

# SHANUL FARAYAND Co. CONSULTING ENGINEERS

# **COMPANY PROFILE**



#### Professional Services توانانی های تخصصی

& PETROCHEMICAL INDUSTRIES



مطالعات اقتصادی و امکانسنجی پروژه ها مهندسی مقدماتی مهندسی قصیلی مهندسی خرید مدیریت پیمان نظارت بر ساخت و نصب بازرسی و نست کالا و تجهیزات برنامه ریزی و کنترل پروژه کنترل و تضمین کیفیت پیش راه اندازی و راه اندازی برآورد کنترل هزینه و قراردادها راهبری و مدیریت پروژه

Feasibility Study
Basic Design & FEED
Detail Design
Procurement Services
Management Consultancy
Construction & Installation Supervision
Test & Inspection
Project Control & Planning
QA & QC

Pre-Commissioning, Commissioning & Start-Up
EPC Projects Management
Cost Control & Estimate
Contract & Claim Management

شانول فر آیند مهندسین مشاور

الجمن شرکتوان مهندسی و پیملکاری نفت . کار و پتروشیمی

جامعه مهندسان مشاور ليزان

عشویت در د

تهران . شهرک غرب ، بتوار دریا ، هبابان کلها ، هبابان توحید ۵ ، پلاک ۲۱ - کدیستی ۱۳۶۹ ۱۳۸۵ - ۱۳۶۹ ۱۳۸۵ (عند ویزد) – فکس ۱۹۳۱ ۱۳۸۵ مهرک غرب ، بتوار دریا - فکس ۱۹۵۱ ۱۸۵۹ No. 118 , Darye Bivd. , Shahrake Gharb , Tehran , IRAN , 14669 46484

Tel: 88581200 - Fax : 88370598 - www.shanul.com - info@shanul.com

#### Fields of Activities زمینه های فعالیت

- Isomerization Units of Bandar Abbas Gas Condensate Refinery including detail design and procurement services
- Lavan gas wells No. 2 & 3 facilities & 19km gas pipeline to Reshadat & Salman plants including detail design, procurement services & project management
- GOHT & KHT Units of Bandar Abbas Gas Condensate Refinery including detail design & procurement services

Scope of services for above projects includes:

- Detail design in all disciplines (civil, structure, electrical, instrument & control, process, mechanical, piping, safety & HSE, telecom)
- Procurement Services including commercial & technical documents for equipment & bulk material, review of manufacturers / vendors proposals, commercial & technical evaluation of proposals, technical meetings with selected bidder / vendor, follow-up / expediting of manufacturing phases & all necessary technical clarifications with manufacturers / vendors, test & inspection
- واحدهای ایزومریزاسیون پالایشگاه میعانات گازی بندر عباس (سه واحد و ظرفیت هر واحد ۴۰ هزار بشکه) شامل طراحی تفصیلی و مهندسی خرید
- واحدهای GOHT و KHT پالایشگاه میغانات گازی بندرعباس شامل طراحی تفصیلی و مهندسی خرید
- تأسیسات سرچاهی چاههای کاز شماره ۲ و ۳ لاوان و ۱۹ کیلومتر خط "۸ انتقال کاز به نیروکاه ها
   و تأسیسات رشادت و سلمان شامل طراحی تفصیلی ، مهندسی خرید و مدیریت پروژه

خدمات ارائه شده در هر یک از پروژه های فوق عبارتست از:

- طراحی تفصیلی شامل بخشهای سیویل، ساختمان، سازه ، برق، کنترل و ابزار دقیق، فرآیند، مکانیک (ثابت دوارا) ، لوله کشی صنعتی ، محیط زیست ، ایمنی ، مخابرات
- مهندسی خرید شامل تهیه مدارک بازرکانی و فنی خرید کالا و اقلام فله صنعتی، بررسی پیشنهادهای سازندگان، مقایسه فنی پیشنهادها، برگزاری جلسات فنی با سازندگان منتخب، پیگیری مراحل ساخت و انجام کلیه مکاتبات فنی لازم در طول ساخت و تست و تحویل کالا

صنایع بالادستی نفت و کاز پالایشگاههای نفت و میعانات کازی پالایشگاههای کاز پالایشگاههای کاز پالایشگاههای کاز تارکذانجات پتروشیمی تاسیسات فراساحل تاسیسات افزایش فشار و تزریق کاز به میادین نفت واحدهای نمک زدایی نفت واحدهای فرآورش کاز تاسیسات مایع سازی کاز تاسیسات مایع سازی کاز تولید و انتقال برق تولید و انتقال برق کارخانجات کاغذ سازی کارخانجات کاغذ سازی صنایع مدنی صنایع مدنی

Upstream Oil & Gas Petroleum / Condensate Refineries **Gas Refineries Petrochemical Plants Offshore Facilities Gas Compression & Injection Facilities Oil Production Units** Oil Desalting Units **Gas Treatment Plants LNG & GTL Plants** Chemical / Industrial Plants **Power Generation & Distribution Pulp & Paper Plants** Pharmaceutical & Biotech, Industries Mine Industries **Architecture & Building Construction** 





- Licensed/Certificated by Design & Consultancy for the following Fields
  - Oil & gas refineries & Petrochemical Plants
  - Oil & gas Pipelines
- Membership in Iranian Society of Consulting Engineers



Membership in Association of Petroleum Industry
 Engineering & Consulting Companies





# Certificate/License Of Consulting Services

- Grade 1 in Oil and Gas industrial projects, Petrochemicals and Refineries
- Grade 3 in Pipeline projects

#### مشخصات گواهینامه

#### زمینه فعالیت و ظرفیت کاری

توضيحات گواهينامه:

زمينه فعاليت	વાધ	تعداد کار مجاز	ظرفیت مجاز (میلیون ریال)	تعداد کار اشغال شده	تعداد کار آزاد	امتیاز قراردادهای تاییدشده
خطوط انتقال نفت و گاز	٣	٤	1777-		٤	
واحدهای پالایشگاه نفت، گاز و صنایع پتروشیمی	١	٦	190.5.	٥	Y	VIV

شماره: ۳۱۱۸۲ تاریخ: ۳۹۱/۰۳/۰۲



# گواهینامه صلاحیت خدمات مشاوره

جناب آقای محمد مخدراتی مدیرعامل محترم شرکت شانول فرآیند شماره ثبت: 32883

با استناد به مصوبه شماره ۲۰۶۳/۳/۲۲ ۱۸۴۳۷ مورخ ۱۳۸۳/۴/۳۳ هیأت محترم وزیران و با توجه به احراز شرایط لازم و تایید صلاحیت آن شرکت در سامانه جامع تشخیص صلاحیت عوامل نظام فنی اجرایی، به این وسیله صلاحیت آن شرکت برای انجام خدمات مشاوره از تاریخ صدور این گواهینامه تا پایان دوره ارزشیایی و حداکثر تا تاریخ ۱۳۹۸/۰۳/۰۱ اعلام می گردد.

> شناسه ملی شرکت: ۱۰۱۰۹۳۹۳۹۲۰ خواهشمند است برای مشاهده جزئیات گواهینامه صادره به پایگاه http://sajar.mporg.jr مراجعه فرمائید.

رعایت قانون برگزاری مناقصات، موضوع ابلاغیه شماره ۱۳۰۸۹۰ مورخ ۱۳۸۳/۱۱/۱۷ رئیس مجلس شورای اسلامی، آییننامههای اجرایی مربوطه و ظرفیت کاری مجاز در زمان ارجاع کار توسط آن شرکت ضروری است.

غلامرضا شافعی معاون فنی و توسعه امور زیربنایی

• هرگونه تغییر در ارکان و سهام شرکت و اطلاعات امتیازآوران (مدیرعامل، هیأت مدیره و کارکتان امتیازآور)، باید حداکتر خلرف مدت سه ماه در سامانه ساجات (http://sajat.mporg.ir) ثبت و ارسال شود.

●هر قرارداد جدید حداکثر ظرف مدت سه ماه پس از انتقاد قرارداد و صورت وضعیتهای جدید پس از تأیید کارفرما باید در سامانه ساجات ثبت شود، تا امتیاز آنها هنگام تشخیص صلاحیت دوره بعد و آزادسازی ظرفیت منظور شود.

در صورت مغايرت مطالب اين گواهينامه با اطلاعات موجود در پايگاه http://sajar.mporg.ir، اطلاعات پايگاه اصالت دارد.

به مندرجات پشت صفحه گواهینامه توجه فرمایید.

شش: ۲۸۲۲۰۴



# Membership of **Iranian Society of Consulting Engineers**





Iranian Society of Consulting Engineers

Certificate
Of Membership

: نام شرکت Company Name:

**Shanul Farayand** شانول فرآبند

:Date of Establishment تاریخ تأسیس

11/08/11 2008

تاریخ عضویت: Date of Membership:

1.1/9/1 2009

:Registration Number شماره عضویت

2988

غضو گروه های تخصصی : Membership Groups : ضطوط انتقال نفت و گاز

Oil and Gas Transmission

Chairman رییس شورای مدیریت



# **Certificate / License of Membership in APEC**



# Association of Petroleum Industry Engineering and Construction Companies

Registered at The Iran Chamber of Commerce, Industries Mines & Agriculture: No.: 320 Dated: May. 04,2012 Registered at The Ministry of Labor and Social Affairs: No.: 32-3/2-216 Dated: Dec. 11,2000

Tehran - Iran

#### MEMBERSHIP CERTIFICATE

**Shanul Farayand Consulting Engineering Co.** 

Registration No. :329836 Dat

Dated :2008- Tehran

Membership No.: 88174

March 2017

Member Since: August. 2009

Valid up to:

Issued on:

March 2018

Chairman:

Behzad Hazrati

Treasur

Treasurer: Ali Akbar Adib)



# **ISO Certificates**



#### General Surveillance Association

This certificate verifies that GSA has assessed and Registered the Management System of:

Shanul Farayand Consulting Engineers Co.

To the International Standard

ISO 14001:2004

The Scope of the Management System is applicable to:

Engineering and Design, Procurement, Construction, Installation, Erection, Construction Management & Supervision, Field Engineering, Management Consultancy of Projects in Oil, Gas Petrochemical, Energy and Related Industries

Date of Issue: June 20, 2017 Expiration Date: June 20, 20 2 2

Initial Certification: 2011

Authorizing Signature:

Ben

Certificate No.99811467

Certification via www.gsacert.com

This Certificate has been issued under the accreditation of:

ASG Registration No. US489132947





#### General Surveillance Association

This certificate verifies that GSA has assessed and Registered the Management System of:

Shanul Farayand Consulting Engineers Co.

To the International Standard

OHSAS 18001:2007

The Scope of the Management System is applicable to:

Engineering and Design, Procurement, Construction, Installation, Erection, Construction Management & Supervision, Field Engineering, Management Consultancy of Projects in Oil, Gas-Petrochemical, Energy and Related Industries

Date of Issue: June 20, 2017 Expiration Date: June 20, 20 2 2

Initial Certification: 2011

Authorizing Signature

Ben

Certificate No.99811469

Verification via www.gswcert.com

This Certificate has been issued under the accreditation of:

ASO Registration No. US489132949





# **ISO Certificates**



#### General Surveillance Association

This certificate verifies that GSA has assessed and Registered the Management System of:

Shanul Farayand Consulting Engineers Co.

To the International Standard

ISO 9001:2008

The Scope of the Management System is applicable to:

Engineering and Design, Procurement, Construction, Installation, Erection, Construction Management & Supervision, Field Engineering, Management Consultancy of Projects in Oil, Gas-Petrochemical, Energy and Related Industries

Date of Issue: June 21, 2017 Expiration Date: June 20, 2022

Initial Certification: 2011

Authorizing Signature:

Ben

Certificate No.99811465
Verification via www.gsacet.com
itis Certificate has been issued under the accreditation of:
ASG Registration No. US489132945





#### General Surveillance Association

This certificate verifies that GSA has assessed and Registered the Management System of:

Shanul Farayand Consulting Engineers Co.

To the International Standard

ISO/TS 29001:2010

The Scope of the Management System is applicable to:

Engineering and Design, Procurement, Construction, Installation, Erection, Construction Management & Supervision, Field Engineering, Management Consultancy of Projects in Oil, Gas Petrochemical, Energy and Related Industries

Date of Issue: June 20, 2017 Expiration Date: June 20, 20 2 2

Initial Certification: 2011

Authorizing Signature:

Ben

Certificate No.99811463
Certification via www.gsacet.com
This Certificate has been issued under the accreditation of:
ASO Registration No. US489132943





# **ISO Certificates**



This is to certify that

#### Shanul Farayand Consulting Engineers Co.

Has been approved as a

#### TTAIN Member

In the following activities:

Engineering and Design. Procurement, Construction, Installation, Erection, Construction Management & Supervision, Field Engineering, Management Consultancy of Projects in Oil, Gas Petrochemical, Energy and Related Industries

Under the following Membership Number:

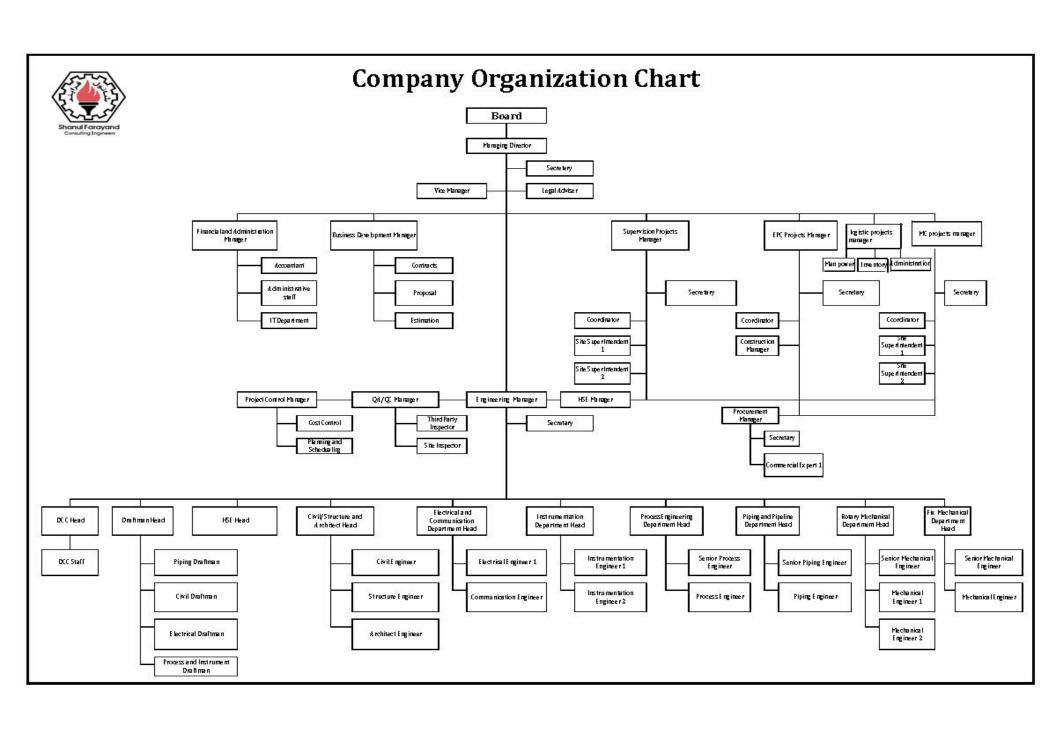
1109 0074 0093 1537

Authorizing Signature:

Date of Issue: Date of Expiry: 21 May 2017 20 May 2020

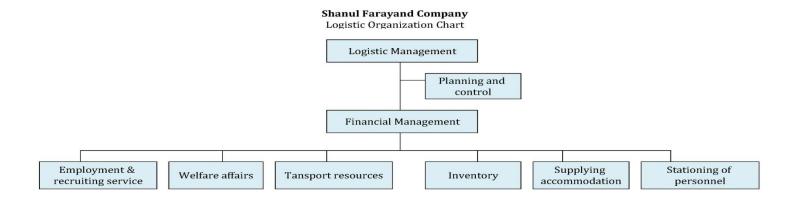
Initial Membership 21 May 2017

Top Ten Award International Vision's was established to recognize burnarding calciduals groupe Companies, Organization representing the first in the public words profession 4TAIN has been registered when the Onlevia Business Function (they 50 22)059629. The Live Avanta International certaining will be held every year in a country for prominent of the guiday of works, where under productions. Verification for approprial of Monthership can be then a viry above meaning for approprial membership inumber in the following web link. For more information call the business info line and all bounded between some two conand Indian's Canada at 1-888-745-8888 or 1-416-212-8888 or TT) 800-768-1093. Ventication of Certificate via ; www.toptenaward.info





# Logistic Organization Chart





# **HUMAN RESOURCES**

DEPARTMENT	NO.
General Management	6
Project Managers	5
QA & QC	2
Planning & Project Control	3
Project Coordinator	3
Piping	7
Process	4
Civil & Structure	7
Instrumentation & Control	5
Safety	2
Mechanical (Fix , Rotary , Package)	7
Electrical/Telecommunication	4
Drafting	7
IT	2
Accounting/Administration	5
Construction Site Services	35
Total	104



# **ENGINEERING SOFTWARE**

		<u>FUNCTION</u>	DESCRIPTION
•	DOC	CUMENT CONTROL SOFTV	VARE
	-	HUMMINGBIRD	Document management software
	-	POUPACK	Document management software
•	PRC	CESS DEPT.	
	-	PROII	Process plants simulation
	-	HYSIS	Process plants simulation
	-	ASPEN BJAC	Heat exchangers & air coolers thermal/mechanical design
	-	HEXTRAN	Heat exchangers & air coolers thermal design
	-	PIPE PHASE	Process piping system design
	-	FLARENET	Flare stack design
	-	PIPENET	Process piping system design
	-	FLOWMASTER	Fluid flow software
	-	HTFS	Heat exchanger simulation and design
	-	HTRI	Heat exchanger, thermal design
	-	PHAST	Process hazard analysis
•	INST	TRUMENT DEPT.	
	-	CONVAL	Design/control valve, safety valves, line size, orifice plate, pump sizing
	-	FLOWEL	Flow element sizing
	-	FISHER	Control valve sizing
	-	MASONEILAN	Control valve sizing
	-	CROSBY	Safety valve sizing
	-	FARRIS	Safety valve sizing
	-	SAFTY-SIZE	Tyco valves & controls pressure relief valve sizing program
	-	Instrucalc	Control valve sizing, Flow Element Sizing, Safety valve sizing
	-	INTOOLS	Instrument Calculations
	-	Val SpeQ	Control Valve Calculation



# **ENGINEERING SOFTWARE**

•	ME	CHANICAL DEPT.	
	-	ASPEN BJAC	Heat exchangers thermal/mechanical design
	-	PVELITE	Pressure vessel mechanical design
	-	TANK	Storage tank design
	-	ANSYS	Finite element analysis/design
	-	NOZZLE PRO	Finite element analysis/design
	-	FLUENT	Computational fluid dynamics software
	-	SOLIDWORK	3D mechanical design and 3D CAD software
	-	COMPRESS	Pipe stress analysis software
	-	STACKDES	Stack/flare design
•	CIV	IL/STRUCTURAL DEPT.	
	-	SACS	Structural analysis computer system
	-	SAP 2000	Structural analysis program
	-	STAAD	Integrated structural design system/structural analysis and design
	-	ETABS	Extended 3 dimensional analysis of building systems
	-	SAFE	Slab analysis and design by finite element method
	-	FOUNDATION 3D	Analysis & design of foundations
•	PIPING DEPT.		
	-	CASER II	Pipe stress analysis
	-	PDMS (CADCENTRE)	Plant design management system-Plant 3D modeling
	-	PEGS (CADCENTRE)	Plant engineering system
	-	PDS (INTERGRAGH)	Plant design system
	-	REVIEW REALITY	Plant design review
	-	NAVIS WORKS	Plant design review
	-	PUMA IV	Material handling software



# **ENGINEERING SOFTWARE**

		EL ESTRICAL DERT	
	•	ELECTRICAL DEPT.	
			Lighting Calculation
		- CALCULUX	Lighting Calculation
		- EDSA	Electrical distribution system analysis/power distribution network
		- ETAP	Electrical power system analysis
		- CYME-GRID	Electrical network analysis
		- CYME-TCC	Electrical network analysis
		- EPLAN	Electrical Network Drafting
		- DIGSILENT	Electrical Network Analysis
		- SAFT	Indoor & Outdoor Lighting Calculation
		- Mazinoor Lighting	Indoor & Outdoor Lighting Calculation
	•	PLANNING & COST CONTROL	
		- PRIMAVERA	Planning and project monitoring
		- MS PROJECT	Planning and project monitoring
	•	DRAFTING	
		- Autodesk AutoCAD	2D Drafting
		- TEKLA/XSTEEL	3D modeling / 2D drafting software for Steel/Concrete Structures
		- Bocad	3D modeling / 2D drafting software for Steel Structures
		- Archicad	Architectural 3D Modeling and 2D drafting
ĺ			
	•	GENERAL	
		- MS OFFICE	Microsoft Office



# **HARDWARE**

COMPUTER	Qty.
HP proliant ML370 G4 Server Platform	4
Desktop Computer – Core i5 Processor, 512 GB HDD , 64 MB RAM	54
LAPTOP TOSHIBA	5
LAPTOP SONY	2
LAPTOP DELL	1
COPIER	Qty.
SHARP AR-5316/AR-5127/AR-M420U	3
PRINTER	Qty.
HP LASER COLOR CP2025n	3
HP LASERJET /A3 5100/5200	3
HP LASERJET/A4 1320/3005/2015	8
HP DESKJET 1220	3
PLOTTER PLOTTER	Qty.
HP DESIGNJET 130	1
SCANNER SCANNER	Qty.
SCANJET 3970/G2710	5
PROJECTOR	Qty.
EPSON EB905	1
UPS	Qty.
UPS MERLIN GERIN 20 KVA	2
NETWORK HARDWARE	Qty.
D-link switch 1048	2
D-link switch 1024	2
D-link switch 1016	2
General Rack	4



# **CAPABILITIES IN DIFFERENT FIELDS**

#### General Services in Oil, Gas and Petrochemical Project

- Feasibility Study
- Proposal Preparation
- Invitation To Tender-(ITT) & Evaluation of Tenders

#### Oil Projects Services

- Oil production facilities
- Oil desalting plants
- Oil pipelines & booster stations
- Oil / condensate refineries

#### Gas Projects Services

- Gas compression & injection facilities
- Gas transportation, gas pipelines & gas treatment facilities
- Gas refineries, production facilities

#### Petrochemical Projects

- Small / large petrochemical plants (Olefins , Aromatics , HD/LDPE , PP , LAB , Methanol , Urea/Ammonia , ....)
- Utility plants & off sites

#### Other projects

- GTL/LNG plants
- Offshore production facilities
- Chemical / industrial plants

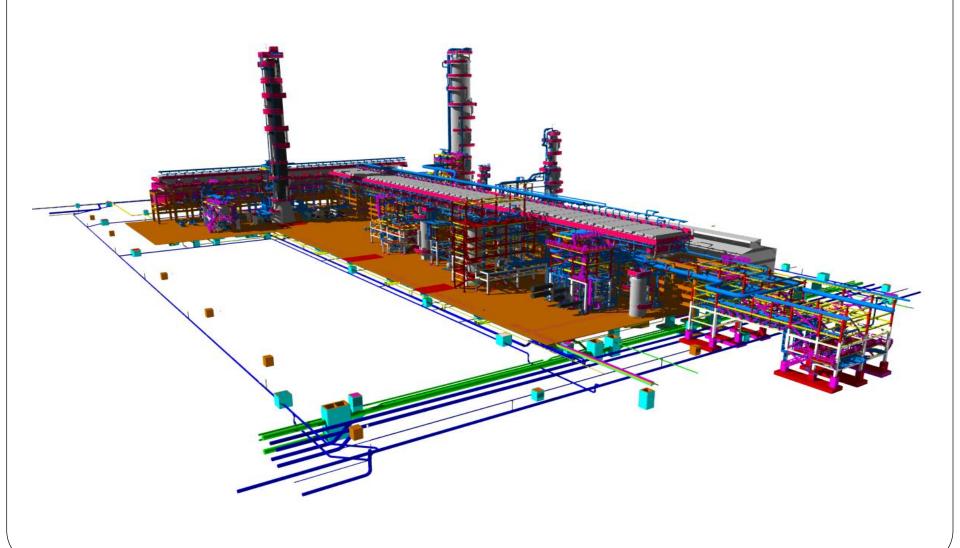


#### **Isomerization Units of Bandar Abbas Gas Condensate Refinery**

- Scope of Work:
  - Detail engineering, procurement services, project control, planning for 3 isomerization units.
- Client: Persian Gulf Star Oil Co.
- Technology Provider: UOP
- Duration: 60 Months
- Project Progress: 99.62 %
- Major Activities:
  - Detail design (process, civil, piping, mechanical, electrical, control, safety, telecom, Hazop, modeling..)
  - Procurement engineering services, Review of Vendor documents.
  - Planning & project control.
  - Field engineering and Site supports
- Project Key Figures :
  - Piping(each train): 1850 Lines , 250000 Dia/Inch
  - Equipment(each train): 94, including: 4 compressors, 26 pumps, 7 columns/reactors, 17 Vessels, 39 Exchanger/Cooler, ...
  - Steel Structure(each train): 19 No., 1900 tons excluding piperack
  - Civil(each train): 15000 m3 concrete volume
  - Electrical /Instrument(each train): 8 MW, 3300 I/O's (including FF)



# **3D MODEL OF ISOMERIZATION UNIT**





#### **GOHT & KHT Units of Bandar Abbas Gas Condensate Refinery**

#### Scope of Work:

 Detail engineering, procurement services, project control, planning for 3 GOHT (Gas oil Hydro Treating) & KHT(Kerosene Hydro Treating) Units

Client: Persian Gulf Star Oil Co.

Duration: 60 Months

Technology Provider: Haldor Topsoe

Project Progress: 99.51 %

#### Major Activities:

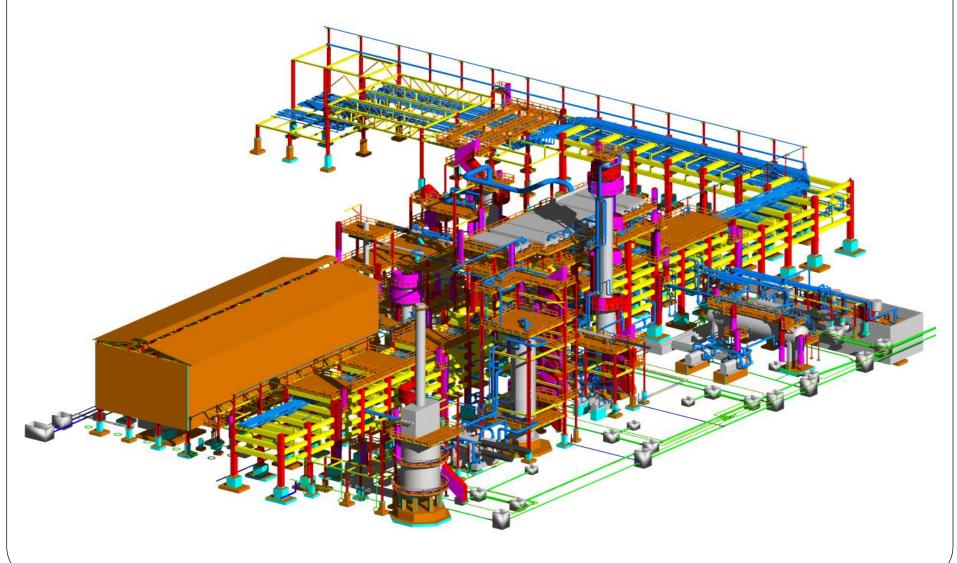
- Detail design (process, civil, piping, mechanical, electrical, control, safety, telecom, Hazop, modeling...)
- Procurement engineering services, Review of Vendor documents.
- Planning & project control.
- Field engineering and Site supports

#### Project Key Figures :

- Piping(each train): 995 Lines , 110000 Dia/Inch
- Equipment(each train): 65, including: 3 compressors,24 pumps,4 columns/reactors, 15 Vessels,16 Exchanger/Cooler, 1Fired Heater, ...
- Steel Structure(each train): 14 No., 950 tons excluding piperack
- Civil(each train): 6500 m3 concrete volume
- Electrical /Instrument(each train): 3.6 MW, 2100 I/O's (including FF)

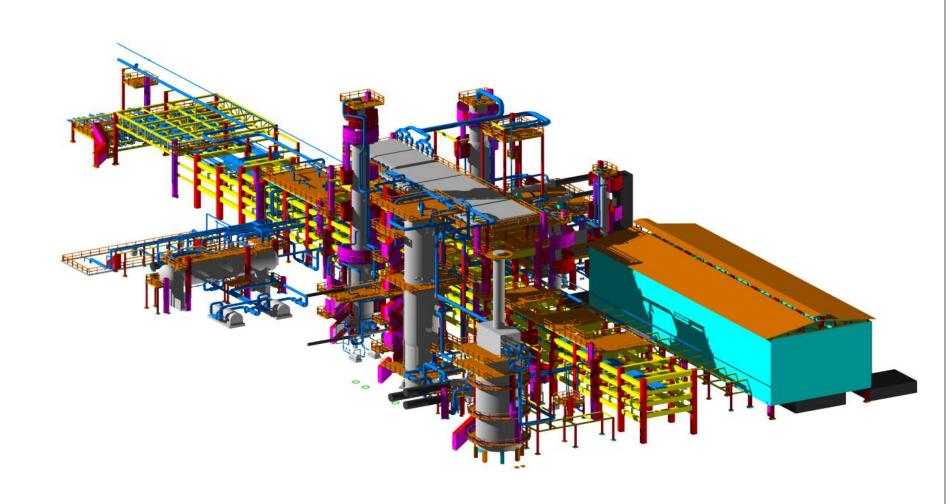


# 3D MODEL OF KEROSENE HYDROTREATER UNIT





# 3D MODEL OF GAS OIL HYDROTREATER UNIT





### Nargesi Gas Gathering, Compression & Injection Project

#### Scope of Work:

- Gathering, compression, and injection of gas from Nargesi Production Unit, capacity of gas
   19MMSCFD. The scope was detail engineering, procurement, construction & commissioning (EPC.)
- Client: National South Oil Fields Co.
- Duration: 30 Months
- Project Progress: completion.

#### Major Activities:

- 2 sets of screw compressors+ 8 sets of reciprocating compressors to boost up gas pressure to 3000 psi (injection).
- Compressor shelter, chemical injection, flares & burn pit, pig launcher / receivers
- Gas dehydration package.
- 8km, 6" pipeline to injection well(33MMSCFD).
- 37km over head power line (66kv) & related substations
- Telecommunication and safety systems
- Industrial buildings & facilities



# Nargessi GAS GATHERING, COMPRESSION & INJECTION PROJECT













# Nargessi GAS GATHERING, COMPRESSION & INJECTION PROJECT





### **Nargesi Oil Production Unit Capacity Increasing**

- Scope of Work:
  - Detailed Design, Procurement, Construction (EPC) Oil production capacity increase from 15,000 BPD to 25,000 BPD
- Client: National South Oil Fields Co.
- Duration: 20 Months
- Project Progress: Completion
- Major Activities:
  - 10" oil pipeline (102km)
  - Dismantling of existing Pumps, installation of new high capacity pumps, Renovation of instrumentation & Control system.



# NARGESSI OIL PRODUCTION UNIT OIL CAPACITY INCREASING















#### Lavan Gas Wells No.2&3 Facilities & Gas Pipeline

#### Scope of Work:

- Detailed Design, Procurement, Construction (EPC) of Lavan Gas Wells Facilities and 19km pipeline to Rashadat and Salman Plants
- Client: Iranian Offshore Oil Co.
- Duration: 12 Months
- Project Progress: Completion

#### Major Activities:

- Gas wellhead facilities, chemical injection packages & 2 No. gas conditioning packages
- 8" gas pipeline (19km) and respective pig launcher / receivers ,3x Flares .
- 19km over head power line (20kv)
- 2xElectrical rooms, 3xControl rooms, Safety / utility facilities.



# Lavan Gas Wells No.2&3 Facilities & Gas Pipeline















#### Nafte Sefid oil field gas and oil system optimization & renewal project

#### Scope of Work:

 Detail Engineering, procurement services for a new production unit, 25000 BBL/d oil & 30.4 MMSCF/d of gas. (EPC)

Client: National Iranian South Oil Co.

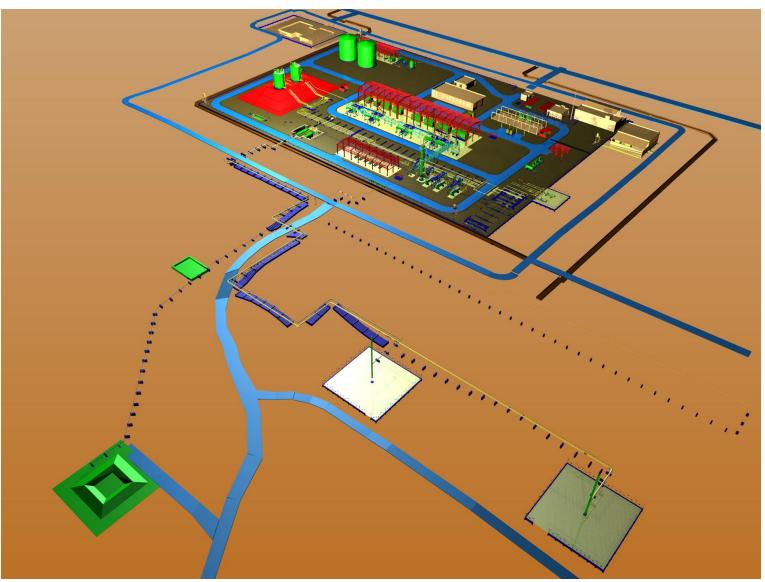
Duration: 30 Months

#### Major Activities:

- Detail design (process, oil, gas, water separation, gas compression, oil transfer & boosting pumps, mechanical, civil, electrical, control, safety, telecom, Hazop, modeling..) gas compressors, oil pumps, chemical inj. packages, 40 Km. oil pipeline, 37 Km (60Kv)
   Overhead power line, pumps shelter, compressors shelter, air cooled gas heat exch.
   Oil/gas separators, stripper column, control bldng., electrical sub station & electrical room.
   Fire& safety devices, pipe lines & manifold, etc.
- Procurement engineering services ,vendor documents review.
- Planning & project control



# 3D MODEL OF Nafte Sefid



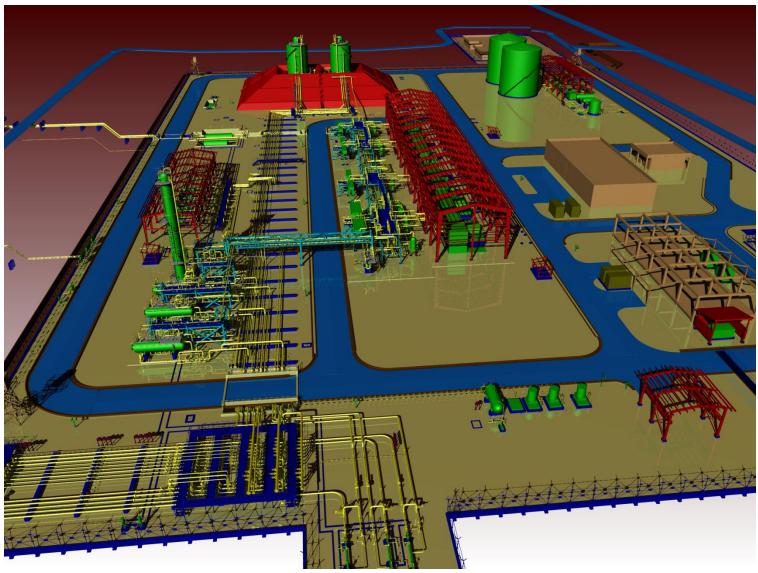


# 3D MODEL OF Nafte Sefid





# 3D MODEL OF Nafte Sefid



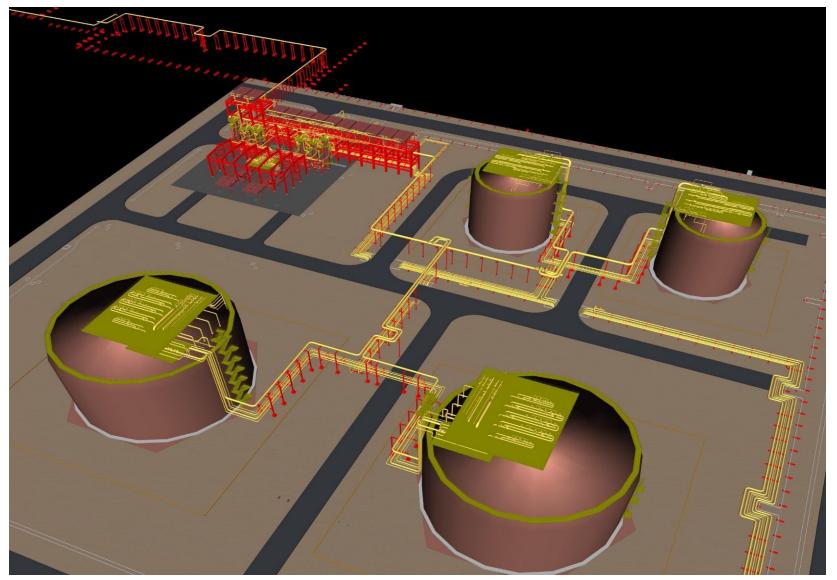


# Engineering Services and Basic Design for LPG Refrigeration, Storage & Loading System

- Scope of Work:
  - Engineering Services and Basic Design for LPG Refrigeration, Storage & Loading System
- Client: Persian Gulf Star Oil Co.
- Duration: 6 Months
- Technology Provider: KT Technology Italy
- Project Progress: 100 %
- Major Activities:
  - Engineering Services for Basic Design in all disciplines



# LPG Refrigeration, Storage & Loading System



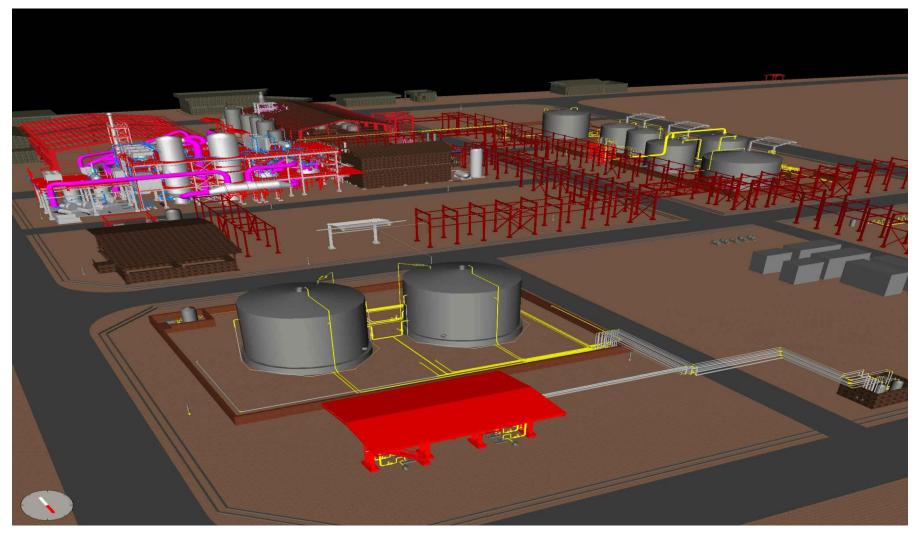


#### Dismantling, Re-installation and Erection of Formalin Complex

- Scope of Work:
  - Engineering, Procurement, Supervising services of 109, 000 TPY Aq. Formaldehyde / 69, 000 TPY Urea Formaldehyde Concentrate (UFC – 80) and 107, 000 TPY Amino (UF) Resin plants
- Client: Entekhab Investment Development Group (EIDG)
- Technology Provider: Sadepan Chimica Italy
- Duration: 24 Months
- Project Progress: 60 %
- Major Activities:
  - Presenting site supervision engineering services (Preliminary and detailed)
  - Supervision of dismantling of Formalin plant in Italy
  - Supervision, managing and assessment of supervisory reports of main processing equipment and plant utility
  - Re- generation and Preparing engineering documents for construction and erection of plant in Gheshm
  - Procurement services
  - Managing and Project Control
  - Supervision and inspection of subcontractor activities in constructing and erecting and continuous report to client

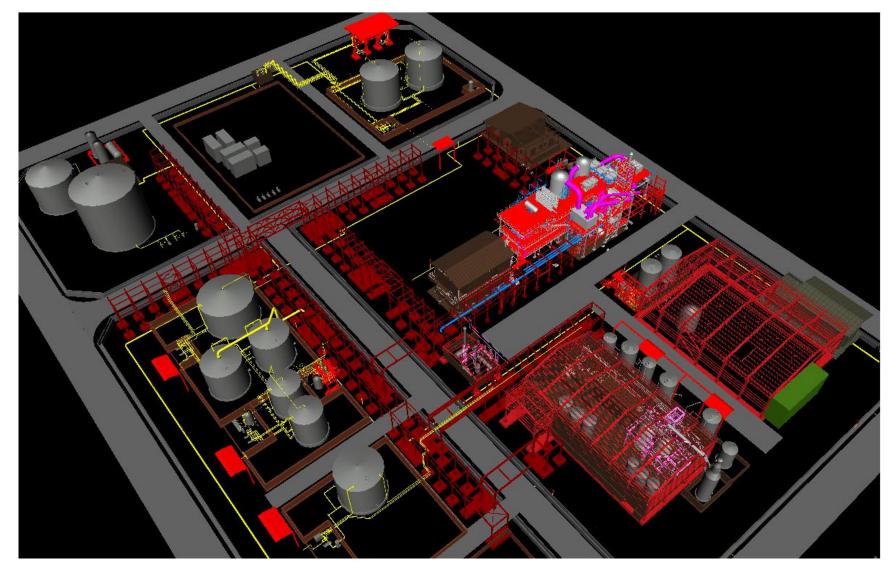


## Formalin Complex





## Formalin Complex





#### Flare Gas Recovery of Ahvaz-2 Oil Production and Gas Compression Units

#### Scope of Work:

 Conceptual and Feasibility Study of alternatives and Basic Design of slected method for Flare Gas Recovery of Ahvaz-2 Oil Production and Gas Compression Units

Client: National Iranian South Oil Co. (NISOC)

Duration: 24 months

Project Progress: 85%

- Field survey and data gathering for finding the flaring sources and rates
- Feasibility study of all available and common methods of flare gas recovery used in the world
- Conceptual and Basic design for the final selected method for flare gas recovery in all disciplines
- Preparation EPC tender documents



### Study And Preparation of Contracting Services and Preparation of Tender Documents - Completion Of Nargesi Defects

- Scope of Work:
  - Study And Preparation of Contracting Services and Preparation of Tender Documents - Completion Of Nargesi Defects
- Client: National Iranian South Oil Co. (NISOC)
- Duration: 2 Months
- Project Progress: Completion



## Preparation of tender Documents for Nafte Sefid oil field gas and oil system optimization & renewal project

- Scope of Work:
  - Preparation of tender Documents for Nafte Sefid oil field gas and oil system optimization & renewal project
- Client: National Iranian South Oil Co.
- Duration: 2 Months
- Project Progress: Completion
- Major Activities:
  - Preparing the document of Naft Sefid Project



### Site Supervision Engineering Services for Bandar Abbas Gas Condensate Refinery

#### Scope of Work:

 Site Supervision Engineering Services for Bandar Abbas Gas Condensate Refinery (zone 4 & 5)

Client: Persian Gulf Star Oil Co.

Duration: 18 Months

Project Progress: 90 %

#### Major Activities:

 Presenting site supervision engineering services for units 88, 68, 66, 18, 16, 04 (Isomerization & GOHT-KHT) including engineering services, managing & supporting for project execution



### Claim Management of Kharg Island Gas Gathering & NGL Recovery Project

Scope of Work:

Claim Management of Kharg NGL project

• Client: Iranian Offshore Oil Co. (IOOC)

Duration: 12 Months

Project Progress: 100 %

- Technical assessment / verification of the contractor's claims (engineering, procurement, construction/commissioning etc.)
- Contractual and commercial assessment/verification of claims including the main EPC contractor and subcontractors' contracts.



### Management and Engineering consulting services for RESHADAT OFFSHORE RENOVATION PROJECT

#### Scope of Work:

 Management Consultancy, logistic, Engineering and technical backup of Reshadat development and renewal of Reshadat oil field

Client: Iranian Offshore Oil Co. (IOOC)

Duration: 30 Months

- Logistic Management including Man Power ,Management of inventory, stationing of personnel, supplying accommodation, office, etc. and all related services)
- Planning, Execution and control
- Assessment of engineering documents
- Construction supervision
- Engineering and procurement supervision



## High Supervision and Constriction Supervision and Engineering Services for F&G System of Kish Island

- Scope Of Work :
  - High Supervision and Constriction Supervision and Engineering Services
- Client: Kish Port & Airport Development & Management Co
- **Duration**: In progress
- Major Activities:
  - High Supervision and Constriction Supervision; including piping, pipeline, pump house, tanks, instrumentation and Electrical systems (ports and warehouses)



#### Mansour Abad Oil Fields Development Project

- Scope Of Work :
  - Basic endorsement, Detail and procurement Engineering Services
  - EPC Management Services Including Project and construction Management Services
- Client: National Iranian South Oil Co.
- **Duration:** In Progress

- Basic endorsement
- Detail and procurement engineering :
  - Wellhead facilities (13 wells)
  - Crude oil flow lines
  - Separation units (3 Booster clusters)
  - Oil and gas transfer lines
  - Power line (23km overhead power line)



## Management Consultancy (MC) and engineering Services for GHADIR-JASK Refinery

- Scope Of Work :
  - Management Consultancy (MC)
  - Engineering Services
- Client: GHADIR-JASK Petro-Refinery company
- **Duration:** In Progress
- Major Activities:
  - Project Management
  - Bankable Feasibility Study
  - License and Technology (Negotiation, evaluation and PDP Review)
  - Basic design Tender preparation
  - Basic design Supervision
  - Interface Integration
  - Engineering Integration



# High Supervision and Constriction Supervision and Engineering Services for Shahid Rajaei port and Pipeline corridor

- Scope Of Work :
  - High Supervision and Constriction Supervision and Engineering Services
- Client: Ports and Maritime Organization of Hormozgan
- Duration: In Progress
- Major Activities:
  - Terminal and Oil Tanks, pump station, Piping and F&G system.



#### Parsian Sepehr Ethan Recovery Project (C2+ Recovery)

- Scope Of Work :
  - Detail and procurement engineering services
- Client: Palayeshgah Parsian Sepehr Company
- **Duration:** In Progress
- Major Activities:
- Detail and Procurement Engineering Services For Parsian Gas Refinery (C2+ Recovery) Including Turbo Compressors, Industrial and non-industrial buildings; Control Room, Substation and Process Design



**Shanul Farayand** 

**Consulting Engineers**