



## Corporate Profile

*Engineering Solutions*

*Through People Power*



**Al Hassan Engineering Co. S.A.O.G.**

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## Message from Managing Director

Since its formation in 1975, Al Hassan Engineering Co. SAOG (AHEC) has achieved an impressive record of successfully meeting its customers' requirements and exceeding their expectations. AHEC is proud of its reputation as one of the leading EPC contracting and construction companies in Oman and the UAE.

AHEC's success is measured through its customer satisfaction with the delivery of projects and services to the highest quality, in time and on budget.

Our work in the Oil & Gas, Power (Generation, Transmission & Distribution), Water and Wastewater markets has been well acclaimed. We have also started to extend our activities into various areas of infrastructure. Our enviable performance record and reputation in all of these areas continues to develop and grow.

With over three decades of dedicated services, AHEC has won the trust and recognition from clients in Oman and UAE.

To meet the ongoing and new challenges within our markets and to continually improve the services that we provide to our customers, AHEC is fully committed to invest in the development of its people, business processes & systems in addition to its investments in plant & equipment base. AHEC is confident that with the continual strengthening of its capabilities, the company will always be ready to face the new challenges within the developing marketplace.

The greatest asset of AHEC is its loyal, dedicated and hard working employees. The entrepreneurial initiative and creativity of our employees has shaped our achievement-oriented culture and led to one success after another, ensuring client satisfaction.

I look forward to taking AHEC into its next decade of success.

**Maqbool Ali Salman**  
Managing Director



*PDO Amal Power Station Project (EPC)*

## Introduction

Al Hassan Engineering Company S.A.O.G. (AHEC), a member of the multi-million dollar Al Hassan Group started its operations as Al Hassan Trading & Contracting Co. in 1975. Over last three decades, AHEC has successfully undertaken more than 100 contracts for leading organizations in Oman such as PDO, Occidental, PTTEP, ORPIC, OGC, OETC, Haya Water, PAEW and more recently DEWA, ADWEA, TRANSCO and GASCO in UAE. AHEC has also partnered with a number of international EPC contractors in Oman such as GS E&C, SNC Lavalin, Exterran, BHEL, Stone & Webster, Petrofac, Alstom, Hyundai Rotem and more lately Siemens and Technip in UAE.

AHEC has successfully executed projects in core sectors such as Oil and Gas (Midstream and Downstream segments), Power, Electricity Transmission & Distribution, Industrial Infrastructure, Operations and Maintenance of Oil & Gas installations, Water and Wastewater Treatment Plants. AHEC is the first Omani contracting company to be listed on Muscat Securities Market (Code : HECI) in the year 1998 and has consistently featured in Top 20 Listed companies in Oman.

AHEC employs more than 5000 people of 20 nationalities making us one of the largest construction companies in Oman. AHEC operates a head office in Oman at Muscat and a UAE Office in Abu Dhabi along with fabrication workshop facilities in Ghala, Muscat and Mafrq, Abu Dhabi. Our Muscat

Fabrication workshop is approved by ASME and NBIC for Design, Fabrication and Repair of Pressure Vessels and Boilers.

AHEC has also achieved certification to internationally recognized standards in three distinct disciplines - ISO 9001:2008 for Quality Management, ISO 14001:2004 for Environmental Management and OHSAS 18001:2007 for Occupational Health and Safety Management. Every year, AHEC accrues many millions of working man-hours without Lost Time Injuries (LTI), this has been appreciated by clients through numerous awards and citations. AHEC has also won a number of awards for on time and safe delivery of its projects in prestigious regional competitions conducted by Construction Week and MEED.

In order to cater to diversified projects, AHEC has made substantial investment in its own plant and machinery. The extensive fleet of 1000+ units includes Lifting Equipment, Tankers, Earthmoving Equipment, Trailers, Concreting Equipment, Stationary Equipment and Vehicles.

Proven technical expertise, strong infrastructure facilities, pragmatic & commitment oriented management and an excellent track record on HSE and Quality have all enabled AHEC to emerge as the leading Engineering, Procurement & Construction (EPC) company in Oman.



*PDO Nimr-C Full Field Water Injection Project (EPC)*

*Erection of 200 ton Knockout Drum using 750 ton Crane for Sohar Aromatics Project*

## Core Sectors

AHEC focuses on four core market sectors :

- OIL AND GAS
- POWER
- BUILDINGS
- WATER & WASTEWATER

## Areas of Operation

Work scopes for AHEC could include any or all of the following:

- EPC CONTRACTS
- CIVIL & STRUCTURAL
- MECHANICAL & PIPING
- ELECTRICAL & INSTRUMENTATION
- PAINTING, COATING & INSULATION
- PIPELINES
- SERVICES & MAINTENANCE
- TELECOMMUNICATION



# AHEC HISTORY



Al Hassan Trading & Contracting Co. commences operations (1975)

## 1975 - 1997

- 1975 • Starts Operations as Al Hassan Trading & Contracting Company
- 1986 • Secures first contract from PDO for modification & Upgradation of Electrical Installation for Mobile Caravans
- 1988 • Secures 4 years Instrumentation Service Contract for South Oman Oil Fields and Well Heads
- 1991 • Secures 4 years CMEI Services Contract from PDO
- 1993 • Secures EPC contract for PDO Saih Rawl Water Disposal Project
- 1994 • Secures EPC Contract for PDO Sadad Production Station Upgradation
- 1995 • Secures 5 year South Oman Mechanical Service contract from PDO
  - Secures 5 year contract from PDO for Construction of Permanent Industrial & Residential Facilities
  - Secures EPC Contract for 33kV Switchgear & OHL at Rima & Sadad
- 1996 • Achieves ISO 9000 Certification
- 1997 • Secures EPC contract for PDO Nimr Deep Water Disposal Plants
  - Secures first contract in Power Plant Sector - MEI works for Saih Rawl Integrated Power Station with Waste Heat Recovery



Lists on Muscat Securities Market (1998)

## 1998 - 2003

- 1998 • Lists on Muscat Securities Market (Code : HECI) and renamed as Al Hassan Engineering Company SAOG
- 2000 • Secures EPC contract from MHEW for 132 kV North Oman Power Transmission Project (JV with Jyoti Structures Ltd., India), Oman's largest 132 kV Power Transmission Network comprising 9 Sub-stations
- 2001 • Secures 4 year Campaign Maintenance for PDO's Complete North and South Oman facilities
  - Registers Al Hassan Engg. Co. Dubai LLC
- 2002 • Secures major EPC contract for Saih Nihayada Gas Treatment Plant from PDO (JV with SNC Lavalin, Canada)
  - Secures Instrumentation Works for SCADA Installation Gas Pipeline System, LARGEST SCADA Project linking 2000 km of pipelines of Oman Gas Company
  - Secures EPC contract for 48" 265 km Gas Saih Nihayada-Sur Pipeline Project (JV with Punj Lloyd, India)
- 2003 • Registers Al Hassan Engg. Co. Abu Dhabi LLC
  - Secures EPC Contract for PDO Thulailat Water Injection Phase II Project



Completes PDO Mukhaizna Power Station (2008)



Secures Emergency Water Reservoir Project from PAEW (2011)

## 2004 - 2008

- 2004 • Secures EPC contract for Al Wasit - Al Ain Overhead Line Project, first Grid Interconnection Power Transmission project between UAE & Oman
- Secures Construction contract from GS E&C for Oman Polypropylene Plant at Sohar, the first Petrochemicals plant in Oman
- Secures EPC Contract for PDO Qarn Alam RO Plant
- Secures Contract for supply & fabrication of Well Head Kits & MSV Skids to PDO
- 2005 • Secures CEI & SMP works from Exterran for Shams Gas & Condensate Project
- 2006 • Secures MEI Works from Alstom for 1000 MW Captive Power Plant for Sohar Aluminum Smelter - the largest Power Plant in Oman
- 2008 • Secures EPC Contract for Nimr-C Full Field Water Injection Project from PDO
- Secures Civil Works from Hyundai Rotem JV for Haya Water's A'Seeb Sewage Treatment Plant, one of the largest STPs in Oman
- Obtains ASME "S" & "U" Stamps for fabrication of pressure vessels
- LTI Free completion of the year with 13.4 million man-hours and 12.8 million kms driven
- Completion of the largest Power Plant Projects for PDO (375 MW at Mukhaizna/Qarn Alam)

## 2009 - 2012

- 2009 • Secures EPC contract for Amal Power Plant, the first EPC contract awarded by PDO to a local company in Power Plant sector
- Secures EPC contract for PDO's Burhan Pipeline Project & completes it 4 months ahead of Schedule, well appreciated by PDO for the achievement
- Receives maiden order in Dubai for DEWA Sub-station Civil works from Siemens
- LTI Free completion of the year with 12.3 million man-hours and 14.6 million kms driven
- Achieves the latest ISO 9001:2008 Certification
- Successfully completes the two major Petrochemical Projects, viz., Sohar Aromatics Project & Salalah Methanol Project ahead of Schedule & gets GS E&C's special appreciation award.
- 2010 • Secures maiden order in Abu Dhabi for GASCO Asab-3 Civil works from Technip
- Secures EPC Contract for Long Term Power Supply Project from Occidental Mukhaizna
- Secures Civil & Building Works from GS E&C for Barka-3 IPP
- 2011 • Secures EPC Contract for PDO Zauliyah Depletion Compression Project - Phase III
- Achieves ISO 14001:2004 & OHSAS 18001:2007 Certifications for UAE Operations
- Secures Emergency Water Reservoir Project from PAEW
- 2012 • Achieves ISO 14001:2004 & OHSAS 18001:2007 certifications for Oman Operations
- Renews ASME "S" & "U" Stamps and obtains NBIC "R" Symbol
- Secures Amal HRSG-1 Project from PDO
- Secures Piping Works for GASCO NGL-4 Project from Petrofac-GS JV



## Awards

AHEC has won a number of awards for its ability to deliver safely projects on time and within budget, operational excellence, commercial success and continuous improvement.

*Some of the recent accolades include :*

**AW 01 : MEED Quality Awards for Projects - 2012**  
National Winner in Oil & Gas for PDO Nimr-C Full Field Water Injection Project and National Winner in Power for PDO Amal Power Station Project

**AW 02 : Construction Week Oman 2012 Awards**  
Two Executive Awards : Construction Executive of the Year and Project Manager of the Year

**AW 03 : MEED Quality Awards for Projects - 2011**  
National Winner in Oil & Gas for PDO Burhan-Harmal Gas Pipeline Project

**AW 04 : OER Top 20 Award for 2011, 2010, 2009, 2008 & 2006**  
for featuring in Top 20 Listed Companies on Muscat Securities Market

**AW 05 : Pan Arab Web Award for 2010**  
for the Best Corporate Website across 22 Nations

**AW 06 : The BEST Small Project for the Year for 2007 by Construction Week**  
for the PTTEP Shams Gas and Condensate Development Project

**AW 07 : The BEST Project Award for 2005 by Construction Week**  
for Saih Nihayda Gas Project, the largest Gas Processing facility in Oman

**AW 08 : The BEST Project Award for 2005 by PDO**  
for Saih Nihayda Gas Project, the largest Gas Processing facility in Oman

**AW 09 : Runners-Up Project Award for 2005 by PDO**  
for 48" dia 265 km long Gas Export Pipeline from Saih Nihayda to Sur

AHEC has also won a number of awards in recognition of its continuous HSE performance from industry associations, its clients and international EPC contractors.





Civil, Structural, Mechanical & Piping Works for Sohar Aromatics Project

## Achievements

AHEC has been associated with a number of significant achievements in Oman including:

**AC 01 : FIRST Petrochemical Plant- Oman Polypropylene Project, Sohar:**

Civil & Mechanical/Piping Works

**AC 02 : LARGEST Power Plant - 1000 MW Sohar Aluminum Smelter Plant:**

Mechanical, Electrical/Instrumentation Works for Complete Plant

**AC 03 : FIRST Aromatics Plant - Aromatics Oman LLC, Sohar:**

Civil, Structural, Mechanical & Piping Works

**AC 04 : FIRST Project interconnecting the Power Grids of Oman and UAE through the Al Wasit - Al Ain Overhead Line:**

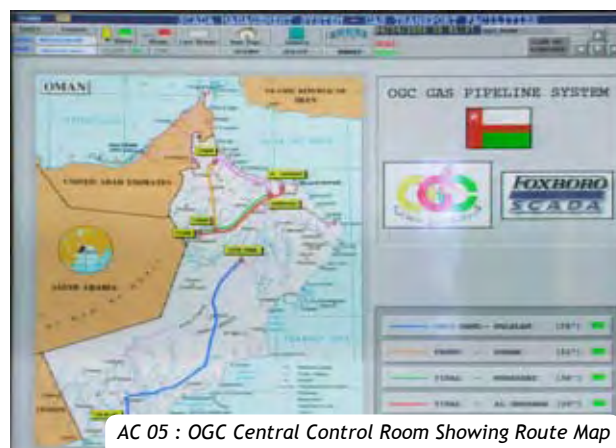
EPC Lumpsum Turnkey

**AC 05 : LARGEST SCADA Project linking 2000 km of pipelines of Oman Gas Company**

Installation of fibre optic network for data acquisition & supervisory control from Muscat

**AC 06 : LARGEST Power Plant Projects for Petroleum Development Oman (PDO) at Qarn Alam and Mukhaizna:**

Civil, Mechanical, Electrical & Instrumentation erection including part EPC



AC 05 : OGC Central Control Room Showing Route Map



## Registrations & Pre-qualifications

Al Hassan Engineering is registered and pre-qualified with all the key Ministries, local bodies and private organizations operating in Oil, Gas & Petrochemicals, Power, Water & Wastewater and Infrastructure sectors in Oman.

A representative list is given below:

- BP Oman
- Distribution Code Review Panel (DCRP)
- Haya Water
- Majis Industrial Services Co. SAOC
- Ministry of Commerce & Industry
- Ministry of Defence
- Ministry of Oil & Gas
- Muscat Municipality
- Occidental Mukhaizna
- Oman Chamber of Commerce and Industry
- Oman Electricity Transmission Company
- Oman Oil Refineries and Petroleum Industries Company (ORPIC)
- Oman Tourism Development Company (Omran)
- Petroleum Development Oman
- Public Authority for Electricity and Water (PAEW)
- Royal Court Affairs
- Royal Oman Police
- Tender Board





## Customers

AHEC has built an impressive list of customers across various sectors including Power, Oil and Gas, Petrochemicals, Water and Wastewater sectors.

Al Hassan Engineering has also won a number of appreciation letters from its customers.



# CAPABILITIES



Mr. Hassan bin Ali Salman, Chairman-AHEC receiving the Shield from Ms Abla Al Riyami, Gas Director-PDO on completion of 5 million safe man-hours for Saih Nihayada Depletion Compression Project

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Single Pour of 2500 m<sup>3</sup> in progress for 20,000 m<sup>3</sup> RCC OWS pond in Aromatics Oman, Sohar, completed in 10 hours



More than **5000**  
People from over **20**  
Nationalities

## Resources

### Manpower

With a 5000 strong, well-motivated multi-national work force, AHEC is one of the largest employers in private sector in Oman.

AHEC's workforce is well-trained, highly skilled and competent to meet the most demanding work requirements. The Engineers and Managers are

among the best in the industry with rich experience and knowledge.

One of the achievements in the Human Resources initiative of AHEC is its Omanisation Programme for which it has been awarded the Green Card facility. This enables AHEC in expeditious mobilization of large number of manpower for its various projects, in shortest possible time.



*New Batch of Omani Management Trainees with Top Management*



**1000<sup>+</sup> Fleet Valued  
at USD 50 million**

## Resources

### Plant & Equipment

One of the key attributes of any construction company is its ability to mobilize plant & construction equipment at short notice. AHEC has its own fleet of construction plant & equipment covering the full range of activities for CMEI works.

The extensive fleet includes :

#### Lifting Equipment

- Fleet of Cranes upto 200 Tons
- Pipe layers
- Fork Lifts
- Manlift Platform
- Hydra

#### Tankers

- Drinking Water Tankers
- Fuel Tankers
- Vacuum (Sewage) Tankers
- Brackish Water Tankers

#### Earth Moving Equipment

- Shovels
- Excavators
- Pole/Earth Rigs
- Backhole loaders
- Dumpers / Articulated Dumpers
- Graders
- Dozers
- Roller Compactors

#### Trailers

- Flat bed / Low bed / Box Trailers

#### Concreting Equipment

- Concrete Pumps
- Batching Plants
- Transit Mixers

#### Stationary Equipment

- Air Compressors
- Welding Generators
- Compactors
- Pumps
- Generators
- Lighting Towers



Side Boom Pipe Layer



Well Maintained Camp Facilities

## Resources

### Vehicles

- Buses
- Trucks
- Pick-Ups
- Cars
- Station Wagons
- Ambulances



Batching Plant

### Camp Facilities

Ever since AHEC commenced its operations, it has worked in remote areas far from towns and villages having demanding desert conditions. Over the years, AHEC has developed and honed its mobilization strategies such that now it is possible to set up camps at distant locations at very short notice. AHEC has well maintained camps in line with the best HSE practices with a primary objective of providing healthy living environment to its employees.

AHEC has been recognized for the quality of its camps by many of its customers.





HSE Shield for 10 million LTI Free manhours - Sohar Aromatics Project



HSE Shield for 6 million LTI Free manhours - Salalah Methanol Project



HSE Shield for 6 million LTI Free manhours - Sohar Aluminium Project



HSE Shield for 5 million LTI Free manhours - A'Seeb STP Project

## Health, Safety and Environment

AHEC gives paramount importance to Health, Safety and Environment (HSE) so as to keep our employees and work place safe as well as to strive to achieve world class standards in HSE.

Keeping this in mind, AHEC has started a number of HSE related initiatives :

- Safe Toolkit for Artisans
- Safety Week/Campaign
- Commuting Policy
- Name & Shame Scheme
- Best IVMS Driver
- Best Stop Card
- Mobile Medical Van with Doctor and Laboratory for periodic checkup of all employees

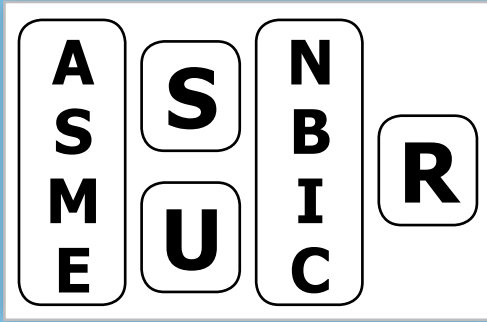
Quarterly Inspection of all installations is conducted along with monthly senior management meeting to review HSE performance. AHEC's senior management actively participates in JMFI (Joint Management Facility Inspections), HSE Audits & Inspections, Walkabouts & Campaigns. AHEC also conducts HSE related training courses which are stipulated by PDO and other clients.

AHEC has won a number of awards in recognition of its continuous excellent HSE performance from

industry associations, its clients and international EPC contractors. AHEC has also achieved certification to internationally recognized standards - ISO 14001:2004 for Environmental Management and OHSAS 18001:2007 for Occupational Health and Safety Management.







*Design Department Staff discussing Drawing*

## Quality

In acknowledgement of AHEC's commitment towards Quality, it has been accredited with the internationally-acclaimed Quality Management System certificate ISO 9001:2000 since 1996 and has achieved ISO 9001:2008 in 2009.

AHEC has a substantial library of method statements and welding procedures developed over a period of time as a result of the number of complex projects completed. Welding procedures include metals such as Carbon Steel, Alloy Steel, Stainless Steel, Duplex Stainless Steel, Aluminium, Incolloy, Titanium as well as non-metals such as GRP, GRE, HDPE, etc.

AHEC has also qualified its welding procedures for Submerged Arc Welding Process which enables substantial progress in its welding production rate.

AHEC has also secured the prestigious ASME "S" & "U" and NBIC "R" Stamps for Design, Fabrication and Repair of Boilers and Pressure Vessels at its Ghala, Muscat facility.

## Design

AHEC Design Department is staffed with a well-focused and dynamic technical professional workforce having cross-industry experience. Using state-of-the-art technology, AHEC provides end-to-end engineering solutions to various industries including Oil & Gas, Power and Water.

The Design Department provides engineering support for EPC projects right from tendering, through execution, testing to final commissioning.

The objective is to provide :

- Cost effective optimum design & engineering for the project
- Timely completion of Engineering to support project completion to schedule
- Value Engineering to optimize specification, functionality, operability and cost



Oil Inlet Manifolds



Surge Vessel



Multi-Selector Valve Skids



Air Receiver

## Fabrication

AHEC has a full fledged fabrication facility holding ASME “S” & “U” and NBIC “R” Stamps at Ghala, Muscat. This provides AHEC the opportunity of pre-fabricating a number of units in a controlled environment, thereby, saving “at site” construction time.

This facility has handled a number of complex equipment with a wide range of materials.

**The manufacturing capabilities of this facility include:**

- Pressure Vessels
- Oil Inlet Manifolds
- Multi-Selector Valve Skids
- Filters
- Small size Storage Tanks
- Pre-fabrication Assembly for Carbon Steel/ Stainless Steel Piping/DSS Piping/Alloy Steel Piping
- Heavy Wall Thick Piping
- Steel Structural Fabrication
- Well Pad Hook Up Kits
- Multi-Phase Metering Skids (Revamping)
- Shot blasting & Painting of all types / specifications

- Auto-blast machines & painting
- PDO approved DSS workshop for piping fabrication
- Boiler installation controlled from this facility

At Ghala, AHEC has a team comprising management & staff, skilled workers (including welders, piping & structural fitters, blasters and painters) and helpers.

**The major equipment at the facility includes:**

- Welding Machines
- Radial Drilling Machines
- Pipe Bending (Hydraulic)
- Beveling Machines
- Compressors
- Blasting Pots
- Airless Spray Pumps
- Electrode Baking / Holding Ovens
- Inspection and Testing Instruments for Welding and Painting
- Dead Weight Calibration Unit for Pressure Gauge
- Hydro Test Pumps to test upto 600 bar
- Automatic Welding Machine for DSS & CS
- PMI Machine
- Pipe Clamps (Internal & External)



*In-house team of dedicated SCM Professionals*



*Supervising Loading at Port*

## Supply Chain Management

The Supply Chain Management (SCM) function at AHEC is managed by experienced and committed multi-disciplinary engineering professionals involved in the procurement of quality products and systems at right price at the right time and from the right place.

The major functions for SCM are:

- Provision of pre-bid support to tender cell at bidding stage
- Procure materials and services cost effectively
- Procurement of Assets and optimum utilization
- Managing inventory of all types including project materials, Assets, Tools, Equipment, *etc.*
- Complete Logistics Management for material and services being sourced.

AHEC is committed to fair competition in the market place and the choice of suppliers for goods and services is based on the competitive conditions of quality, price, services and value offered to Al Hassan.

AHEC has an integrated database of over 500 vendors providing materials of different types such as Electrical/ Mechanical/Instrumentation equipment and bulk items along with Capital items, Tools & Tackle and consumables running into over 50,000 line items. AHEC being an ISO 9001:2008 certified company, has a structured approach

in placing orders, receiving and certifying materials and services and making timely payments to its suppliers for correct supplies made within the delivery schedule.

AHEC welcomes quality manufacturers of engineered items in Mechanical, Electrical, Process Control & Instrumentation products, equipment and services to register them as approved vendors through the submission of their Prequalification documents for full evaluation.

AHEC has expertise in the area of procuring exotic materials such as Duplex Stainless Steel (DSS), Inconel, Monel, GRE, *etc.*

AHEC has also executed many projects working closely with international EPC contractors including SNC Lavalin, Stone-Webster and BHEL. All these JV partners have relied heavily on Al Hassan's Supply Chain Management capabilities for getting the best material at competitive prices and matching the project delivery schedule even in remote desert locations.

AHEC Supply Chain department has been commended by clients for its efficient, effective and proactive support in the area of procurement of long-lead items.

# EXPERTISE



Civil Works for A'Seeb STP

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Installed more than 40% of Oman's Power Generation Capacity

MEI Works for 1000 MW Sohar Aluminium Power Plant

Oman's Leading EPC Contractor

Construction of Valve Pit in Progress



Beam Pump Installation - South Oman Mechanical Service Contract

## Services and Maintenance

### Services & Maintenance Contracts

AHEC has been the pioneer in Oman in the business of the Services & Maintenance contracts. AHEC has executed Services contract during 1991-2000 in PDO South Oman and Campaign Maintenance during 2001-2005 with PDO South & North covering Beam Pumps, Well Heads, ESP, Static Equipment, Rotating Equipment, Electricals, Instrumentation, etc. including shutdowns.

AHEC has executed many projects over the years covering up to 220 kV Sub-stations, OHL up to 220 kV, Switchyards up to 132 kV, and Power Stations in Oil & Gas and Power sectors within PDO & outside. In addition, AHEC has executed Electrical / Mechanical Tie-ins, Shutdowns, Electrical testing covering Controls & Relay panels.

AHEC credentials on Electrical / Mechanical shutdowns cover various projects such as Mukhaizana Power Station, Qarn Alam Power Station Phase II, Fahud - Lekhwair 132 kV OHL, Nimr-C Full Field

Water Injection Project, Burhan-Harmal Pipeline (33 kV with concrete poles). AHEC has complied with the PTW system as applicable during execution of Shutdowns, Tie-ins, etc. as a pre-requisite for Brown field activities.

AHEC has capability of up to 132 kV cable jointing with qualified & trained personnel available in-house. Further, AHEC has qualified, trained and dedicated staff including Engineers, Supervisors and Electrical Technicians to execute and support the activity.





## Oil, Gas & Petrochemicals

### Oil and Gas Facilities

AHEC provides EPC services for Oil and Gas production facilities comprising Process and Utility/offsite units, flow lines, pipelines, Overhead transmission lines. This requires handling of various types of equipment (pumps, compressors, heat exchangers, fin-fan coolers, flares, utility packages, etc.), piping & pipelines of various material grades (CS, SS, DSS, GRE, PE lined), Electrical Transformer & Switchgear Control & Relay Systems as well as SCADA System.

Independent of EPC, AHEC provides complete range of Construction / Erection services when working as pure sub-contractor.

#### Zauliyah Gas Compression Project - Phase III

**Customer:** Petroleum Development Oman

**Location:** Zauliyah, South Oman

**Project Duration:** 2011-13

**Project Synopsis:** EPC of Gas Compression station where the separated gas in Zauliyah Production Station is compressed and supplied to gas lift manifolds and conditioning of excess gas for export.

**Project Scope:** Engineering, Procurement and Complete Construction & Erection of facility including :

- Installation of Four Stage motor driven Centrifugal Gas lift Compressor of capacity 620 K sm<sup>3</sup>/d including all auxiliaries
- Supply and installation of 2 Nos. Gas Booster Compressors and Gas Conditioning Unit (GCU) of capacity 200 K sm<sup>3</sup>/d
- Supply and installation of scrubbers and coolers required for main Gas lift Compressor and Booster compressor
- Supply and Installation of 2 Nos. of NGL Transfer Pumps
- Installation of 2 Nos. of Instrument Air Packages
- Supply and installation of HVAC System
- Upgrade and/or expansion of electrical infrastructure and instrumentation system (MAC)
- Civil design and construction of Substation Building, and foundations

#### Saih Nihayda Depletion Compression Project

**Customer:** PDO/ GS Engg. & Construction, Korea

**Location:** Saih Nihayda, Central Oman

**Project Duration:** 2010-12

**Project Synopsis:** It's a Depletion Compression Facility for the existing Saih Nihayada Gas Processing Plant.

**Project Scope:** Civil & Building, Electrical & Instrumentation Works, Painting & Insulation and providing 132 kV Overhead line on an EPC basis.



An overview of PDO Kauther Plant - Kauther Depletion Compression Facility in Foreground

## Oil, Gas & Petrochemicals

### Kauther Gas Field Depletion Compression Project

**Customer:** PDO / Petrofac E&C

**Location:** Kauther, North Oman

**Project Duration:** 2009-12

**Project Synopsis :** Compression Facility to boost the depleting inlet gas pressure for subsequent processing

**Project Scope:** Complete Construction & Erection of facility including:

- Installation of compressors, separators and associated equipment
- Civil & Structural erection (upto max. height of 22 m)
- Complete Electrical, Instrumentation, Process Control System, telecom facility, etc.

The salient features of the Plant are :

- Construction of a large size Control Room & Substation measuring 126 m x 26 m coupled with huge size cellar underneath
- Being a Brown Field facility working within the operating Gas Plant warranting stringent safety conditions
- Carrying out automatic welding process for high wall thickness of DSS.

### Nimr-C Full Field Water Injection Facilities

**Customer:** Petroleum Development Oman

**Location:** Nimr, South Oman

**Project Duration:** 2008-11

**Project Synopsis:** EPC project comprising Bulk Fluid Separation & Water Injection Facilities. New facilities to process 55000 m<sup>3</sup>/day gross fluids, resulting in emulsion production of 7500 m<sup>3</sup>/day and produced water of 40000 m<sup>3</sup>/day. Plant was successfully commissioned in April 2011.

**Project Scope:** Construction of 2 Nos. double-walled tank (size 39m dia x 12.5m height) with GRE lining on the inner surfaces of tanks

- Piping works including DSS up to the size of 30", GRE & under ground piping, SS/CS piping
- Flare system, Blow down system, Emulsion & Water injection pumps
- Off-plot pipelines of sizes 6", 18", 24" and measuring total length of 36 km, incl. PE lining and Rotolining
- 5 Km of 33 kV OHL, Installation of GIS panels, Installation of 50 MVA transformers, DCS system

The Plant is designed for un-manned operation with all its signal & control system in place.



PDO Saih Nihayada Gas Treatment Plant (EPC)

## Oil, Gas & Petrochemicals

### Shams Gas and Condensate Development Project

**Customer:** PTTEP Oman / Exterran, U.S.A.

**Location:** Shams Gas Field - Block 44, Ibri, Oman

**Project Duration:** 2005-06

**Project Synopsis:** The plant has a processing facility to separate Gas & Condensate mixture with production capacity of 20,000 bpd of Condensate and 100 SCF Sweet Natural Gas per day.

**Project Scope:** Complete Civil & Structural, Electrical & Instrumentation, Mechanical & Piping works for the Central Processing Plant

Installation of 32 km of 12" Gas Pipeline and 107 km of Condensate Export Pipeline, on EPC basis

**Achievement:** It is first of its block development in Oman executed within a record period of 15 months.



Shams Gas and Condensate Processing Plant

### Saih Nihayada Gas Treatment Plant

**Customer:** Petroleum Development Oman

**JV Partner:** SNC Lavalin Inc., Canada

**Location:** Saih Nihayda, Central Oman

**Project Duration:** 2002-05

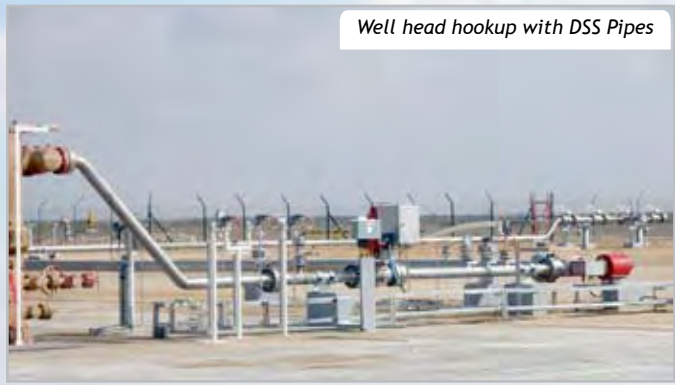
**Project Synopsis:** Gas condensate separation facility with production capacity of 20 million m<sup>3</sup> of natural gas per day and 10,000 m<sup>3</sup> of condensate per day.

**Project Scope:** The entire Green Field facility was executed on EPC basis with the JV partner and mainly involved:

- Various critical equipment (Separators, Compressors, Columns, Heat Exchangers)
- Plant Piping upto 20" Dia DSS (30,000 Inch Dia), Piping upto 24" Dia CS/AS (50,000 Inch Dia)
- Excavation and Laying of 6", 8" & 10" of Flow Lines (total 45 Km)
- DB/Panels, Blastproof Building, Erection of Structural Steel and Rack (1500 MT), Telecommunication facility
- Pre-Commissioning as well as Commissioning & testing, Operation and Maintenance for one year

**Award:** Best Project of the Year by PDO for 2005.





Remote Manifold Station at Burhan West - Harmal Pipeline Project (EPC)

## Oil, Gas & Petrochemicals

### Pipelines

AHEC has rich experience in executing all types of pipelines and flowlines in various material such as CS, SS, DSS, GRE, HDPE, Lined pipe, Titanium, Alloy Steel, etc.

#### Burhan West - Harmal Pipeline

**Customer:** Petroleum Development Oman

**Location:** Burhan West and Harmal

**Project Duration:** 2009-10

**Project synopsis:** Collection of Natural gas from wells and transport upto Saih Nihayada processing facility

**Project Scope:** EPC execution of flowlines & pipelines in DSS at both locations (45 km at Burhan West and 16 km at Harmal). Installing Fibre Optic Cables along the Pipelines, 55 km of 33 kV Overhead Lines on concrete poles, temporary and permanent Cathodic Protection System

**Achievement:** Being a project of national importance, the project was completed 4 months ahead of contractual schedule without a single lost time incident (LTI).

#### Additional flowlines and associated facilities

**Customer:** Petroleum Development Oman

**Location:** Saih Nihayda, Saih Rawl and Bariq, Oman

**Project Duration :** 2006-07

**Project Scope:** Construction of 4 X 10" DSS Bulk Lines, 11 X 8" DSS Flowlines and CMEI Works for Terminals, Well Heads and Midline Tie-ins.

**Achievement:** Completion of the project in record time of 560 days without a single LTI.

#### Gas Export Capacity Increase Pipeline

**Customer:** Petroleum Development Oman

**JV Partner:** Punj Lloyd, India

**Location :** Saih Nihayda to Sur

**Project Duration:** 2002-05

**Project Synopsis:** Transportation of Natural Gas upto Sur for converting into LNG for export.

**Project Scope:** EPC execution with JV partner of 265 km of 48" Gas Pipelines, incl. 8 Block Valve Stations to transport Natural Gas from Saih Nihayda to LNG Plant at Qalhat, near Sur.

**Award :** 2<sup>nd</sup> Best Project of the Year by PDO in year 2005.



Overview of Utility Area - Salah Methanol Project

## Oil, Gas & Petrochemicals

### Petrochemicals

AHEC's expertise includes Civil, Mechanical, Piping, Electrical & Instrumentation Construction Works for Petrochemical Projects involving:

- Heavy Concreting and De-watering works, incl. foundations for Static and Rotary Equipment
- Erection of equipment such as Fired Heaters, Boilers, Reactors, Columns and other process plant equipment
- Piping erection handling various types of materials such as Stainless Steel, Duplex Stainless Steel, High Nickel Chromium Steel, Titanium, Aluminum, Alloy Steel, HDPE, etc.

#### Salah Methanol Project

**Customer:** Salah Methanol Co. LLC/ GS Engineering & Construction, Korea

**Location:** Salah, Oman

**Project Duration:** 2007-09

**Project Synopsis:** 3000 Metric Tonnes per day Gas based Methanol plant on Grass-root basis. Plant was commissioned in early 2010.

**Project Scope:** Complete Civil, Structural, Mechanical & Piping erection work for the Utilities & Offsites for the plant. The salient features of the project include:

- Construction of Storm Water Tank (size 82m x 41m x 6m) in RCC leak proof construction, Fire

water pond (size 60m x 60m x 3m) with leak proof HDPE lining. Total concreting work of approx. 50,000 m<sup>3</sup>

- Erection of 3000 MT of equipment (Boilers, ETP, STP, N<sub>2</sub> Plant, Steam turbine Generators, Desalination plant, Mix-Bed packages, Flare system)
- 150,000 inch dia of piping works in various materials, incl. fire-water network for the entire plant
- GRE piping works up to the size of 56" ( 50,000 inch. Dia), on-shore construction of sea-water intake and return with out-fall structure, loading facilities at the port end

#### Sohar Aromatics Project

**Customer:** Aromatics Oman LLC / GS E&C, Korea

**Location:** Sohar Industrial Area, Oman

**Project Duration:** 2007-09

**Project Synopsis:** Petrochemical complex for the production of Aromatics, viz., 819,000 tpa of Paraxylene (PX) and 210,000 tpa of Benzene (BZ). It has gone into commercial production in Feb. 2010.

**Project Scope:** AHEC's scope of Construction / Erection work comprised :

- Civil Works for Utility, Flare and Tankage Area
- Mechanical Works comprising Structural Erection, Mechanical Equipment Erection and Piping for Utility and Flare Area



Overview of Sohar Aromatics Project

## Oil, Gas & Petrochemicals

- Painting Works for Reformer and Utility Area
  - Site office and camp establishment for client
- Achievement:** Biggest Single Concrete Pour of 2600 m<sup>3</sup> for underground tank in 16 hours non-stop operation

### Oman Polypropylene Project

**Customer:** Oman Polypropylene LLC / GS E & C, Korea

**Location:** Sohar Industrial Area, Oman

**Project Duration:** 2004-05

**Project Synopsis:** First ever Petrochemical Plant in Oman producing 340,000 MT per year of International

Grade Polypropylene.

**Project Scope:** As a major construction contractor, AHEC's scope included Civil, Structural, Mechanical, Piping and Instrumentation works for the process plant and offsite facilities

**Achievements:** Biggest Single Concrete Pour (1400 m<sup>3</sup>) for casting a Concrete Slab of thickness 1200 mm at a height of 27 m

Heavy Equipment Erection at a height of 43 m using 1200 T Crane - the first of its kind in Oman



Civil, Structural, Mechanical & Piping Works for Oman Polypropylene Project



MEI Works for Sohar Aluminium 1000 MW Combined Cycle Power Plant

## Power

### Power Plants

#### AHEC's expertise in Power Plants include :

- Construction of Open & Combined Cycle Power Plants
- Assembly and Installation of Heat Recovery Steam Generators, Boilers and Condensers
- Erection of Balance of Plant (BoP) Equipment

#### 2 x 126 MW Amal Power Station

**Customer:** Petroleum Development Oman

**Location:** Amal, South Oman

**Project Duration:** 2009-12

**Project Synopsis:** Amal Power Plant is modular construction with the installed capacity of 252 MW. The power plant is designed with a unitized concept to ensure any equipment failures associated with one train does not cause any adverse effect on the other train. Further, the Power Plant is designed for unmanned operation and under the normal operation will be remotely controlled by SCADA and remotely monitored from Master Control Room.

**Project Scope:** EPC execution of complete Power plant (Gas Turbines as free issue) and associated

facilities comprising DM and Service Water System, Emergency Diesel Generator, Unit Electrical Buildings, Gas Treatment Plant Control Buildings, 100 km of 132 kV OHL using ELM and Oryx conductors, HVAC System, Internal & External Communication system, Fire detection & Alarm System, 142 MVA and Auxiliary Transformers, Instrument Air System, DC & AC UPS system. The Scope also includes the pre-commissioning and commissioning of Power Plant.

#### 1000 MW Combined Cycle Power Plant

**Customer:** Sohar Aluminium Co. Oman/Alstom, France

**Location:** Sohar Industrial Area, Oman

**Project Duration:** 2006-09

**Project Synopsis:** Captive power plant to meet the power demand for the first ever Aluminum smelter in Oman owned by Sohar Aluminum Company. This power plant is the largest ever greenfield power project in Oman as on date.

**Project Scope:** Mechanical, Electrical & Instrumentation installation works for Combined Cycle Power Plant consisting of 4 X 165 MW Gas Turbines, 4 Nos. Heat Recovery Steam Generators, 2 X 250 MW Steam Turbines and Balance of Plant facilities.



HRSO Erection Works for Occidental Mukhaizana



Construction Works for 1 X 120 MW Open Cycle Power Plant (Qarn Alam -2)

## Power

### 2 x 25 MW Heat Recovery Steam Generators

**Customer:** Occidental Oman/Gulf Steam Generators

**Location:** Mukhaizana, South Oman

**Project Duration:** 2008-09

**Project Synopsis:** To meet steam requirements for steam injection plant for Enhanced Oil Recovery

**Project Scope:** Assembly and Erection of 2 nos. Once Through Heat Recovery Steam Generators (HRSO) at Mukhaizna. This is horizontal Once Through type HRSO, producing wet steam and forms an integral part of the existing Power Plant.

**Achievement:** This is a first-of-a-kind facility established for steam injection projects in the region.

### 1 X 120 MW Open Cycle Power Plant (Qarn Alam -2)

**Customer:** PDO / BHEL, India

**Location:** Qarn Alam, North Oman

**Project Duration:** 2005-08

**Project Synopsis:** Captive Power Plant to meet the increased demand of electric power in the region.

**Project Scope:** AHEC scope as a main sub-contractor comprised :

- Civil, Structural, Mechanical, Electrical and Instrumentation Works for the Power Plant and Fuel Gas Treatment Plant
- EPC execution of BoP facilities including 130 km of 132 kV transmission OHL

### 2 X 120 MW Open Cycle Power Plant

**Customer:** PDO / BHEL, India

**Location:** Mukhaizana, South Oman

**Project Duration:** 2005-08

**Project Synopsis:** Captive Power Plant to meet the increased demand of electric power in the region. This is the largest and one of the most sophisticated power plants in the entire PDO infrastructure.

**Project Scope:** AHEC scope as a main sub-contractor comprised :

- Civil, Structural, Mechanical, Electrical & Instrumentation works for the Power Plant and Fuel Gas Treatment Plant
- EPC execution of BoP facilities including 18" X 31 km of Off-Plot Fuel Gas Pipeline, 250 km of 132 kV transmission OHL and 132 kV Switchyard



Al Wasit-220kV GIS Building



Powerline Interconnection between Oman and UAE

## Power

### Electrical Substations and Transmission Lines

AHEC's expertise in Electrical Substations and Transmission Lines includes :

- Turnkey Installation of Main Transmission Sub-stations (upto 220 kV)
- 220/132/33 kV Sub-stations with advanced Sub-station Control Systems
- 220/132/33 kV Overhead Transmission Lines
- HV/LV Distribution Systems
- Installation and Commissioning of SCADA, Field Instruments, DCS & Field Bus Control System

#### Long term Power Supply (LTPS) Project

**Customer:** Occidental Mukhaizna

**Location:** Block 53, Mukhaizna, Central Oman

**Project Duration:** 2010-2012

**Project Synopsis:** Occidental Mukhaizna LLC (Oxy) is the operator of Block 53 producing mainly the crude. Oxy has embarked on expansion of this facility. The LTPS Project will meet Oxy's increased demand for Power for its Mukhaizna production facility.

**Project Scope:** This brownfield EPC project includes 132/33kV substation, 3 Nos. 33/11 kV substations,

33/11 kV transformers and 33kV interconnectors, incorporation of additional equipment in existing substations and cabling.

#### Powerline Interconnection between Oman & UAE

**Customer:** Oman Electricity Transmission Company

**Location:** Al-Buraimi, Oman

**Project Duration:** 2004-05

**Project Synopsis:** This is a grid interconnection facility between Oman & UAE for transfer of excess power to either side.

**Project Scope:** EPC execution of 220 kV substation comprising :



220kV Gas Insulated Switchgear



Outdoor Switchyard - North Oman Power Transmission Project

## Power

- 220 kV Gas Insulated Indoor Sub-Station, 132 kV Outdoor Sub-Station, 33 kV Outdoor Sub-Station
- 2X125 MVA 132/33kV Transformer, 2 X 315 MVA 220/132/33 kV Auto Transformers
- 50 km of 220 kV OHL
- Associated Control, Protection and Telecommunication System

**Achievement:** This is the First Project of its kind interconnecting Power Grids of Oman and UAE

### 132kV Overhead Transmission Line

**Customer:** Petroleum Development Oman

**Location:** Fahud - Lekhwair, North Oman

**Project Duration:** 2004-05

**Project Synopsis:** Interconnection facility for Power Transmission between two PDO sites

**Project Scope:** EPC execution comprising :

- Extension of 2 X 132 kV Sub-Station
- Modification of SCADA and PRDAS System at Yibal Control Room
- 3.2 km 33 kV Cabling
- 150 Km (Fahud - Lekhwair) 132 kV OHL of Single ELM Conductor on Wooden Poles

### 132 kV North Oman Power Transmission Project

**Customer:** Ministry of Housing, Electricity and Water, Oman

**JV Partner:** Jyoti Structure Ltd., India

**Locations:** Sur, Izki, Mudhaibi, Mudharib, Al Kamil, B. B. Ali, B.B. Hassan

**Project Duration :** 2000-02

**Project Synopsis:** Largest Power Transmission & Distribution Project of Oman connecting Grid Substations of North Oman.

**Project Scope:** EPC project comprising :

- 310 km of 132 kV OHL
- 5 X 132/33/11kV Grid Sub-station, 3 X 33/11kV Primary Sub-station
- 6 X 125 MVA + 2 X 63 MVA + 14 X 20 MVA Transformers, 11.5 MVAR Capacitor Bank and Modification of 132/33kV Sub-station



Civil & Building Works - Staff Accommodation Building Project



Civil and Building Works for Barka - 3 IPP (in progress)

## Civil & Water

### Civil & Building Works

AHEC's expertise in Civil & Building Works include :

- Industrial Projects and Infrastructure Projects such as Roads, Bridges and Flyovers
- Residential / Commercial Buildings
- Supply of Ready Mix Concrete

#### Barka-3 Independent Power Project (IPP)

**Customer:** GS E&C, Korea

**Location:** Barka, Oman

**Project Duration:** 2010-2012

**Project Synopsis:** As part of Oman Govt. 's drive to meet the increasing demand of power supply in the region during 2009 - 2015, Oman Govt. conceptualized the construction of Barka-3 Independent Power Plant in 2010.

**Project Scope:** AHEC's scope for Civil & Structural steel Erection work includes:

- 2 Nos. Gas Turbine units and associated transformers works
- 2 Nos. HRSGs
- 1 No. Steam Turbine unit & associated transformer works
- 1 No. Main Electrical Sub-station with transformer foundations & Fire walls

- 1 No. Administration/ Control Building & Hypo Chlorination Building
  - 5 Nos. Water tanks & 2 Nos. Fuel tanks along with development of surrounding dyke walls & pipe sleepers
  - Various utility Shelters, *i.e.*, Air/ Gas Compressors, CCW Pump, GCB, Fire Foam Station, Fuel oil loading/ unloading, Fire Fighting, *etc.*
  - Construction of mini water & wastewater treatment Plant
  - Pipe-racks, Pipe bridges, Pipe sleepers, Pipe trenches, Duct Banks, Cable trenches, Drain Network inside plant and other miscellaneous works.
  - Structural Steel Erection @ 2500 MT, Cladding works for Equipment shelters & Pipe racks
  - Access Roads, Plant Roads & Plant Security Fencing
- The above scope comprises Earth Work / Concrete Works for Equipment /Pipe Rack/ Pipe Sleeper Foundations, Building & Building Finishing works, *etc.*

#### Staff Accommodation Building Project

**Location :** Al Wadi Al Kabir, Muscat

**Project Duration :** 2009-10

**Project Synopsis:** Residential Building with all modern amenities

**Project Scope :** Execution of Residential Building on EPC basis inclusive of Concrete work, Block Work & Plastering work, MEP Work, Painting, Furnishing, Lift, Waterproofing, *etc.*

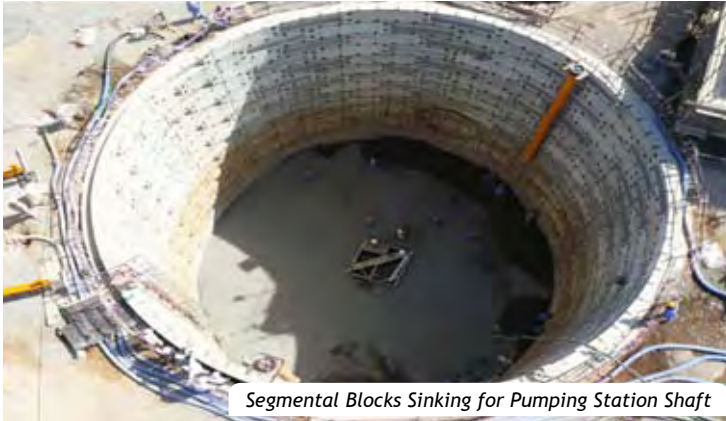




Overview of A'seeb STP (Rendered Drawing)



PEB Structure Erection



Segmental Blocks Sinking for Pumping Station Shaft



Seawater Pumping System for Majis Industrial Services (EPC)

## Civil & Water

### Water & Wastewater

AHEC's expertise in Water & Wastewater Sectors includes Construction and Maintenance of :

- Desalination Plants
- Water Treatment Plants
- Sewage Treatment Plants
- Water Reservoirs / Infrastructure

#### Sewage Treatment Plant

**Customer:** Haya Water / Hyundai Rotem, Korea

**Location:** A'Seeb, Oman

**Project Duration:** 2008-12

**Project Synopsis :** A'Seeb Wastewater Project is one of the many projects being set up by Haya Water in Muscat Governorate and it consists of collection & treatment of domestic sewerage and reuse of Treated Effluent for Horticulture purpose. The treatment plant includes construction of Main Pumping Stations (3 Nos.) and a Sewage Treatment Plant of maximum capacity of 80,000 m<sup>3</sup>/day.

**Project Scope:** As part of EPC contract, AHEC's scope includes complete Civil & Structural work for setting up following structures:

- Main STP Plant
- 3 Nos. of Pumping Stations with Segmental Shaft Construction method (first time constructed in Oman)
- 2 Nos. of Treated Effluent Storage Tanks
- 3.5 km long Onshore Sea Water Outfall (HDPE) Pipeline

#### Seawater Pumping System for Common Cooling Water System

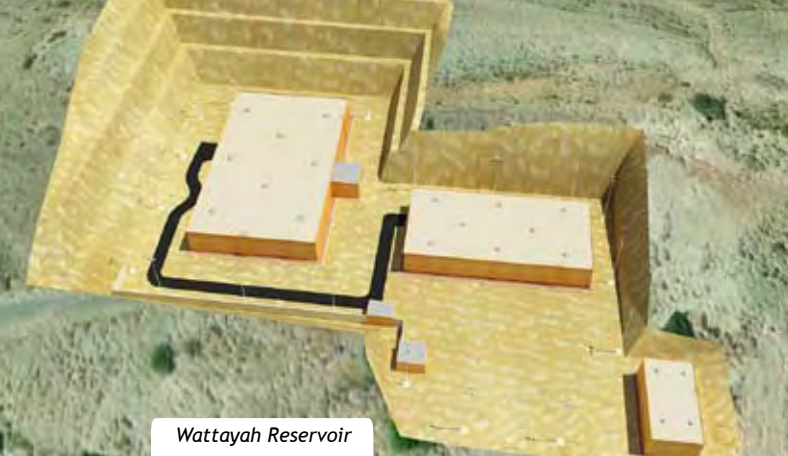
**Customer:** Majis Industrial Services SAOC

**Location:** Sohar, Oman

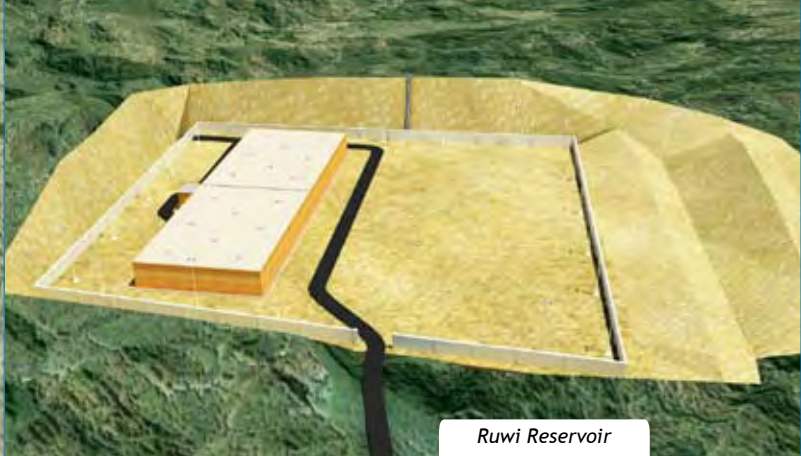
**Project Duration:** 2007-09

**Project Synopsis:** The common sea water cooling system caters to increasing demand of cooling water to the industries set up inside Sohar industrial Port Area.

**Project Scope:** Design, Supply and Installation of 3 Nos. Vertical Turbine Pumps along with a Common Manifold with associated Electrical, Mechanical & Instrumentation Works and Operations & Maintenance of the Common Cooling Water System. The project was executed on EPC basis.



Wattayah Reservoir



Ruwi Reservoir



Wadikabir Reservoir



RO Plant for PDO (EPC)

## Civil & Water

### Emergency Water Storage Reservoirs Phase-1

**Customer:** Public Authority for Electricity and Water (PAEW)

**Location:** Muscat, Oman

**Project Duration:** 2012-14

**Project Synopsis:** PAEW is overseeing the development of a network of a dozen emergency storage reservoirs at strategic sites all around the Muscat capital region. This backup network will be automatically deployed in the event of a supply crisis or a technical breakdown in the Muscat Water Supply Scheme.

**Project Scope:** Engineering, Procurement and Construction of Reinforced Concrete covered Emergency Water Storage Reservoirs of different sizes / capacities as follows:

- Ruwi - 1 x 25,000 m<sup>3</sup>
- Al Wadi Al Kabir - 2 x 15,000 m<sup>3</sup>
- Al Wattayah - 1 x 15,000 m<sup>3</sup>
- Al Qurm - 2 x 73,000 m<sup>3</sup>
- Road Accesses, Boundary Wall and gates and Guard House at specific locations
- Tanker Filling Stations, Inlet & outlet chambers, pipelines and works on emergency site

- Drainage pipeline, Connection with transmission line and connection to existing distribution line from existing reservoirs
- Connection, Motorised valve and flow meter chambers
- Integration of the proposed SCADA system with the existing SCADA System (with Bawsher Centralised Control Room)
- Transmission main from Mumtaz water tower to Mumtaz Emergency Water Storage Reservoirs
- Power Supply for reservoir compounds and tanker filling compounds

### Reverse Osmosis Plant

**Customer:** Petroleum Development Oman

**Location:** Qarn Alam, North Oman

**Project Duration:** 2004-05

**Project Synopsis:** To meet potable water demand in the region

**Project Scope:** EPC execution of Brackish Water RO Desalination Plant (3 units) each of 500 m<sup>3</sup>/day capacity inclusive of RO Plants, DM water storage, and supply pipeline (10" dia x16 km long GRE pipeline)



## International Presence - UAE Operations

After successfully establishing itself as one of the major players in the Contracting Business in Oman, Al Hassan Engineering has now established its foothold in UAE, where it has registered offices in Dubai, Abu Dhabi and Fujairah.

### Al Hassan Engineering Co. Dubai LLC

Al Hassan Engineering Company Dubai LLC, a subsidiary of AHEC is operating in Dubai and Northern Emirates since 2001, and holds the legal registrations with Dubai Chamber of Commerce and Industry and Dubai Planning Departments in addition to the pre-qualifications with the potential customers operating within its geographical arena.

### Al Hassan Engineering Co. Abu Dhabi LLC

Al Hassan Engineering Company Abu Dhabi LLC (AHEC - AUH), a subsidiary of AHEC, is operating in Abu Dhabi Emirates since 2003 and holds all the legal registrations and qualifications required to undertake its businesses in the Oil and Gas and Power sectors.

### Al Hassan Engg. Co. Abu Dhabi (Fujairah Branch)

To cater to the booming Oil and Gas and Power Sectors in Fujairah Emirates, AHEC-AUH has expanded its operations to include Fujairah Emirates, by establishing a branch office taking the advantage

of its existing registrations and qualifications with ADNOC Group of Companies and ADWEA, to meet the client's legal and technical requirements.

### Pre-qualifications

The UAE Operations has successfully pre-qualified itself with ADNOC Group of Companies and the main Utilities in UAE. These qualifications enable AHEC-UAE Operations to bid for the various construction packages of the major Oil and Gas and Power sector projects.

### Quality

AHEC-UAE Operations is committed to provide Quality Solutions to its clients throughout the project life cycle. Its quality system is accredited to ISO 9001:2008.

### HSE

AHEC-UAE Operations is committed to providing a safe, healthy and positive working environment for all its employees and those under its care. The UAE operations are certified to ISO 14001:2004 and OHSAS 18001:2007.





Civil & Building Works - Control and SCADA Building of Dubai Land II- 400/132 kV Substation

## UAE Projects Portfolio

### Dubai Land II 400/132 kV Substation

**Customer:** Dubai Electricity & Water Authority (DEWA) / Siemens LLC

**Location:** Dubai, UAE

**Project Duration:** 2009-10

**Project Synopsis:** The substation forms part of DEWA's extensive power network for supply of Power to various areas.

**Project Scope:** Civil & Building works for self sufficient substation comprising :

- Site Preparation, Control and SCADA Building, 400 & 132 kV GIS Building
- Power Transformer Compounds, Reactor Compounds, Aux. Transformer and RMU Rooms
- Oil/Water Collection Tanks, Fire Pump Houses
- Small Power & Lighting Works, Cable Trenches, Cable Ducting, Pipe Trenches
- External Works (Roads, Paving, Boundary Walls, etc.)
- Water supply and Storage Systems & Sewerage system with septic tanks and soak away pits

### New Sewage Treatment Network

**Customer:** Abu Dhabi Gas Industries Ltd. (GASCO)

**Location:** Buhasa Plant, Abu Dhabi

**Project Duration :** 2011-2013

**Project Synopsis:** The Buhasa Plant is located on the coast of the Arabian Gulf approximately 200 km west

of Abu Dhabi city. This project is for upgrading all the existing sewerage collection system in Buhasa plant and the connection of the existing sewage network to the Masjid and the Lean Gas Station.

**Project Scope:** Engineering, Procurement, Construction, Installation and Commissioning Works Services for the Rehabilitation and Upgrade of the Existing Sewerage Network Plant Facilities of Buhasa Plant including all Civil, Piping, Mechanical and Electrical Works.

### GASCO Asab 3 (A3) Project

**Customer:** GASCO /Technip, Abu Dhabi

**Location:** Asab Oil Field, Abu Dhabi

**Project Duration:** 2010-2012

**Project Synopsis:** As part of GASCO's upgradation plans, a new Central Degassing Station (CDS) at Asab is being set up to support future increased oil production from nearby areas, viz., Asab, Sahil, and Shah oil fields. GASCO also intends to make modifications to its Gas Compression and NGL Separation Unit Asab-0 and divert part of the rich gas to Asab 1/2 (Gas Injection and New NGL Unit).

**Project Scope:** AHEC's scope for Civil & Building work includes:

- 2 Nos. Substation Buildings & 2 Nos. Operator Shelters at Asab 3 (A3) Gas Compression Station &



Civil & Building Works - GASCO Asab 3 Project

## UAE Projects Portfolio

NGL Separation Asab-0 Unit complete with internal/ external finishing, roofing, doors & windows, HVAC system, Hot & Cold water supply system, Electrical/ Instrumentation and telecommunication facility

- Earth Work & Concrete Works for Equipment/ Pipe Rack Foundations, Earth Basins
- Access Roads, Plant Roads & Yards
- Sewer Systems, Underground Pressure Piping Systems
- Civil Works related to Electrical & Instrumentation work and Fire proofing works

### Shuweihat 3 400 kV Gridstation of Shuweihat Independent Power Project

**Customer:** Siemens LLC

**Location:** Abudhabi (Shuweihat), UAE

**Project Duration:** 2011-2012

**Project Synopsis:** 430 KV Grid station (Distribution and Power Supply Outlet for Shuweihat S2 Thermal Power Plant)

**Project Scope:**

- Site Preparation, 430 kV GIS Building
- Building and Architectural Work (Aesthetic Completion of Grid Station)
- Main Control Room Building Work, Structural Work for Power Supply Panels
- Aux. Transformer and LV/HV Control Room Unit
- Oil Collection tanks, Fire Pump Houses
- Cable Trenches, Cable Ducting, Pipe Trenches
- External Works (Roads, Paving, Boundary Walls, etc.)
- External Landscaping including approach road and internal road for vehicle movement
- Gantry Girders Area for Transformer and Equipment Maintenance Building



Civil & Building Works - Shuweihat 3 400 kV Gridstation

Partner of choice for Project Execution



## Corporate Social Responsibility (CSR)

Success is never complete without the goodwill of the community. As expected of a company of its stature, AHEC has gone out of its way to make the concept of Corporate Social Responsibility (CSR) an integral part of its day-to-day activities.

Our efforts to enhance the lives of the local community start at the project site, with our recruitment and training members of the local community, empowering them with specialised skills and improving their employment potential.

To safeguard the lives of the local people, AHEC regularly conducts traffic awareness and community safety training.

Leveraging on its construction expertise, AHEC take it upon ourselves to improve the local infrastructure, by repairing existing amenities from roads to drainage systems, and building new facilities for water, electricity and other necessities.

AHEC also conducts health and environmental awareness programmes for the local community to adopt good health and hygiene practices.



*Locals from nearby Amal Project site hired by AHEC*



*Construction of Bus Stop at PDO Nimr-C Project*

# PROJECT REFERENCES

## Services & Maintenance

- PDO Campaign Maintenance Contract - North Oman
- PDO Campaign Maintenance Contract - South Oman
- PDO South Oman MEI Services Contract
- PDO South Oman CMEI Services Contract

## Oil & Gas Facilities

- Piping Works for GASCO NGL-4 Project
- PDO Zauliyah Gas Compression Project - Phase III (EPC)
- PDO Saih Nihayada Depletion Compression Project
- PDO Kauther Gas Field Depletion Compression Project
- PDO Nimr-C Full Field Water Injection Project (EPC)
- PTTEP Shams Gas & Condensate Project
- PDO Saih Nihayda Gas Treatment Plant & Associated Facilities
- PDO Mukhaizna Facilities Construction of new production facility of 15,000 bpd
- PDO Nimr Deep Water Disposal Plants and NRPS (EPC)
- Additional Booster Pumps & Water De-Oiling Facility
- New FWKO Tank Facilities at PDO Marmul Production Station
- PDO Sadad Upgrade (EPC)
- PDO MAF Firepran CME&I Construction (Partially EPC)
- Extensions to PDO Nimr A&B Gathering Stations
- PDO Saih Rawl Water Disposal (EPC)
- PDO Yibal Water Injection & D-Station Extension
- PDO Yibal Khuff Gas Handling Facilities
- PDO Net Gas Hydro-Carbon Recovery System Turnkey Project at Mina Al Fahal
- PDO Hasirah Gas Lift Facilities
- PDO Marmul Gathering Station & Dewatering Facilities Extension
- PDO MPS Water Disposal Project

## Petrochemicals

- Offsites & Utilities Package for Salalah Methanol Project
- Civil Work for Utility & Tankage/ Flare & Mechanical/ Piping Works for Utility Area for Sohar Aromatics Project
- Temporary Facilities, Civil and Mechanical Works for Oman Polypropylene Project

## Pipelines

- PDO Burhan West and Harmal Pipelines Project (EPC)
- Additional Flow lines
- PDO Saih Nihayda to Sur 48" Gas Pipeline
- PDO Thulailat Water Injection Phase II
- SCADA Installation Oman Gas Pipeline System (over 2000 Km)
- PDO Thulailat 14" and 10" GNR Pipeline Construction
- Construction of two 14" GRE Pipeline at PDO Thulailat North & South
- Oman Gas Co. Barka Spurline & Pressure Reducing Terminal 24" dia - 10 Km
- Construction of PDO Saih Nihayda - Saih Rawl Gas Pipeline
- PDO Fahud Natih Pipelines
- PDO Mukhaizna Phase-1B Header Construction of 18", 12", 8" & 6" Pipeline
- PDO Lekhwair Debottlenecking Projects
- PDO Mukhaizna Pipeline Construction from Sadad to Mukhaizna Class I underground Pipelines
- PDO Amin to Karim West to NRPS and NRPS Oil Export Replacement Pipeline
- PDO Yibal-Al Huwaisah GRE Pipeline
- PDO Qaharir - Thuleilat Pipeline
- PDO Yibal Flow Line Rerouting and Manifold Hook-up

## Power Plants

- PDO Amal HRSG-1 Project (EPC)
- 2 x 126 MW PDO Amal Power Station (EPC)
- 2 x 25 MW ORPC Cogeneration Plant
- Once Through HRSG at Occidental Mukhaizna Facility
- CMEI and HRSG Erection work for 1000 MW Captive Power Project of Sohar Aluminium Plant
- 1 x 130 MW PDO Qarn Alam Power Station - Phase II
- 2 x 130 MW PDO Mukhaizna Power Station
- 2 x 70 MW PDO Qarn Alam Power Station - Phase I
- 427 MW Barka Power and Desalination Plant - Phase I
- 3 x 30 MW PDO Hubara Power Station
- 2 x 30 MW PDO Saih Rawl Integrated Power Station with Waste Heat Recovery

## Substations & Transmission Lines

- Long Term Power Supply Project for Occidental Mukhaizna (EPC)
- 132 kV North Oman Power Transmission Project
- PDO Lekhwair to Fahud 132 kV Overhead Line
- MHEW Powerline Connection between Oman (Al Wasit) and UAE (Al Ain) and Associated Substations
- 33 kV OHL from Mudhaibi S/S to Samad Al Shan S/S in Sharqiyah Region for MHEW
- Supply & Installation of 11kV Indoor Type Switchgear and Associated Equipment at Sohar Grid S/S for MHEW
- 33 kV OH Powerline installation for Sadad & Nimr for PDO
- PDO Yibal Power House 33 kV Primary S/S
- PDO Barik Electrical Upgrade Project
- Qalhat Housing Complex Primary Sub station for Qalhat LNG
- Expansion of MHEW Darsait Sub station
- Extension of MHEW 132/33 kV Al Wasit Sub Station
- Reinforcement of Dhahirah Region 132 kV Transmission System for MHEW
- PDO Burhaan Electrification
- 22 kV Lines from Madinat Qaboos to 33/11 kV Al Ansaab S/S
- PDO Amin 33 kV OHL
- PDO 132/33 kV Amin Sub-Station
- Electrification of PDO Sahma Booster Station and Royal Oman Police Compound
- 33 kV Switchgear & OHL at Rima and Sadad for PDO (EPC)

## Civil & Building Works

- 400 kV Substation for Shuweihat 3 IPP
- Barka-3 IPP
- GASCO Asab-3 Project
- DEWA Dubailand-2 400 kV Substation
- Al Hassan Staff Accommodation Building Project
- Barka Power & Desalination Plant Access Road & Embankment
- Construction of Permanent Industrial & Residential Facilities for PDO - Nimr, Bahja, Rima and Marmul

## Water & Wastewater

- PAEW Emergency Water Storage Reservoirs Phase-1 (EPC)
- GASCO Buhasa Sewage Network (EPC)
- A'Seeb Sewage Treatment Plant for Haya Water
- Seawater Pumping System for Majis Industrial Services Co. (EPC)
- New RO Plant at Qarn Alam for PDO (EPC)
- Water Treatment Plant for Ministry of Housing, Electricity and Water at Kumzar (EPC)



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