  
based on ASA methodology

## Vision

Becoming an EPC contractor for tank, process, and  
utility, and being one of the top 200 national companies  
until 2026.



## EPC Team provides its services in 7 following portfolios:

### 1 General Contracting of Process Plant Projects

Gas Treating Units  
Processing Units  
Petrochemical / Process Plants  
Gas Compression / Pressure Reduction Stations  
Metering / Process Packages



### 2 General Contracting of Tank Farm Projects

Fixed, Dome, Floating Roof Storage Tanks  
Spherical Storage Tanks  
Double Wall Storage Tanks  
Tanks for Special Products



### 3 General Contracting of Utility Plant Projects

Pump Stations  
Industrial Water & Waste Water Treatment Systems  
Cooling Water Systems  
Air Compression Units  
Air Separation Plants (O<sub>2</sub>, N<sub>2</sub> and Ar)  
Power Transmission Units  
Sea Water Intake  
Refrigeration Units  
Sub Stations  
Steam Generation Units  
Gas Stations (C.G.S & ...)







#### 4 Equipment Manufacturing Services

Towers, Drums and Columns  
 Separators, Scrubbers and Filters  
 Special Pressure Vessels  
 Heat Exchangers  
 Reactors  
 Fired Heaters (Process Heaters)  
 Furnaces

#### 5 Process Packages/Units

Crud Oil/ Condensate Desalter Packages  
 Sulphur Recovery Packages  
 Sulphur Solidification Package  
 Desalination Package  
 MEG Regeneration Packages  
 Glycol Injection Packages  
 Chemical Injection Package  
 Vapour Recovery Packages

#### 6 Consultancy

##### Project Management Services

Conceptual Design & Feasibility Study  
 Process / Basic Engineering  
 Detail Engineering  
 Procurement  
 Construction  
 Pre-commissioning  
 Commissioning & Start-up  
 Project Financing  
 Project Management / Supervision



## ITPS Team provides its services in 4 following portfolios:

### 1 Casing

(used for well strength and extraction providing)

carbon Steel Casing  
Alloy steel Casing



### 2 Tubing

(used for product transmission from reservoir to surface)

Alloy Steel Tubing  
CRA Tubing  
Duplex Tubing



### 3 Line Pipe / Structural pipe

Seamless pipe  
Welded Pipe



### 4 Plates (Oil- gas & Energy Application)

Stainless Steel Plates  
Pressure Vessel & Cladded Plates  
Offshore Plates  
Cryogenic Plates





## 2020 - 2024 Reference list

Desc. Of the Project	Client
The Supply of 29 Km CRA Tubing 7". 23ppf and 7". 26ppf in addition to all related accessories	Petropars Oilfield Services Company (POSCO)
The Supply of 7 km ERW 18 5/8" Casing addition to all related accessories	Petropars Oilfield Services Company (POSCO)
Supplying of 82 km of Casing and Tubing and Accessories for Sepehr Jofeir Development Project	Pezhvak Energy Engineering & Services Company (PECO)
Supplying of 33 km of Casing and Tubing and Accessories for Cheshmekhoush Development Project	Tadbir Drilling Development Company (TDDC)
Supplying 500 Tons Appurtenances Steel Material for SP11 Jacket	Iran Marine Industrial Company
Supplying of 5 km of Casing for Sepehr Jofeir Development Project	Tadbir Drilling Development Company (TDDC)
Supplying 3400 Tons Secondary and primary steel structure for SP11 Jacket	Iran Marine Industrial Company
Supplying of 21 km of 9 5/8" Casing for Ahwaz 2,3,5 Development Project	Darya Sahel Company
Supplying of 1 km of 9 5/8" Casing for Siahmakan Development Project	Pezhvak Energy Engineering & Services Company (PECO)
Supplying of 61 km of 4.5" Tubing for Ahwaz 2.3.5 Development Project	Darya Sahel Company
Supplying of 45 km of Tubing for Maroon 6 Development Project	Petro Sina Arya Oil & Gas Co. (PSA)
Supplying of 15 km of Casing and Tubing for Chalangar Development Project	Global Petro Tech Kish Company
Supplying of 82 km of Casing and Tubing for Zeelaie Development Project	Global Petro Tech Kish Company
Supplying of 93 km of Drilling Tubular for Ramin Development EPDC Project	Persia Oil And Gas Industry Development Co. (POGIDC)
The Supply of 114 Km CRA Tubing 7". 23ppf and 7". 26ppf in addition to all related accessories"	Pars Oil and Gas Company
The Supply of CRA 36 Km Tubing 7". 23ppf and 7". 26ppf in addition to all related accessories"	Pars Oil and Gas Company

## The mission of the investment and financing team is realized in three following parts:

**1**

Identifying and selecting profitable and early returns economic areas to invest/partner

- Creating and managing an optimal investment portfolio by focusing on choosing economic areas with Comparative advantages
- Development of the value chain related to oil, gas and petrochemicals
- Gaining market share and becoming steady in the oil, gas and petrochemical industry and being the pioneer in the market
- Developing strategic partnerships with key players in selected areas of investment and creating synergy .



**2**

Using incentives and optimal financing tools to obtain more EPC projects

- Development of financing system through diversification and creation of optimal portfolio of financing tools



**3**

Identifying and selecting knowledge-based economic areas and new businesses through investment/partnership

- Development of technological services/products in selected fields as a knowledge-based company
- Creating and managing an optimal investment portfolio by focusing on choosing knowledge-based economic areas with Comparative advantage
- Gaining market share as a knowledge-based company
- Developing strategic partnerships with key players in selected areas of investment and creating synergy .





# What We Do Our Business

## Gas Process Units

We provide the full range of services from feasibility study, aimed to provide preliminary indications of the investment's attractiveness, to the complete development of the plant, including the start-up and first operations.

- Gas Treating Unit
- MEG Regeneration Unit
- Dehydration Unit
- Ethane Recovery Unit
- NGL Fractionation Unit
- Sulphur Recovery and Tail Gas Treating Unit
- Sour Water Stripping
- Propane Treatment and Drying
- Butane Treatment Facilities
- Ethane Treatment Facilities
- Air Separation Unit (ASU)
- Flaring Improvement Technology





## Oil Process Units

We are one of the leading companies in Crude oil Process Units. We are committed to technology development and customer satisfaction through Design for Reliability, Design for low environmental impact and Design for Easy Capacity Increase.

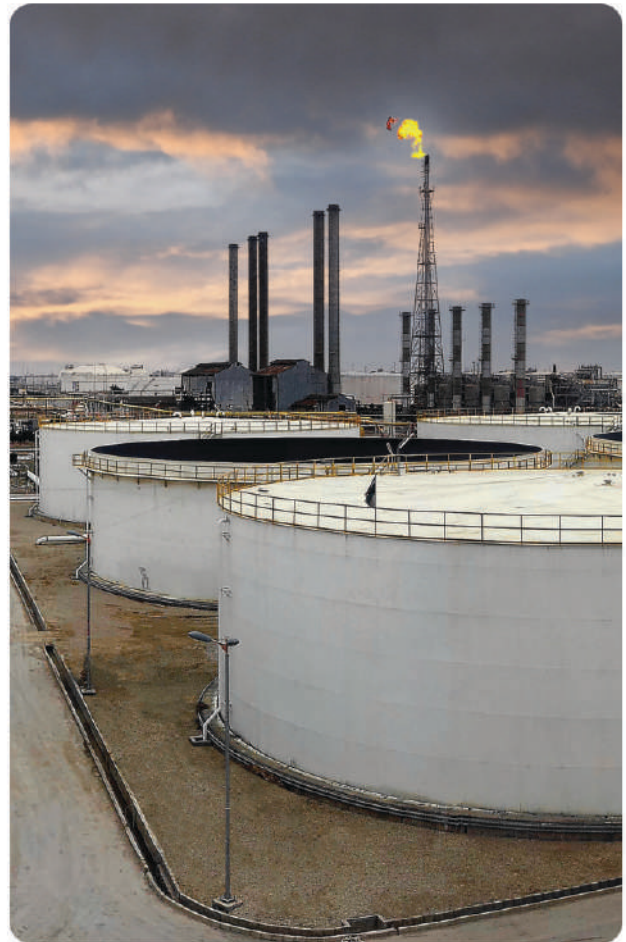
- Desalter
- Crude Oil Distillation
- Vacuum Distillation
- Crude pump station



## Utilities

We provide the common utility systems include:

- Instrument and Plant Air Compression Unit
- Nitrogen Generation Unit
- Cooling Water Supply
- Steam Generation Unit
- Fuel Gas Distribution
- Chemical Injection Package
- Water Treatment plant
- Waste Water Treatment plant.





## Pipeline

We are Innovative and efficient main line Engineering and construction company for Oil and Gas, LPG, Petroleum products, natural gas cross-country piping line Engineering, which provide Complete range of Services. Our experienced Manpower,resources and Equipment, which can construct pipe of any range, size, geography and terrain. Our Engineering and construction team always focus on quality, Safety and cost efficiency. Our Services Include:

- Conceptualization and Feasibility study of cross-country pipeline
- Basic Engineering & Details Engineering
- Construction, Testing and Commissioning (Execution activates)
- Pipe coating





## Technology development and Licensing

Innovation and Technology Development are crucial for the creation of value for our company, for our clients and for our communities. We follow the most advanced project management techniques within a new innovation strategy featuring a more efficient development of ideas and allocation of resources and investments.

## Petrochemical Plant

We are one of the EPC /EPCF companies in the construction of petrochemical units with the ability to choose the best technology.

We specialize in debottlenecking and revamping existing installations to improve capacity within set requirements, while keeping the original equipment.





# Storage Tanks Services and Solutions

## › Storage Tanks Design and Construction

Our full range of services include design, fabrication and construction, commissioning & start-up of all types of aboveground storage tanks. Our highly qualified engineering specialists help you choose the best tank configuration based on your specific requirements and process design.

### 1 Atmospheric and Low Pressure Storage Tank

TIV Energy Co. design and build fixed roof Storage tanks & floating roof type for all applications and storage products. Here, the different requirements and design parameters are taken into account such as:

- Design codes: API 650, API 620, API12D, NFPA 22, AWWA D100
- Applications: Oil, Petroleum, Refinery, Chemicals, Water, Etc.
- Material: Carbon Steel, Stainless Steels, Alloy steels, Aluminum, Etc.
- Temperature range: Up to +260 °C according to customer requirements
- Design pressure: from atmospheric ranges up to 1 barg.
- Sizes: of small and factory-made tanks with 100 m<sup>3</sup> volume to large field erected storage tanks with 100,000 m<sup>3</sup> working capacity and more.
- Tank roof: Self-supporting dome or cone roof, structurally supported dome and cone roof.
- Floating roof: Single deck with Pontoon floating roof with or without center pontoon, double-deck floating roof, pan type roof, each equipped with floating roof seal.

The necessary auxiliary and safety equipment for trouble-free operation of different operating applications are selected and designed by our engineers according to the relevant standards and client requested specification.

- Water spray cooling system for protection against fires of neighboring structures
- Foaming system as a fire extinguishing system for fighting fires
- Different internal and external heating systems to control the temperature of the stored products
- Over-and under -pressure devices to provide protection against pressure damage
- Overfill prevention (High Level, Low Level)
- External inspection facilities e.g. stairs, ladders, platforms, etc. to ensure safe accessibility of safety- and operating-equipment as well as measurement devices.
- Facilities for inspection of the tank interior such as manholes and cleaning openings.
- Roof and tank shell nozzles for different applications and in various designs
- Equipment for leakage monitoring of tank bottom and tank shell
- Tank anchorages according to the designed pressure range and the applicable seismic loads and in accordance with the available foundations
- Additional equipment required for the operation e.g. infeed equipment, dip tubes, floating suction units, mixers, skimmers, etc.
- Tank foundation and bund walls



### Fixed-Roof Tank

Of currently used tank designs, the fixed-roof tank is the least expensive to construct and is generally considered the minimum acceptable equipment for storing liquids. A typical fixed-roof tank consists of a cylindrical steel shell with a cone- or dome-shaped roof that is permanently affixed to the tank shell. Storage tanks are usually fully welded and designed for both liquid and vapor tight.

### External Floating Roof Tank

A typical external floating roof tank consists of an open-topped cylindrical steel shell equipped with a roof that floats on the surface of the stored liquid, rising and falling with the liquid level. The floating roof is comprised of a deck, fittings, and rim seal system. Floating roof decks are constructed of welded steel plates and are of three general types: pan, pontoon, and double deck. Although numerous pan-type decks are currently in use, the present trend is toward pontoon and double-deck type floating roofs. We supply various versions of these basic types of floating decks, which are tailored to emphasize particular features, such as full liquid contact, load-carrying capacity, roof stability, or pontoon arrangement. The liquid surface is covered by the floating deck, except in the small annular space between the deck and the shell that is covered using sealing system. External floating roof tanks are equipped with a rim seal system, which is attached to the roof perimeter and contacts the tank wall. The rim seal system slides against the tank wall as the roof is raised and lowered. The floating deck is also equipped with fittings that penetrate the deck and serve operational functions. The external floating roof design is such that evaporative losses from the stored liquid are limited as minimum as possible.

### Internal Floating Roof Tank

That tanks have both, a permanent fixed roof and a floating roof inside. There are two basic types of internal floating roof tanks:

- Tanks in which the fixed roof is supported by vertical columns within the tank
- Tanks with structurally supported fixed roof or a self-supporting roof and no internal support columns

Fixed roof tanks that have been retrofitted to employ an internal floating roof are typically of the first type, while external floating roof tanks that have been converted to an internal floating roof tank typically have a self-supporting roof or a structurally supported roof.

Tanks initially constructed with both a fixed roof and an internal floating roof may be of either type. An internal floating roof tank has both a permanently affixed roof and a roof that floats inside the tank on the liquid surface and rises and falls with the liquid level.



## 2 Refrigerated Liquefied Gas Storage

TIV Energy Co. and its technical partner bring together the Extensive Experiences in Engineering and Design, Procurement Engineering, Field Engineering, Pre-Commissioning, Commissioning and Start Up of refrigerated liquefied gas Storage to provide full inclusive services of this field.

Our highly qualified engineering specialists help you choose the best tank configuration based on your specific requirements and process design.

Here, the different requirements and design parameters are taken into account such based of API625 standard:

- **Coverage:** API 625 standard covers tank systems having a storage capacity of 800 cubic meters and larger. Stored product shall be liquids which are in a gaseous state at ambient temperature and pressure and require refrigeration to less than 5 °C (40 °F) to maintain a liquid phase such as Butane, Butadiene, Ammonia, Propane, Propylene, Ethane, Ethylene, Ethane, Mthane, LNG, LPG, Nitrogen, Oxygen, etc.  
Tank systems with a minimum design temperature of -198 °C (-325 °F) a maximum design internal pressure of 50 kPa (7 psig), and a maximum design uniform external pressure of 1.75 kPa (0.25 psig) are covered.
- **Configuration:** Configurations consist of a primary liquid and vapor containment constructed of metal, concrete or a metal/concrete combination and when required a secondary liquid containment.
- **Metallic Containers:** Metallic container materials, design, fabrication, inspection, examination, and testing shall be in accordance with API 620 including either Appendix R or Appendix Q. The applicable appendix of API 620 depends on the design metal temperature and the applicable temperature ranges given in these appendices.
- **Concrete Containers:** Concrete container materials, design, construction, inspection, examination, and testing shall be in accordance with ACI376. The regulatory standards refer to standards such as API 625, which in turn utilize supplementary equipment standards and codes such as API 620 and ACI 376.





### Single Containment Tank System

This system incorporates a liquid-tight container and a vapor-tight container. It can be a liquid and vapor-tight single-wall tank or a tank system comprised of an inner and outer container, designed and constructed so that only the inner container is required to be liquid-tight and contain the liquid product.

The outer container, if any, is primarily for the retention and protection of the insulation system from moisture and may hold the product vapor pressure, but is not designed to contain the refrigerated liquid in the event of leakage from the inner container.

The primary liquid container shall be of low temperature metal or pre-stressed concrete. The outer tank (if any) shall be vapor-tight. It is normally made from carbon steel, and it is referenced in this standard in various contexts as the warm product vapor container or the purge gas container.

A single containment tank system is surrounded by a secondary containment (normally a dike wall) which is designed to retain liquid in the event of leakage.



### Double Containment Tank System

This consists of a liquid and vapor tight primary tank system, which is itself a single containment tank system, built inside a liquid tight secondary liquid container.

The secondary liquid container is designed to hold all the liquid contents of the primary container in the event of leaks from the primary container, but it is not intended to contain or control any vapor resulting from product leakage from the primary container.

The primary and secondary liquid containers shall be constructed either from metal or from concrete.

### Full Containment Tank System

This consists of a liquid tight primary container and a liquid and vapor tight secondary container. Both are capable of independently containing the product stored.

The secondary container shall be capable of both containing the liquid product and controlling the vapor release in the event of product leakage from the primary liquid container.

The primary and secondary liquid containers shall be constructed either from metal or from concrete. Vapor tightness of the tank system during normal service is required. Under inner tank leakage (emergency) conditions, tank system product losses due to container permeability are acceptable.



### 3 Spheres (ASME) Spherical Storage Tank

Spherical shaped storage in the form of ASME pressure vessels are used in gas and liquid storage in many industries including midstream, downstream, petrochemical, chemical, refineries, etc.

Spheres can store many products such as anhydrous ammonia, LPG, NGL, gasoline, naphtha, butadiene, ethylene, hydrogen, oxygen, nitrogen, argon, LNG, biogas and sewage gas.

A spherical shape offers uniform stress distribution under internal loading resulting in highly efficient pressurized storage. Sphere storage results in the lowest land space for pressurized storage and offers lower costs for foundations, coatings, accessories, and piping than other options.

We provide EPC/Turnkey solutions for ASME sphere storage in accordance with our ASME Section VIII, Divisions 1 & 2. Our team includes numerous industry experts in the design, project engineering, fabrication, construction, coatings and insulation of spheres. TIV Energy Co. can assist you with sphere storage for ambient, low, or cryogenic temperature applications.



### ➤ Tank Repair, Renovation and Upgrading

TIV Energy Co. has extensive experience in the repair and refurbishment of containers and storage tanks. All work is planned in detail, adapted to the individual requirements and the execution is documented with static calculations, drawings, welding- and inspection-plans. A safe execution of the repair- and refurbishment-work taking into account the API 653 & relevant safety regulations and the creation of a risk analysis is a matter of course for our experts. We provide the experienced personnel capable to assure quality service for aboveground and underground tank removal & demolition.





The following is a selection of the most common work & services:

## 1 Tank refurbishment

### Tank Foundation Renewal

- Tank lifting and renewal of the foundation of the tank
- Placement of an additional concrete layer in the tank
- Preventing tank settlement

### Tank Bottom

- Repairs such as replacing bottom plates, bottom plates doubling, re-welding, welding, etc.
- Subsequent installation of the tank bottom sump
- Installation of a new tank bottom
- Replacement bottom edge plates, and annular plates below the lower first course

### Tank Shell

- Exchange of e.g. corroded shell plates
- Extending of the tank shell to increase the volume
- Installation of additional stiffening rings on the tank shell e.g. due to a change in the design parameters of the tank or due to an adaptation to current standards

### Fixed Roof

- Repair or replacement of the roof plates
- Repair or replacement of the roof structure
- Additional reinforcements to the existing fixed roof e.g. due to a change in the design parameters of the tank or due to an adaptation to current standards
- Replacement of the entire roof
- Tank Bridge Design and construction

### External & Internal Floating Roof

- Repair or replacement of the roof membrane
- Repair or replacement of roof pontoons
- Leak testing of pontoons
- Conversion of pontoon floating roof into double deck floating roof
- Repair or replacement of existing floating roof seals
- Supply and installation of new floating roof seal
- Retrofitting secondary seal
- Retrofitting tertiary seal

### Attachments & accessories

- Nozzles and manholes repair or replacement
- Floating suction skimmer
- Tank heaters
- Safety fittings
- Fire-fighting equipment & system
- Floating roof sealing & drainage systems
- Instrumentation upgrading

### Miscellaneous Repairs & Service

- Hot Tapping and Cold Cut Services
- Secondary Containment Construction
- Tanks Paint & Lining Removal & Re-Furbish

### Tank Removal/Demolition

- Proper hazardous substances removal and remedial action
- Permit filings as required by local agencies
- Soil sampling, tank certification, and closure reports
- Tank support concrete removal and replacement



## 2 Upgrading of Existing Tanks

- Conversion from floating roof tank into fixed roof tank
- Retrofitting ALU Dome on floating roof tank
- Retrofitting floating roof
- Increase in volume
- Changes in the design parameters  
(e.g. increase operating temperature and pressure)
- Adaptation to store new liquid
- Adaptation to new storage products  
(such as jet mixers, new firefighting technology)
- Adaptation to current standards edition



## 3 Working Capacity Optimization

- Existing and new asset evaluation & recommendations
- Low-profile floating roof options
- Suspended floating roof options
- Low-profile secondary seal options
- IFR travel constraint evaluations & suggested modifications
- High liquid level & low liquid level alarm level evaluation and recommendation
- Revise under IFR obstacle to provide larger Travelling span for IFR



## 4 Emission Reduction Solution

**TIVENERGY Co.** offers a comprehensive portfolio of strategies to reduce aboveground storage tank emissions. From high-impact products such as welded full-contact roofs and geodesic domes, all the way down to leg socks and gauge pole sleeves, we can provide for you with not only the products but also the expertise and strategic guidance to optimize your tank performance and emissions reduction for regulatory compliance.

Emissions reduction solutions include:

- Existing and new asset evaluation and recommendations
- Best available control technology in IFRs (full-contact, welded, suspended)
- Clear-span aluminum domes to retrofit IFRs
- Clear-span aluminum domes for new tanks to eliminate column penetrations
- Leg socks, vapor cover, gauge pole sleeve.





## 5 Tank Inspection and Evaluation

In order to assure your Storage Tanks compliance with the relevant Standards and Codes, we provide Technical Audits according to EN 14015, API 650 or 653, EEMUA 159 or Clients' Specifications. We perform independent assessment, testing and verification for storage tanks. We are in the position to integrate and manage not just a list of standard techniques but solutions using a combination of multiple techniques. These Inspections include:

- Tank foundation and settlements evaluation
- Tank bottom evaluation
- Tank shell evaluation
- Tank roof evaluation
- Tank access evaluation
- Periodic visual external and internal inspections
- Fugitive emission and leak detection through infrared camera
- Tracing of system leaks and determination of material strengths
- Determination of water and sludge inside containers
- External thickness measurements and calculation reviews
- Adjustment and stamping of identification plates
- Tank security instruments check
- Tank environmental study & risk analysis
- Survey of repairs
- Laser Scanning & 3D modeling
- Tank Calibration Solution
- Mechanical integrity study
- Floor scan/Magnetic Flux Leakage
- Corrosion Mapping
- Hydrostatic pressure tests
- Determination of subsoil corrosiveness
- Safety systems control



## 6 Tank Cleaning, Sludge Removal and Treatment

- Routine and Emergency Tank Cleaning
- Sludge Removal
- Sludge Treatment & oil Recovery
- Degassing Solutions





## › Tank Accessories and Auxiliaries

In order to provide inclusive services of storage, we have commitment to provide the best selected accessories to enhance more reliable and safe operation of storage tanks.

- Floating Roof Seal
- Floating Roof Drainage System
- Pressure & Vacuum Relieving Device
- Blanketing system
- Firefighting System
  - Foam system
  - Auto Rim Seal Foam system
  - Water Cooling Deluge system
  - Dry powder Extinguishing
- Blending & Sludge Prevention
  - Fixed Jet Mixers
  - SRJ (Submerged Rotary Jet-mixer)
  - Side Entry Mixers
- Ex. Proof Elevators and cranes
- Grounding and Lightning Solution
- Corrosion Protection
  - VCI (Volatile Corrosion Inhibitors)
  - Cathodic Protection
  - Internal Cathodic Protection / Sacrificed Anode
  - Corrosion Inhibitors
  - Protective Coating and Lining
  - Out of Service Tank Preservation
- Automation
  - Leak Detection System
  - Tank Gauging System
  - Instrumentation
  - Fire & Gas Detection & Alarm System
  - Metering / Measuring Solutions
  - Overfill Prevention



## › Tank-farm and Terminal Services

Integrated design & construction of the storage facility is the achievement of our knowledge and experience, which provides the customer's interests and the provide unity of the design and construction of the Tank farms and storage facilities.

- Pining & Pipe Lines
- Loading, Unloading & Transfer Pumps
- Truck Loading/Unloading Facilities
- Marine Loading/Unloading Facilities
- Custody Metering System
- Vapor Recovery Systems
- Electrical, Instrumentation, Control & Automation
- Fire Protection & Gas Detection System
- Tank farm Management System and Solutions

# Our Construction Facilities

## Shop Area

- 48,000 m<sup>2</sup>

## Roofed Area

- 13,000 m<sup>2</sup>

## Overhead Cranes

- 2\*30 MT    ▪ 2\*15 MT    ▪ 7\*10 MT    ▪ 1\*12 MT    ▪ 1\*5 MT

## Facilities

- Horizontal Bending Machine (up to 140 mm thk with 3 m width, up to 168 mm thk with 2 m width)
- Horizontal Bending Machine (up to 30 mm thk with 2 m width)
- CNC Plasma Cutting Machine (up to 50 mm thk for SS Plates, up to 200 mm thk for CS Plates)
- Forklift 7 Tons Capacity
- Rotators (50, 30, 20, 15) Tons Capacity
- Drilling Machines
- SAW submerged Machine
- SMAW Welding Machine
- Band Saw
- Turning Machine





# Our Projects

## Storage Tanks



## Ethylene storage Tanks and related facilities of Amir Kabir Petrochemical Plant

**Client:** AMIR KABIR PETROCHEMICAL CO.  
**Location:** Mahshahr  
**Duration:** 24 months  
**Delivery Method:** EPCC  
**Description:** Engineering, Procurement, Construction, Pre-Commissioning and Commissioning for CONSTRUCTION OF 28000 M3 ETHYLENE STORAGE TANKS

**Status:** Ongoing



## Almas-e Mahshahr Olefin 3 Spherical Storage Tanks

**Client:** ALMAS - E MAHSHAHR PETROCHEMICAL COMPANY  
**Location:** Mahshahr  
**Duration:** 24 Month  
**Delivery Method:** EPCC  
**Description:** 3 Spherical Storage Tanks

**Status:** Ongoing





## Establishment of 6 set of Spherical Tanks

**Client:** Abadan Oil Refining Co.  
**Location:** Abadan  
**Duration:** 24 months  
**Delivery Method:** EPC  
**Description:** 2 x 3,000 m<sup>3</sup> spherical tanks, 17.5 m diameter, 650 MT/each weight, 70 mm thickness and 22 bar working pressure 4 x 1,000 m<sup>3</sup> spherical tanks, 12.5 m diameter, 250 MT/each weight, 37 mm thickness and 15 bar working pressure.

**Status:** Finished



## Construction, PRE-Commissioning and Commissioning for 1,620,000 BBL Storage Tanks

**Client:** Petro Omid Asia (POA)  
**Location:** Jask  
**Duration:** 12Months  
**Delivery Method:** C  
**Description:** Manufacturing, installation and delivery of 4\*500.000 BBL Floating Roof Storage Tanks

**Status:** Finished



## Engineering, Procurement, Construction, PRE-Commissioning and Commissioning for 11 Storage Tanks

**Client:** Pishgaman Siraf Development Refining Co. (PSDR)  
**Location:** Assaluyeh (Siraf Province)  
**Duration:** 12 Months  
**Delivery Method:** EPCC  
**Description:** Supply all Material and Manufacturing, installation and delivery of 11 Heavy and Light Naphtha & Gas Condensate Feed Storage Tanks, Fixed and Floating roof

**Status:** Ongoing



## Engineering, Procurement, Construction, PRE-Commissioning and Commissioning for 1,620,000 BBL Storage Tanks

**Client:** Qeshm Oil Investment Company (QOIC)  
**Location:** Gheshm Island  
**Duration:** 11 Months  
**Delivery Method:** EPCC  
**Description:** Supply all Material and Manufacturing, installation and delivery of 2\*540000 BBL and 2\*270000 BBL Floating Roof Storage Tanks.

**Status:** Finished





## 5,000 MTPD SIRAF Methanol Plant Storage Tanks and pipe Racks EPC project

<b>Client:</b>	Siraf Energy Petrochemical
<b>Location:</b>	Dayyer Port
<b>Duration:</b>	18 months
<b>Delivery Method:</b>	EPC
<b>Description:</b>	Design, Engineering, Fabrication, Testing, Packing, Marking and Forwarding of Storage Tanks material & Civil works.

**Status:** Delivered (2019)



## Gas Condensate and Atmospheric Storage Tank (Phase19)

<b>Client:</b>	Petropars Co.
<b>Location:</b>	Assaluyeh
<b>Duration:</b>	49 months
<b>Delivery Method:</b>	EPC
<b>Description:</b>	Management & supervision, study & executing all required design works, supply of materials, equipment, facilities, inspection & test,...

**Status:** Delivered (2011)



## Establishment of 29 Tank Farm

**Client:** Persian Gulf Star Oil Co. (PGSCO)  
**Location:** Bandar Abbas (Hormozgan Province)  
**Duration:** 25 months  
**Delivery Method:** EPCC  
**Description:** 29 x 3,032 ~ 101,478 m<sup>3</sup> fuel storage tanks, fixed dome and floating roofs, 14.6 m height, 18.5 ~ 94 m diameter, 630 ~ 10,200 MT weight and 27,000 MT total weight.

**Status:** Delivered (2008)



## Establishment of Pressurized Spherical Tanks

**Client:** Tabriz Petrochemical Company  
**Location:** Tabriz (East Azerbaijan Province)  
**Duration:** 24 months  
**Delivery Method:** EPC  
**Description:** 3 x 1,000 m<sup>3</sup> Spherical tanks, 13 m diameter, 140 MT /each | weight, 18 ~ 25 mm thickness and 7.5 bar working pressure.

**Status:** Delivered (2001)





# Our Projects

Process & Utility Department



## Arfa Iron & Steel Company LNG Peak Shaving Plant

**Client:** Arfa Iron & Steel Company  
**Location:** Yazd Province  
**Duration:** 24 months  
**Delivery Method:** EPCC  
**Description:** Design, Engineering, Procurement, Construction, Pre-Commissioning and Commissioning for ARFA IRON & STEEL COMPANY LNG Peak Shaving Plant with a capacity of 100 tons per day and storage tanks (2 tanks with an effective capacity of 27500 cubic meters of LNG)

**Status:** Ongoing



## Benzene & Gasoline Production Plan From Marun Petrochemical Pyrolysis Gasoline

**Client:** Sadra Petrochemical Company  
**Location:** Mahshar Special Economic Zone  
**Duration:** 24 months  
**Delivery Method:** EPCC  
**Description:** Benzene & Gasoline Production Plan From Marun Petrochemical Pyrolysis Gasoline  
Provision of technical knowledge, design and engineering, supply, construction and installation of process, utility and offsite units.

**Status:** Ongoing





## Iran Chemical Industries Investment Co. (ICIIC) Development Plant (L.A.B)

**Client:** Iran Chemical Industries Investment Co. (ICIIC)  
**Location:** Shahin Shahr (Isfahan province)  
**Duration:** 12 Months  
**Delivery Method:** PC  
**Description:** Equipment Foundation, Control Room and Substation, Structure and Pipe Rack

**Status:** Ongoing



## Interconnecting Utilities and Offsite of MOKRAN Petrochemical Complex-Stage 1

**Client:** Mokran -Ab Niroo  
**Location:** Chabahar (Sistan and Baluchestan Province)  
**Duration:** 20 Months  
**Delivery Method:** EPC  
**Description:** Basic Engineering Endorsement, Detail Engineering, Procurement, Construction, Precommissioning and commissioning of Interconnecting Utility lines and offsite of Mokran Petrochemical Complex.

**Status:** Ongoing



## Reducing flares and SO<sup>2</sup> Gas Emission

**Client:** South Pars Gas Complex (SPGC)  
**Location:** 6th Refinery, Asaluye Bushehr  
**Duration:** 12 months  
**Delivery Method:** PC  
**Description:** Supply, Installation and Implementation of projects for reducing flares and SO<sub>2</sub> gas emissions

**Status:** Ongoing



## Air-Separation Unit (ASU)

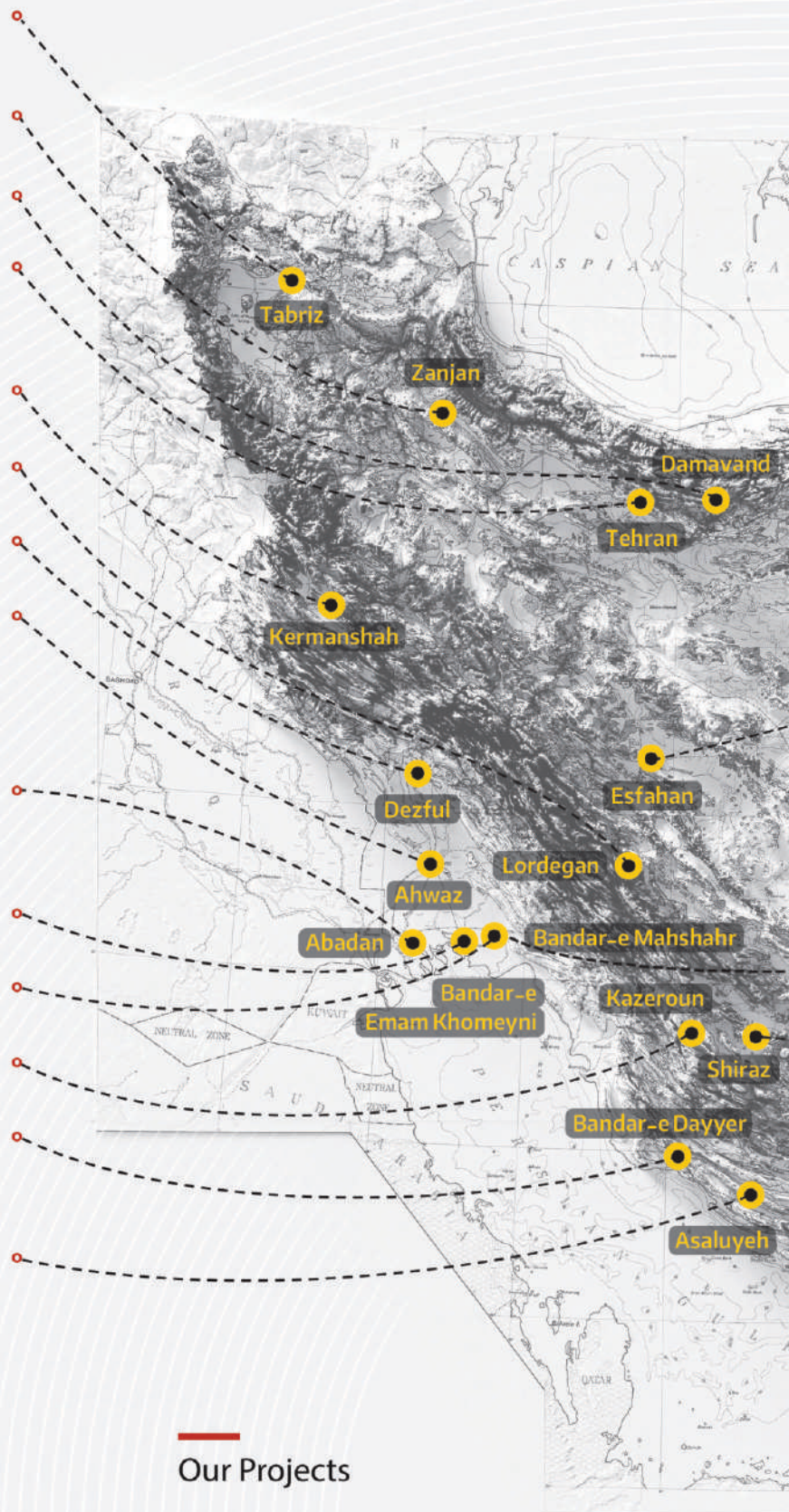
**Client:** Arvand Petrochemical  
**Location:** Bandar Imam (Khuzestan Province)  
**Duration:** 22 months  
**Delivery Method:** EPC JV with Fortune (China)  
**Technology:** EPCM (Canada)  
**Description:** Supplementary Design, Procurement of Building Material, Installation of Two Cryogenic Air Separation Plant. (7500 Nm<sup>3</sup>/h GOX & 7500 Nm<sup>3</sup>/h GAN)

**Status:** Delivered (2011)



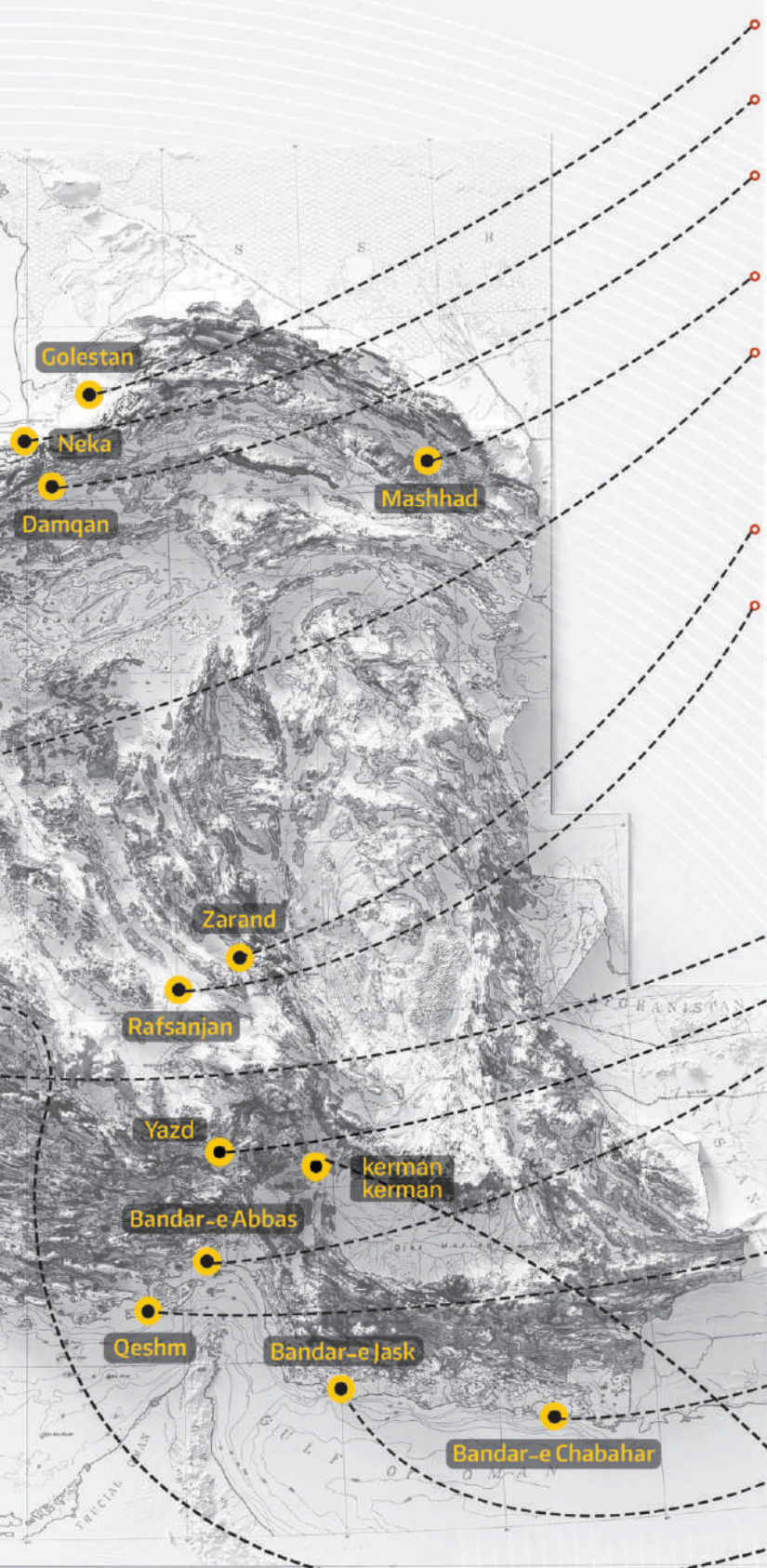


- Construction of three sets of LPG Spherical Storage Tanks for Tabriz Petrochemical Co.
- Soufian Cement Co.
- Construction of LED Towers of Zanjan Petrochemical Co. (Over 1500 ton)
- Implementation of Auxiliary Facilities of Fuel Tanks of Damavand Combined Cycle Power Plant
- Two Sets of 500,000 Barrels Crude Oil Storage Tank for Tehran Oil Refining Co.
- Fabrication of ISOMAX Unit's Reactors for Tehran Oil Refining Co.
- Construction of Kermanshah Bioethanol and Coproducts Plant
- Fabrication of LED Towers of Lordegan Petrochemical Co. (Over 1500 ton)
- Purchasing Six Storage Tanks for Design and Construction of Lab Sefid Desalination Unit
- Construction of Bibi Hakimeh 1 Desalter
- Open circuit water modification of the direct reclamation unit of Khuzestan Steel Company
- Khuzestan Oxin Steel co. Wide Plate Rolling Project
- Sole Supplier of Three Phase Separator of National Iranian South Oil Company
- Construction of Abadan Oil refining Co's Spherical Storage Tanks
- Changing the Single-Pass Cooling System to a Closed Loop for Abadan Oil Refining Co.
- Construction of Arvand Petrochemical Co. Air Separation Unit (ASU)
- Construction of Gasoline and Benzene from Pygas for Marun Petrochemical Co.
- Ethylene storage Tanks and related facilities of Amir Kabir Petrochemical Plant
- Almas-e Mahshahr Olefin 3 Spherical Storage Tanks
- Benzene & Gasoil Production Plan From Marun Petrochemical Pyrolysis Gasoil
- Construction of products Storage Tanks for Methanol
- Construction of Gasoil Storage Tank with Capacity of 2x15000 m<sup>3</sup> for Kazerun Combined Cycle Power Plant
- Construction of products Storage Tanks for Methanol Unit of Siraf Energy Petrochemical Co.
- Construction of Storage Tanks for Pishgaman Siraf Petro Refining Co
- South Pars Gas Complex (SPGC)
- Reducing flares and SO<sub>2</sub> Gas Emission
- Construction of Gas Condensate Storage Tanks, South Pars, Phase 19
- Phases 22-24, South Pars, Storage Tanks Construction
- Storage Tanks Construction of Phase 12 South Pars Gas Field Development
- Construction of Iran LNG's catchment unit & Storage Tanks
- Construction of Different Phases of South Pars Pressure Vessels (Over 8500 ton)
- Construction of Storage Tanks for Pishgaman Siraf Petro Refining Co.



**Our Projects**



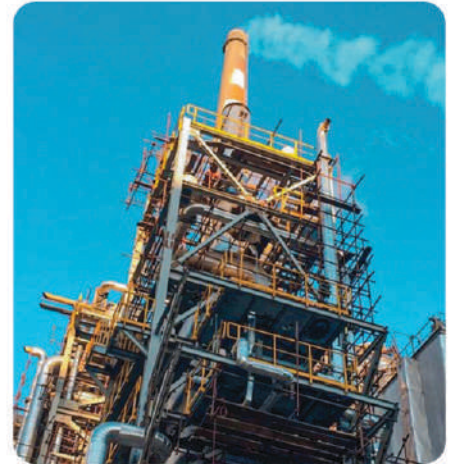


- Fabrication of LDR Towers of Golestan Petrochemical Company (just over 1500 ton)
- Inch Gas Transmission Pipeline of Qusheh Damghan - Sari/Neka and Related Facilities
- Design and Construction Planning of Wastewater Plant and Water Transmission Pipeline from Intake Tower to The Service Tank of Damghan City
- Construction of 30,000 m<sup>3</sup> Mazut Storage Tank at Bokhar Tous Power Plant
- Development plan of Iran Chemical Industries Investment Co. (ICIIC) (LAB Project)
- Fabrication and Installation of Pressure Vessels for Esfahan Oil Refinery Development Plan
- Construction of Distillation Tower C522 of Coal Tar Refining Company
- The Construction Planning of Zarand Coking and Tar Refining Factories
- Replacement of Roasting-Reverb Process with Flash Smelting Technology at Sarcheshmeh Metallurgical Copper Production
- Construction of Oxygen Plant with Capacity of 16000 Nm<sup>3</sup>/h at Sarcheshmeh Copper Complex
- Construction of molybdenum extraction plant at Sarcheshmeh Copper Complex
- Construction of Khatoun Abad Copper Refining Plant
- Construction of Anode Furnace No. 4 at Sarcheshmeh Copper Complex
- Construction of Gas Pressure Reduction Station of Shiraz Petrochemical Company.
- Fabrication of Shiraz Oil Refining's Reactor
- Arfa Iron & Steel Company LNG Peak Shaving Plant
- Construction of 29019 Storage Tanks for Persian Gulf Star Oil Co
- Construction of Several Storage Tanks for Bandar Abas Oil Refining Co.
- Construction of Oil Storage Tanks for Special Economic Zone of Shaid Rajaei
- Construction of Several Storage Tanks for Persian Gulf Star Oil Co (Over 6000 ton)
- Construction of Qeshm Oil Terminal Storage Tank
- Construction of Qeshm Topping Fixed Roof Storage Tank
- Construction of Utility unit and Interconnecting of Negin Mokran Petrochemical Co.
- Construction of Bandar Jask International Oil Terminal's Storage Tanks.
- Fabrication of BIPC 2nd Ethane Recovery Plant Pressure Vessels
- Fabrication of Two Ejector Stacks
- Fabrication of 4 Desulphurization Vessels
- Fabrication Of 4 Set Heat Recovery Air Duct



## Flash Smelting Furnace

- Client:** National Iranian Copper Industries Company (NICICO)
- Location:** Sarcheshmeh-Rafsanjan (Kerman Province)
- Duration:** 42 months
- Delivery Method:** EPC
- Description:** Construction works including site fabrication, construction of industrial and non-industrial building and civil works
  
- Status:** Delivered (2009)



## Establishment of Copper Refinery of Khatoon Abad

- Client:** National Iranian Copper Industries Company (NICICO)
- Location:** Khatoon Abad (Kerman Province)
- Duration:** 30 months
- Delivery Method:** EPCF, Consortium with Fakoor Sanat Tehran and Ronin companies
- Technology:** EPCM (Canada)
- Description:** A copper refinery as supplementary of existing Sarcheshmeh Copper Complex with production capacity of 200,000 MT/day including cathode blanks, cathode washing & stripping system, anode preparation system, anode scrap wash system, transformer rectifier, copper bus bar system, tankhouse crane, electrolytic cells, cell-top hardware, electrolyte filters, electrolyte heat exchangers, polishing filters, process tanks, process pumps and process valves
  
- Status:** Delivered (2009)





## Establishment of Bibi Hakimeh-1 Desalting Unit

<b>Client:</b>	National Iranian South Oil Company (NISOC)
<b>Location:</b>	Bibi Hakimeh Industrial Zone (Bushehr Province)
<b>Duration:</b>	36 months
<b>Delivery Method:</b>	EPC, JV WITH TEHRAN BERKLI
<b>Description:</b>	Desalting of 55,000 bpd crude oil including three phase gas separators, heat exchangers, pump stations, oil pre-heaters, oil desalting & dehydration unit, waste water treatment unit, 86 barg water injection unit, 40 km water transfer pipeline 6" and 750 m oil transfer pipeline 12"
<b>Status:</b>	Delivered (2008)



## Establishment of Closed-Loop Cooling Water and Water Treatment System

<b>Client:</b>	Abadan Oil Refining Company (AORC)
<b>Location:</b>	Abadan (Khuzestan Province)
<b>Duration:</b>	24 months
<b>Delivery Method:</b>	EPCC, consortium with Omrab company
<b>Technology:</b>	EPCM (Canada)
<b>Description:</b>	36,000 m <sup>3</sup> /hr cooling tower, water intake equipment, water distribution network, pre-treatment system, chemical dosing station, surface condenser, reverse osmosis WTP, clarifiers, storage tanks and ancillaries, fire fighting system and HP steam transfer line.
<b>Status:</b>	Delivered (2008)





## Establishment of Oxygen Production Unit of Copper Production Plant

<b>Client:</b>	National Iranian Copper Industries Company (NICICO)
<b>Location:</b>	Rafsanjan (Kerman Province)
<b>Duration:</b>	24 months
<b>Delivery Method:</b>	EPCC, JV with SIAD Macchine (Italy)
<b>Technology:</b>	EPCM (Canada)
<b>Description:</b>	16,000 Nm <sup>3</sup> /hr capacity, 95.5% oxygen purity

**Status:** Delivered (2008)



## Establishment of Extension Unit of Carbon Black Production Plant

<b>Client:</b>	Pars Carbon Black Company
<b>Location:</b>	Saveh (Markzai Province)
<b>Duration:</b>	24 months
<b>Delivery Method:</b>	EPCC
<b>Description:</b>	15,000 MT/y production capacity of soft & hard grade carbon, feed grade unit, soft & hard grade reactors, collection & separation units, granulation unit, storage & silo units, packing & loading unit, water recycling system, vacuum cleaning system and utilities

**Status:** Delivered (2003)





# Our Projects

Construction Workshop





### Fabrication of BIPC 2nd Ethane Recovery Plant Pressure Vessels

**Client:** EIED Company  
**Location:** Bandare-Emam Petrochemical Company  
**Duration:** 6 Month  
**Description:** Engineering, Procurement and Fabrication Of 4 Pressure Vessels  
**Weight:** 57,200 kg

**Status:** Ongoing



### Fabrication of Two Ejector Stacks

**Client:** FST Co  
**Location:** Bardsir , Kerman, Iran  
**Duration:** 120 days  
**Description:** 3 Spherical Storage tanks  
**Weight:** 255,000 Kg

**Status:** Completed



## Fabrication of 4 Desulphurization Vessels

**Client:** FST Co.  
**Location:** Bardsir, Kerman, Iran  
**Duration:** 120 days  
**Description:** Procurement and Fabrication of 4 Desulphurization Vessels for Implementation of two Direct Reduction Iron units of Gohar Zamin Iron Ore Co  
**Weight:** 150,000 kg

**Status:** Ongoing



## Fabrication Of 4 Set Heat Recovery Air Duct

**Client:** FST Co  
**Location:** Bardsir , Kerman, Iran  
**Duration:** 210 days  
**Description:** Procurement and Fabrication Of 4 Sets Heat Recovery Air Duct for Implementation of two Direct Reduction Iron units of Gohar Zamin Iron Ore Co  
**Weight:** 340,000 kg

**Status:** Completed





**Indirect Crude Oil Heater**

**LAB-SEFID-I Desalting Plant**

**End User:** NISOC  
**Client:** Tasdid  
**Location:** Khuzestan Province  
**Fire Box Rating:** 2 x 7,513 KBtu/hr  
**Material:** SA-516.Gr70

**Status:** Completed 2011



**Indirect Crude Oil Heater**

**Bibi Hakimeh-I Desalting Plant**

**End User:** NISOC  
**Client:** NISOC  
**Location:** Khuzestan Province  
**Fire Box Rating:** 2 x 7,500 KBtu/hr  
**Material:** SA-516.Gr70

**Status:** Completed 2018



**Indirect Fired Heater**

**South Azadegan Oil Plant**

**End User:** PEDEC  
**Client:** Petrotechna  
**Location:** Khuzestan Province  
**Fire Box Rating:** 6 x 275 KBtu/hr  
**Material:** SA-516.Gr70

**Status:** Completed 2019



**Desalting & Dehydration Package**

## Bibi Hakimeh-I Desalter

**End User:** NISOC  
**Location:** Khuzestan Province  
**Material:** SA-516.Gr70 / SA-304L  
**Weight:** 310 MT

**Status:** Completed 2018



## Design, Procurement, and Construction of 63 Equipment of Persian Gulf Star Refinery

**Client:** Persian Gulf Star Oil Co. (PGSCO)  
**Location:** Bandar Abbas  
**Duration:** 52Months  
**Delivery Method:** EPC  
**Description:** Design, Fabrication and Construction of Pressure Vessles Towers and Heat Exchangers

**Status:** Delivered 2014





## Designing and Supplying of 19 High Pressure Heat Exchangers for Isomax Unit

<b>Client:</b>	Tehran Oil Refining Co.
<b>Location:</b>	Tehran
<b>Duration:</b>	18 Month
<b>Delivery Method:</b>	EPC
<b>Description:</b>	Designing and Fabricating of 19 High Pressure Heat Exchangers for North & South Isomax Unit

**Status:** Delivered 2012



### LDE Tower

## Lordegan Urea-Ammonia Petrochemical

<b>End User:</b>	Lordegan Urea-Ammonia Petrochemical
<b>Client:</b>	HAMPA
<b>Dimension:</b> (L x OD x Thk (Max))	43,500 x 5,300 x 74 mm & 34,350 x 3,900 x 64 mm & 23,350 x 6,200 x 52 + 3 mm clad
<b>Material:</b>	SA-516 & SA-240-304L
<b>QTY:</b>	3 (T-2001 & T-2002 , 2003)
<b>Weight:</b>	750 MT

**Status:** Completed 2014



**LDE Tower****Assaluyeh Urea and Amonia Petrochemical Plant**

<b>End User:</b>	Assaluyeh Urea & Amonia Petrochemical Plant Pardis Petrochemical Co (PPC)
<b>Client:</b>	PIDEC
<b>Location:</b>	Assaluyeh
<b>Dimension:</b>	54,000 x 5,300 x 74mm & 74,000 x 6,200 x 45 mm
<b>Material:</b>	C.S + SS Cladded
<b>Description:</b>	SA 516 Gr.70N + 3mm SS 304 Cladded
<b>QTY:</b>	6
<b>Weight:</b>	1200 MT
<b>Status:</b>	Completed 2003

**LDE Tower****LDE Towers, Drums and Reactors for Urea-Ammonia-1**

<b>Client:</b>	Petrochemical Ind. Design & Eng. Company (PIDEC)
<b>Location:</b>	Assaluyeh
<b>No. of Equipment:</b>	18 (6 towers, 4 reactors & 8 drums)
<b>Total Weight:</b>	2200 MT
<b>T-2001 Description:</b>	501 MT, 57 m length, 5.2 m dia., 48 ~ 74 mm thk, low alloy steel material
<b>T-2002 Description:</b>	300 MT, 70 m length, 3 ~ 6 m dia., 13 ~ 54 mm thk, clad material

**Status:** Completed 2006





**Reactor**

**Assaluyeh-1 Urea-Ammonia Petrochemical**

**End User:** Pardis Petrochemical Co. (PPC)  
**Client:** PIDEDEC  
**QTY:** 4  
  
**Status:** Completed 2003

**Axens Regenerator of Gas Refinery**

**High Pressure H<sub>2</sub> Converter Reactor**

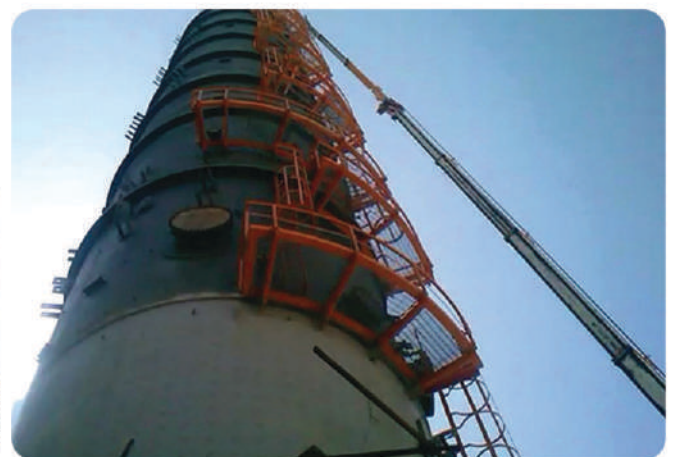
**End User:** Shiraz Petrochemical  
**Client:** Shiraz Petrochemical Co.  
**Design Pressure:** 173 bar  
**Hydrotest Pressure:** 225 bar  
**Process Type:** H2 Converter Reactor  
**Material:** SA-516.Gr. 70N  
**Max Thk:** 75 mm  
**Status:** Completed 2011



**Columns**

**Marjan Methanol Plant**

**End User:** Namvaran Co.  
**Client:** Namvaran Co.  
**Dimension:** 45,750 x 7,700 x 32 mm & 60,000 x 6,350 x 36 mm  
 (L x OD x Thk (Max))  
**Material:** 516 GR.70N  
**QTY:** 2 (T-5002 & 5003)  
**Weight:** 705 MT  
  
**Status:** Completed 2012



**Pressure Vessels for Part III, NF3 Project**  
**Imam-Khomeini Petrochemical**

**End User:** BIPC  
**Client:** NAMAVARAN  
**Type:** LP, MP, K.O. Drum  
 Flash Drum & Vessel  
**Wall Thickness:** 35mm  
**Material:** SA-304L & SA-516.Gr70N  
**QTY:** 11  
**Weight:** 250 MT  
**Status:** Completed 2010



**F.W. Tank, LP & HP Deaerator**  
**Feed Water - Tank LP. & Deaerator**

**End User:** Power plant Shirvan  
 Abadan / Esfahan II  
**Client:** MAPNA  
**Diameter:** 2800  
**Wall Thickness:** 20mm  
**QTY:** 32  
**Weight:** 500MT  
**Status:** Completed 2010-2011



**Bullet-Type Pressure Vessel**  
**Pressure Vessel (LPG Tanks)**

**End User:** Shahzand Refinery complex  
**Client:** Shahzand Refinery complex  
**Dimension:** 4 m X 32 m (DX L)  
**Wall Thickness:** 30 mm  
**Pressure Nominal:** 16 Bar  
**QTY:** 2  
**Weight:** 188 MT  
**Status:** Completed 2005



**High Pressure Knockout Drums (FS)**  
**Imam-Khomeini Petrochemical**

**End User:** NAMAVARAN  
**Client:** MAPNA  
**Type:** Pressure Vessel  
**Material:** SA-304L  
**Status:** Completed 2008



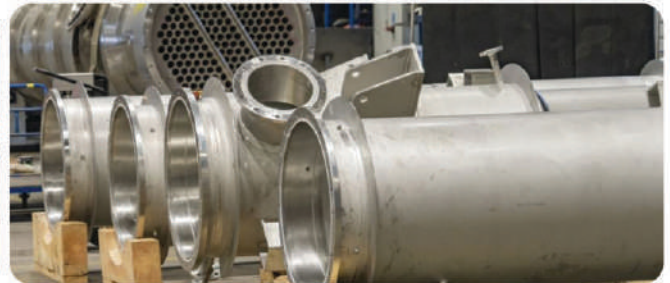
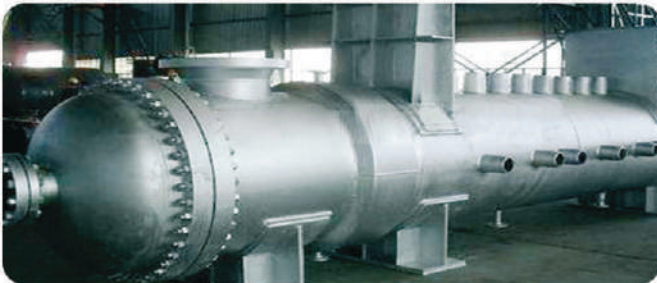


**Shell & Tube Heat Exchangers**

**Heat Exchangers for Karun Petrochemical Co.**

**End User:** Karun Petrochemical Co.  
**Client:** Karun Petrochemical Co.  
**Material:** C.S  
**QTY:** 12 PCS  
**Weight:** 450 MT

**Status:** Completed 2008



**Hydro Mechanical Equipment**

**Y Brach for Spillway of Karoon-1 Dam**

**Client:** FARAB  
**Total Weight:** 1000 tons  
**Material:** STE500  
**Vertical Shaft:** 14 x 5m  
**LxW:** 5 x 5 m      **RxW:** 8 x 5 m  
 AWWA; DIN; JAPANESE Standards NISA II Software  
**Weight:** 310 MT  
**QTY:** 2 Sets  
**Status:** Completed



### Two & Three Phases Separator

## Separator of Marun-6 Gas Refinery

**End User:** NISOC  
**Client:** NISOC  
**Process Type:** 2/3 phases Separators  
**Material:** SA-516.Gr70N (NAEC MR.0175)

**Status:** Completed 2014

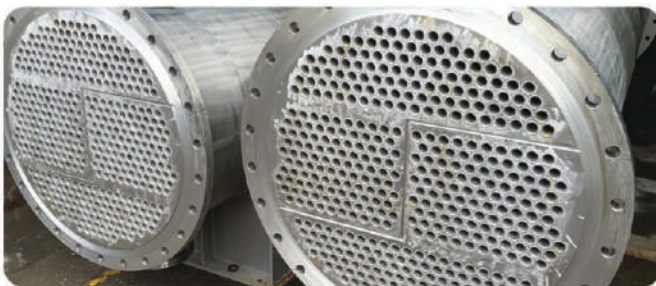


### Shell & Tube S.S. Heat Exchangers

## Coal-Tar Refinery

**End User:** Coal-Tar Refinery Co. (CTRC)  
**Client:** CTRCO  
**Material:** S.S 304L  
**QTY:** 12  
**Weight:** 70 MT

**Status:** Completed 2011



### High Pressure Boiler

## South Azadegan

**End User:** South Azadegan Co.  
**Location:** Khouzestan Province  
**Material:** C.S  
**Weight:** 220 MT

**Status:** Completed 2012





# Licenses and Certificates

## Accreditations and Licenses

Qualification of General Contracting  
(from Presidential Deputy of Strategic Planning and Control)

- Grade 1 in "Oil and Gas" branch
- Grade 1 in "Industry and Mine" branch
- Grade 1 in "Equipments and Facilities" branch
- Grade 3 "Building" branch
- Grade 4 in "Water" branch

Operational License  
of Technical & Engineering Entity  
(from Ministry of Industry, Mine & Commerce)

- "Oil, Gas and Petrochemical" specialization
- "Power Plant" specialization
- "Equipments and Facilities" specialization

Operational License of Design  
Manufacturing and Assembly Entity  
(from Ministry of Industry, Mine & Commerce)

- Pressure Vessels, production (6000 MT/year)
- Industrial Parts for refinery, rigging and petrochemical industries production (4000 MT/year)

Trading License  
(from Ministry of Industry, Mine & Commerce)

## Management Certificates

- ISO 9001:2015 Quality Management System Certificate
- ISO 14001:2015 Environmental Management System Certificate
- ISO 45001:2018 Occupational health and safety management systems Certificate
- HSE Management System Certificate





Tiv Energy

# ONE STEP FURTHER





## AVL / ACL Clients

<b>Iran Ministry of Oil (MOP)</b>
<b>National Iranian South Oilfields Company (NISOC)</b>
<b>Pars Oil &amp; Gas Company (POGC)</b>
<b>National Iranian Gas Company (NIGC)</b>
<b>National Iranian Oil Engineering and Construction Company (NIOEC)</b>
<b>National Iranian Petrochemical Company (NPC)</b>
<b>Iranian Central Oil Fields Company (ICOFC)</b>
<b>Iranian Offshore Oil Company (IOOC)</b>
<b>Tanzania Oil and Petrochemical Company</b>
<b>Qatar Petroleum (Qualified &amp; Registered)</b>
<b>Dubai Aluminum (Dubal) (Qualified)</b>
<b>Syrian Oil Company (Qualified &amp; Registered)</b>



**dubal**  
Dubai Aluminium









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