

Solutions











OHSAS 18001:200 Orisias 18001:2007 Occupational Health & Safet Management System Cert. No. O-1689

Headquarters

Bayswater Tower, Business Bay, Sheikh Zayed Road, Floor No. (22), Office No. 2204, Dubai 215 224, U.A.E TEL.: + (971) 4 447 00 13 Fax: + (971) 4 447 12 68

Regional Office

124, Othman Ibn Affan St., P.O. Box 2882 Al Horeya, 11361 Heliopolis, Cairo, Egypt. TEL.: +(202) 263 872 34 Fax: +(202) 263 608 23



ARGONAUT BRIDGING GAPS

CELEBRATING **10 YEARS** OF SUCCESS

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ARGONAUT **BRIDGING GAPS**

Company Brief

Argonaut is a private limited liability company established in 2004 in Dubai, United Arab Emirates with regional offices in Egypt, and Cyprus. Since our establishment, we have performed as a leader in providing high quality, cost effective, and on time engineering solutions including value engineering services, design services, and electromechanical supply and installations services.

We are exclusively experienced and specialized in providing HVAC and electric power generation contracting services for Oil & Gas sector, Defense Facilities, and Infrastructure projects.

ARGONAUT ARMS

Argonaut is fully dedicated to provide its clients with a state of art products and services through three focused arms.

Climate Solutions

Energy Solutions

That taking care of permanent and temporary solutions for cooling and air-conditioning, Argonaut joined hands with Zamil AC, and other major players in the market to provide the best services to clients, Argonaut entertains exceptional talents and intellectual capital that represents the main company asset, moreover, Argonaut has a large fleet of equipment that includes Chillers/packages/Generators and pumps.

Providing energy solutions for temporary and permanent use, with a focus on Power savings and sustainable solutions that includes solar ,wind and Bio solutions.

Argonaut has a strategic backward integration through holding major exclusive agencies in the electro-mechanical industries within the MENA region, Zamil Air-conditioners, system-air and Halton marine





Providing total EPC "Engineering, procurement and Construction" solutions for Power/Ventilation/ air-conditioning and infrastructure, with wide experience and records in oil and gas, defence and infrastructure sectors.



To become the organization of choice for clients seeking high quality, reliable, and cost effective engineering solutions.

Mission

To deliver high quality/cost effective integrated engineering solutions through outstanding/ qualified technical resources and solid industrial participation.

Business Goals

The business goals that Argonaut aspires to realize through the commitment of its employees are to:

1. Grow local and international market share through exploring and tapping into new opportunities.

2. Generate new revenue streams through the introduction of new and innovative products and services.

3. Implement the most consistent level of supply chain management.

4. Consistently provide the highest level of customer service and increase customer satisfaction.

5. Continue to build on value added services such as warranties and technical support to customers.



and Power solutions (within UAE) to serve the GCC region."
A Air-base with the US-NAVY Bahrain. I used complex in Egypt developed by DAMAC, Park-Avenue
improvement and managed to get ISO certified 9001/14001/18001.
d with more than 35 Oil and Gas companies. pe in the rehabilitation program of British petroleum for OFF-Shore platform. r the MNK-fertilizer plant-Indonesia.
l in Yemen. oject with Sontrach/KBR-Algeria. Il in Egypt "Mall of Arabia"
il and gas/petrochemicals sector within the region.
gest air-base in Iraq-ASAD Air-base, for the AFCEE (US-Air-force).
emonier-Djibouti, for the US-NAVY.
est air-craft hangar in the Mid Asia (Afghanistan) Joint Aviation facility
olutions to Military sector.
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Company Brief www.argonaut.ae

Argonaut's Business Partners

We are proud to proclaim that we have earned the honor of becoming the only official sole distributor of Zamil air-conditioners in Egypt, Halton marine in Egypt, Algeria, Lybia and Sudan, and exclusive agent for systemair in Egypt and distributor for Kuwait and Iraq, We are honored that we are known as being a role model of the trustworthy and reliable supplier.

As we are also committed to fulfill our duty in maintaining high-quality, cost effective, and on time engineering solutions.



Zamil Air Conditioners (ZAC) a sector business of Zamil Industrial is the largest supplier of air conditioners in the Middle East. It manufactures and markets as whole range of air conditioners from Room air conditioners to packaged units to large Chillers for residential, commercial and industrial applications.

Zamil Air Conditioners was founded in 1974 as one of the first air conditioning companies to be established in Saudi Arabia and today is a leading international manufacturer of air conditioning systems and is Number one in the Middle East. With its head office and prime plants in Dammam, Saudi Arabia and a production facility in Italy, Zamil Air Conditioners produces over 900,000 air conditioners per annum. It supplies air conditioning products to over 55 countries across the world- the major markets are GC, Middle East, North Africa, Europe and Asia.

🏽 systemair

Systemair is a leading ventilation company with sales companies in 38 countries in Europe, North America, Asia, the Middle East, South Africa and Australia. Headquarter and largest production unit is since the company started in 1974 situated in Skinnskatteberg, Sweden. They have 12 production facilities located in; Sweden, Norway, Denmark, Germany, Slovenia, Slovakia, Lithuania, Spain, Malaysia, USA and Canada, with a total production area of more than 170 000 sqm. Sales amounted to approx. SEK 3.3 billion for the fiscal year 2008/2009 and the Group employs over 1900 people worldwide. Since October 2007 Systemair is listed on the OMX Nordic Exchange in Stockholm.

Halton Marine, offs one of the v

Halton Marine is a leading, worldwide company that provides HVAC engineering solutions to marine, offshore, and naval applications as well as the oil and gas industry. Moreover Halton is one of the world's preeminent suppliers of HVAC systems to public and commercial buildings. Halton has manufactured products that include: air diffusion, fire safety and indoor environmental management.

Halton Group was founded in Finland in 1969; Halton operates today in 21 countries around the world, with annual sales of €175 Million and over 1000 Employees. The company has production facilities in Canada, China, France, Finland, Germany, Hungary, Malaysia, Norway, United Kingdom and USA.

Halton Marine is one of the world's leading suppliers of marine HVAC solutions. They develop, Manufacturers, and markets reliable and high-quality ventilation solutions specifically designed for marine, navy and offshore applications. In addition, Halton Marine is also a leader in designing and supplying high-quality ventilation solutions specifically designed for the oil & gas market.

Halton's comprehensive list of HVAC product categories includes:

- Diffusers and terminal units (- Grilles - / - Plenums - I
 - F
- Valves
- Low velocity units

All Halton products are carefully tested in Halton's indoor climate laboratories before launching. Tests are done according to the international standards. In addition, Halton operations are ISO 9001 and ISO 14000 certified to ensure the highest quality of all operations.

Halton Marine Products and solutions are designed specifically for marine, offshore and naval applications. Good indoor air quality in demanding conditions result of paying attention to many details and their successful adjustment. Regular, controlled, indoor air and effective air-conditioning improve comfort, efficiency and ensure safety. Investment in Halton Marine's quality products and leading- edge technical and functional solutions are always profitable in the long run.

Chilled beams
Air flow management
Fire and smoke dampers
Terminal filtration units



Certificates

In 2011, Argonaut successfully fulfilled all the perquisites of the ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007.

Every year Argonaut keeps maintaining fulfilling the quality requirements to be eligible to the ISO and OHSAS Certifications.

Argonaut managed to extend the quality commitments to its arm in the UAE and successfully managed to fulfill the ISO and OHSAS requirements, and get Argonaut power generation and air-conditioning certified for the above.

Safety is a mandatory requirement that argonaut keeps fulfilling in all business units, argonaut is now member in the British safety council that would help argonaut to keep and enhance our safety environment for workers and employees.



ISO 9001:2008 Quality Management System Cert. No. 8741





ISO 14001:2004 Environmental Management System Cert. No. E0787





OHSAS 18001:2007 Occupational Health & Safety Management System Cert. No. O-1689



Geographical Location

Argonaut have set up offices in many regions of the world to support its numerous connections with world class clients around the globe. Argonaut have set up offices in Cairo, Dubai, Sharjah, Ras el Kheima, Abu Dhabi and larnaca Cyprus. Specifically chosen, these key places help us to reach out to all our clients and provide top quality services, as well as the ability to diversify theses services

Argonaut operates in various regions around the world starting from Egypt and North Africa and going farther east to countries such as United Arab of Emirates, Bahrain, Yemen and Iraq. As well as projects running in parts of Asia like Turkmenistan, Afghanistan, and Indonesia. Argonaut aims to provide a wide variety of high quality services to our loyal clients by utilizing our many operations around the world.



Argonaut's Offices

\bigcirc	Egypt
	UAE
0	Cyprus

Argonaut's Projects

igodot	Egypt	0	Djibouti
0	Indonisia	0	Yemen
\bigcirc	Algeria	0	UAE
•	Qatar	•	Bahrin
0	Iraq		
•	Afghanistan		

AWARDS AND RECOGNITION

TOTAL

In Recognition of its valuable contribution, cooperation and dedication to perform their assigned work in Mechanical and Electrical work in a timely and quality manner during the construction, fabrication and pre-commissioning of Basement process unit (BPU). In the duration from December.2009 to October.2010

By A.Shatla and T.A.Azeem/S.A.Dayeem - TOTAL E&P-YEMEN



On Behalf of CFI (Chemical and Fertilizer Industry Holding), We Would like to highly Recommend Argonaut for Mechanical and Electrical Works for their assigned scope of work in PT. Muti Nitro tama Kimia New factory Project , Phase II : Production line For ammonia Nitrate 350 MTPD LOAN, And Phase II: Production Line for Nitric Acid 280 MTPD HN03 58.7% CFI has Awarded Argonaut the Scope of Engineering, Procurement, Start up and commissioning of the production process CHILLER cooling for process air system of the above mentioned phases of the project.

The Job was completed as requested and completed prior to the period of performance expiration, and we were pleased to have had the opportunity to work with Argonaut for Mechanical and Electrical Works.

By Mahmoud Aziza - MNK



amec[®]

On behalf of Shaw Environmental, Inc. (SHAW), I would like to highly recommend Argonaut for their excellent performance to complete the work associated with Task Orders 8 and 15 under AFCEE Prime Contract No. FA8903-04-D-8676 for the construction of AI Kasik Army Base in Northern Iraq. Their superior professional technical experience and excellent work ethic led to a very successful completion of all electrical, mechanical and civil works required to turn the facility over. Argonaut's scope of work included the supply of generators, mechanic.al equipment, electrical materials, kitchen equipment and laboratory furniture. Argonaut's team worked tirelessly under very tight schedules with a great cooperative attitude. Argonaut's technical knowledge is superb; their dedication is relentless.

We look forward to working with them again on future projects in the region.

By Issa Toubbeh - Shaw International, Ltd

pipes without damaging the walls.

highest recommendation.

By Claire Hackett - AMEC Earth & Environmental, Inc.

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Argonaut Construction constructed an earthmoving and stormwater project at Kabul Military Training Center in Kabul, Afghanistan. This Project was technically complex involving stormwater detention, erosion control, and very exacting earthwork requirements. It also included the necessity to cross under several existing walls with large

Argonaut completed the project without incident and meeting our rigorous standards. I was very impressed at the quality and speed of Argonauts work and give them my



Engineering Solutions

AENS [Argonaut Engineering Solutions] leads the provision of engineering solutions, including value engineering services, design services, electromechanical supply and installation services that maintain a balanced relation between cost time and quality since 2004.

Engineering Solutions

Mission

To deliver high quality/cost effective integrated engineering solutions through outstanding/ qualified technical resources and solid industrial participation.

Why AENS?

As a client oriented firm; our sales team is fully dedicated to serve client's specific needs, we invest in complementary design and construction related services to enrich our offerings and provide you with inclusive services at competitive market prices.

We combine this client oriented approach with comprehensive engineering and management expertise, professional scheduling, innovative problem solving techniques, and a policy of highlighting safety as a first priority to provide high quality products and services that exceeds expectations and consequently develop and maintain a win-win relationship.

Argonaut is committed to continuous improvement and recognizes the importance of compliance with relevant environmental legislation as a minimum requirement of performance.

Scope of Services

At Argonaut we aim to provide total EPC "Engineering, Procurement and Construction" solutions for Power/Ventilation/ air-conditioning and infrastructure, with wide experience and records in Oil and Gas, Defense and Infrastructure sectors.

These solutions might be either temporary solution through our rental division or permanent solutions through our Commercial Division and Project's Units, a workforce of dedicated employees, partnerships with electromechanical world's leading organizations and manufactures, and a rich pool of local and international building materials' suppliers; we offer a full range of high quality electromechanical and building materials supply and/or contracting services at latest technology, competitive prices, and in time delivery periods.

Oil and Gas Engineering Solutions

Argonaut's Engineering Solution for Oil & Gas Industries

We understand the importance of O&G industry because it is the backbone of world's economy and future of our industrial development and growth, no wonder it is the most attractive industry to associate with yet it demands very high standards of service and support. At Argonaut we can proudly deliver such high standards (as we have done it in the past) and are the preferred partners of the most reputed market players, we can supply permanent or temporary solutions for Power and Cooling in all the related sectors of O&G.



At Argonaut we're Constantly facing challenges, but nevertheless we keep carrying on. We aim to provide engineering solutions for every problem occurring in tough seasons, that mostly lead to lack of efficiency/productivity. Our rental cooling division developing tailored engineering solutions for every single issue regarding power and cooling. Our 24/7 team is specially trained and dedicated to provide help and support in different process applications such as Dense air injection, Condenser cooling, Lube oil cooling, Turbine cooling, Supplemental water cooling, cooling down vessels and planned shutdowns.





Problem: Air-limitation

During summer months, refineries in one of the GCC countries are experiencing air limitation problems due to hot whether temperature.



Solution: Dense Air Injection

Argonaut can cool large volumes of air and deliver or introduce that chilled air into the intake on the regenerator's main blower, thereby, simulating springtime conditions. In a closed-loop system the Argonaut water chiller circulates 7°C water through an air-handler equipped with a high-static blower. Ambient air is normally cooled to 12°C. The cooled air is forced through temporary duct work which is directed at the intake to the air blower. The 12°C air is then mixed with ambient air in whatever quantities to give the desired effect.



Problem: RPM Limited on the Turbine

A refiner in one of the GCC countries is RPM-Limited on the turbine that was driving the blower. Cooling water temperatures on the turbine's surface condensers which caused the low RPMs.



Solution: Surface Condenser Cooling

Argonaut can bring in temporary water chillers to supplement the existing cooling on the surface condensers. The results were cooler temperatures to the condensers, an increase in turbine RPMs and an end-result of increased volumes of air through the main air blower.





Exchanger



Generator

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Problem: FCCU Overhead Condensers

A refinery in one of GCC countries experiencing cooling problems on their FCCU overhead condensers which resulted in high temperatures and high pressure problems throughout the system.



Solution: Overhead Condenser Cooling

Argonaut can solve this problem by supplementing the cooling water on the overhead condensers thus eliminating the temperature and pressure problems. Furthermore, Argonaut can improve the temporary system by cooling the hydrocarbons directly with the Argonaut equipment rather than supplementing the cooling water.



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Problem: Water Gas Compressors

A refiner was experiencing cooling problems on their wet-gas compressor due to fouled water-jackets. There was a significant drop in production and a shutdown was still five months away.



During summer, many conditions can occur that may cause cooling problems to lube oil coolers, such as high ambient, undersized of fouled coolers, high water temperatures, and increased production, etc. Argonaut can solved these problems by utilizing the fleet of small water chillers (50 -160 kW machines) by pulling a slip steam on the existing inlet cooling water line to the coolers or by blocking the existing cooling water and convert to a closed-loop system using an Argonaut water chiller.



cooler is valve off and replaced with a closed loop

Lube Oil Cooler



Problem: High Ambient & Dirty Motor Windings

A combination of high ambient temperatures and dirty motor windings was limiting the production of compressed air and reducing production capability.



Solution: Compressor Motor Cooling

This is a very simple and common application for Argonaut. The most common place in the refineries where motor cooling is applied is in the Coker unit where at times coke dust begins to insulate motor windings causing the motor to overheat. Usually with a small DX air conditioner, cool air is introduced into the air intakes on the motor and displaces heat.

Other areas in the plant where this same idea is applied is on transformers and motor control central centers.



Problem: Hydrocarbon Vapor Pressure

Some of the reasons these different products were cooled are vapor recovery, reduce time for ship or rail car loading or to help the plant stay within EPA regulations regarding the RVP of stored hydrocarbons.



Solution: Lubrication Oil Cooling

Vapor Pressure Reduction - Blended Gasoline- Propane Loading

This application covers a wide range of products and benefits. Argonaut can provide cooling in different hydrocarbons, i.e. butane, propane, gasoline, kerosene, etc. But in most cases to reduce vapor pressure for one reason or another.







Method No. One:- Some of the reasons these different products were cooled are vapor recovery, reduce time for ship or rail car loading or to help the plant stay within EPA regulations regarding the RVP of stored hydrocarbons.

Oil and Gas Engineering Solutions



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Method No. Two:- By supplementing cooling tower water or by installing an Argonaut heat exchanger and water 2 chiller system these vapor pressures can easily be controlled.



The various constituents of gasoline are blended then cooled via an heat exchanger prior to storage.

Method No. Three:- Use our chillers during the summer to condense vapors to use as fuel that would normally go to the flare.

Make the marketing group of the refineries aware that by using our rental chillers you may be able to complete for a spot market where existing cooling limits wouldn't allow the plant to complete before.



Modular Cooling Towers for Oil and Gas applications:

Modular Cooling Towers (MCT) can be used to remove heat from various sources such as machinery or heated process material. The primary use of industrial cooling towers is to remove the heat absorbed in the circulating cooling water systems used in power plants, petroleum refineries, Petrochemical plants, natural gas processing plants, food processing plants, semi-conductor plants, and for other industrial facilities, our MCT solution is quick and easy for either an emergency or contingency planning or to simply install them during high ambient conditions to improve efficiencies and to reduce the loss of thousands of gallons of hot water which could eventually be the cause of environmental pollution.



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GUPCO's Mega Rehabilitation Projects

Project Owner | GUPCO / BP

Main Contractor | Enppi[Engineering for Petroleum and Process Industries].

Project Consultant | Enppi[Engineering for Petroleum and Process Industries].

The project aims to the Rehabilitation of BP offshore facilities including steel structural platforms, topside facilities and subsea pipelines.

The aim of the overall rehabilitation project was to make sure that the whole system could safely operate for at least additional 25 years maintaining the best possible operating conditions and capacities. A qualitative risk based approach had been followed for the whole 119 platforms in order to evaluate the hazard of structural failure.

Rehabilitation of Gupco offshore facilities includes complexes, satellites platforms, and subsea pipelines in addition to onshore facilities RasShukhier / Western Desert including all associated pipelines.

Ras Shoukar, Red Sea, Egypt

The project consists of 8 phases; each phase includes rehabilitation of one or more platforms of the following 8 platforms:

Badri, July-10, Ramadan, October, M55, Morgan 36, Morgan 1, Morgan 8.

The Engineering for the Petroleum & Process Industries Company (ENNPI), jointly with British Petroleum Company (BP) and Gupco awarded Argonaut Integrated Solutions the HVAC scope of phase III based on their extensive expertise and reputation in the OIL & Gas Industry.

Ramadan 6 Platform

Awarded Scope

ENPPI awarded Argonaut

- 1-The Supply, Installation, Start up, and Commissioning of HVAC system for Rehabilitation of Ramadan 6 Plat form in Gupco offshore plant- Gulf of Suez. 2-Dismantling Existing HVAC system.

3-Design, Supply & install new HVAC system special & suitable for Hazard area Class I, Zone II. 4-All package Units, MCC's, Fans are Atex certified for class I, Zone II applications.

following special specs:

- Air Cooled Packaged Air Conditioners.
- Explosion Proof MCC
- Explosion proof Fans
- HVAC Control Systems
- Fire and Smoke Dampers
- Volume Dampers
- Exhaust Air Dampers
- Ductwork & Fittings
- External and Internal Insulation
- AISI 316 L Grilles & Diffusers.

Morgan 36 Platform

Awarded Scope

Argonaut is fully responsible for the designs, fabrication, supply, installation, testing, adjustment, balancing and Guarantee of the HVAC and pressurizing system for the Offshore Installation.

In order to meet the special requirements of the project; items are to be fabricated with the following special specs:

- Air Cooled Packaged Air Conditioners.
- Explosion Proof MCC
- Explosion proof Fans
- HVAC Control Systems
- Fire and Smoke Dampers
- Volume Dampers
- Exhaust Air Dampers Ductwork & Fittings
- External and Internal Insulation
- AISI 316 L Grilles & Diffusers.

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In order to meet the special requirements of the project; items are to be fabricated with the





Main Contractor | Petrojet [Petroleum projects and Technical consultations Company]

Project Consultant | Enppi [Engineering for Petroleum and Process Industries]

Awarded Scope

- Design, fabricate, supply, install, test, adjust, balance and guarantee HVAC system inclusive of:
- Air-cooled condensing Units (total cooling capacity not less than 450kw)
- Air Handling Units (coil entering air conditions at DB/WB 28/19C, Supply air flow rate 17140 l/s, outdoor fresh air flow rate 3975 l/s, cooling coil total capacity 450kw)
- Air cooled Packaged Units (coil entering air conditions at DB/WB 30.5/20.5C Supply air flow
- rate 7480 l/s outdoor fresh air flow rate 1950 l/s, cooling coil total capacity 220kw)
- Condensing split Units (total cooling capacity not less than ranges 6kW-70kW)
- Air Handling Spilt Units (Supply air flow rates range 545 l/s 5285 l/s)
- Ductwork
- Air Outlets
- Exhaust Fans
- Terminal Duct Heaters
- Motor Control Center
- Automatic Control System
- Pressurization system.
- Battery Room Ventilation System.
- Pressurization system.
- Battery Room Ventilation System

ITSI Gillbane's TO30 Ministry of Defense

Project, Kabul, Afghanistan

Project Owner | Ministry of Defense

Main Contractor | ITSI Gilbance Company

Awarded Scope

ITSI Gilbance Awarded Argonaut the Supply, Installation, testing, commissioning and handing over of AHUs, Exhaust and Fresh Fans at Gibane's TO30 Mistry of defense (MOD) Project, Kabul Afghanistan.



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Experience Record



Production Process Cooling Solution at Multi Nitrotama Kimia New Factory

Project Owner | PT. Multi Nitrotama Kimia

Main Contractor | (CFI) Holding Pte Ltd. And PT IntiKarayaPersadaTeknik

Project Consultant | PT. IntiKarayaPersadaTeknit

PT. Multi Nitrotama Kimia announced that it will build a new factory with an annual capacity of 110,000 tons. The new factory would be operational in 2011 and cost \$60 million. The company has named a consortium of Chemical& Fertilizer Industry (CFI) Holding Pte Ltd. And PT. IntiKarayaPersadaTeknit to design and build the factory.



Awarded Scope

CFI awarded Argonaut the supply of the project's production process cooling solution consisting of centrifugal Chiller Units, Air Handling Units, Pumps, Valves, Control, MCC, Starter, system, Expansion Tanks, and Air Separators.

All above Items come with the below special specifications:

- IP 65 Electric Motors.
- Stainless Steel tube 304L / Aluminum fins chilled water & steam coils.
- · Ceramic coated evaporator heat exchanger.
- Stainless steel pumps' impellers and blades.
- Medium voltage chiller 2300/3/50.
- IP 65 Panels.
- SS 304 L. Condenser/ evaporator chiller tubes.
- AHU SS 304 L Construction.

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Experience Record

Turkmenistan – South Yoloten Gas Field **Development Project**

Project Owner | Turkmengas

Main Contractor | Petrofac International (UAE) L.L.C.

The Development of the South Yoloten Field is a critical part of Turkmenistan's plans to exploit their very significant hydrocarbon resources.

Petrofac, the international oil & gas facilities service provider, has been engaged by Turkmengas, the state-owned national gas company of Turkmenistan, to provide services in relation to the development of the South Yoloten gas field (the "Project"), situated approximately 400 km south east of the capital Ashgabat.

In 2010, the South Yoloten Gas Field Development Project was awarded to Petrofac. Under the US\$3.4 billion contract, the company is providing engineering, procurement, construction and commissioning (EPC) work on a lump-sum basis for a 10 billion cubic metres per annum (bcma) gas processing plant along with the infrastructure and pipelines for the entire 20 bcma development. This is the largest contract awarded to Petrofac in the past 30 years, and a first to be executed in Turkmenistan.

Turkmenistan – South Yoloten Gas Field Development Project is Petrofac's first project award in Turkmenistan, Argonaut was gratified to be chosen by Petrofac towards the Supply of HVAC System in Waste Water Treatment Plant Building.



Argonaut was awarded by Petrofac the supply of the HVAC System for the Control Room and Mcc Room of Waste Water Treatment Plant Building in Turkmenistan.

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Yoloten, Turkmenistan

Storm water Detention Basin & outfall Channel at Kabul Military Training Center (KMTC)

Project Owner | AFCEE

Prime Contractor | AMEC Earth&Environmental, Inc.



Argonaut's scope of work consisted of furnishing all labor, equipment, and materials necessary to construct a storm water detention basin and outfall channel serving Kabul Military Training Center (KMTC) in Afghanistan. This was primarily an earthwork project consisting of excavating approximately 47,000 CUM of earth and then placing that material either as embankment or as engineered fill in the primary spoil area or as waste in the secondary spoil area.







HVAC at Joint Aviation Facility (JAF)

Project Owner | USACE-AED

Prime Contractor | Shaw Environmental, Inc

The project consists of the Design and construction of a new helicopter maintenance facility for the U.S and Afghanistan Ministry of the Interior's use in training, maintenance and counter narcotics helicopter operations in Afghanistan. The site is located near the existing international airport in Kabul, Afghanistan. Primary facilities include two(2) helicopter maintenance hangars to accommodate a total of eight(8) MI-8 or equivalent size helicopters and one AN-12 fixed wing aircraft; apron parking to accommodate 20 helicopters; hangar maintenance shops; parts and equipment storage, concrete parking apron with tie-downs and grounding points; maintenance apron.



Kabul, Afghanistan



Argonaut has successfully completed the installation of the building Mechanical Systems for the Joint Aviation Facility (JAF) in Kabul- Afghanistan. The mechanical Systems being installed shall serve all buildings in the facility and will cover Heating, Ventilation, and Air Conditioning. The installations were part of an USD \$ 813,050.00 contract which was accredited to Argonaut by Shaw Environmental Inc, in early 2007. Building mechanical systems include Heating, Ventilations, and Air Conditioning (HVAC).

After its completion, the facility was able to support 4 MI-8 helicopters with the possibility of housing AN-12, built on more than 30 acres with enough parking apron space for 20 MI-8 helicopters. The facility also hosts, a potable water treatment facility, an educational and training building, a power plant, an arms and ammunition building, a wash rack, a bulk aviation fuel system, two maintenance hangars, a warehouse, ammunition loading and unloading area, a fueling and defueling area and a hazmat storage area.

Experience Record



Argonaut Climate Solutions (ACS) is a rising star of the gulf region and has presence in the region since 2004, mainly known for our integrated solutions for Oil & Gas industry, we have offices in Egypt, Cyprus and UAE.

We have joined hands with Zamil group (KSA) as our business partners, Zamil is the regional leader and a global player (in Air-conditioning equipment) for past 40 years.

We have recognized the potential and need to provide most effective and economical solutions to our HVAC clients, hence we have formed this unmatched partnership between Argonaut and Zamil AC, Argonaut has the expertise to provide integrated solutions to the Oil & Gas market while ZAC has the expertise of a regional OEM, ZAC has the largest manufacturing factory (outside USA) in the world. We have selected the most qualified and experienced group of people who only knows to deliver quality. We offer the most reliable, efficient and economical equipment coupled with our flexible services and highly gualified technical teams, we put "customer first" and ready to serve them round the clock on 24/7 basis.

Climate **Solutions**

ACS Mission

Our mission is continuous improvement and development to deliver the best solutions and services to our end users, at ACS we have zero complacency attitude where failure is not an option. Commitment with quality is a true reflection of our business, to meet and exceed from our high business standards will always be on top of our agenda, while a highly satisfied customer base will be the hallmark of our mission.

Why ACS?

We have seen over the years that the temperature control industry has very few players with limited solutions, shallow knowledge/qualification and basic equipment to offer end users, ACS believes that we can turn this trend round and will become the household name for providing tailor made solutions with a wide range of our bespoke equipment and with our business ethos where customer always comes first. No wonder with the support from the largest AC supplier (Zamil) of the Middle East we have the edge to design our equipment which can be the best fit for our customers.

Our Distinguished factors are:

- Our unique helpdesk with 24/7 will always there to assist and support our clients and ensure them that they are in safe hands, sales inquiries can be send through sales.enquiry@argo-naut.com and will be dealt on immediate basis.

- We do our rental business with environmental certification (ISO 14001:2004) which makes us unique in our league.
- Energy efficient and environment compliant (R134a) Screw chillers.
- of a company who cares more about your environment.
- Top of the range bespoke models.
- Youngest fleet (brand new) in the region.
- Minimum downtime/breakdowns to end user.
- Our chillers are designed to perform under high ambient.
- Our chillers are designed for high pressure, (built-in Heat exchangers).
- Our generators are 5% more fuel efficient to the closest rival (Cummins).
- High standards of (OEM) enclosures makes our generators environment friendly.
- Low noise emission makes us environment friendly and fellowship of Estidama.

Scope of Services

At Argonaut we aim to provide total EPC "Engineering, Procurement and Construction" solutions for Power/Ventilation/ air-conditioning and infrastructure, with wide experience and records in Oil and Gas, Defense and Infrastructure sectors.

These solutions might be either temporary solution through our rental division and Project's Units or permanent solutions through our Commercial Division and Project's Units, a workforce of dedicated employees, partnerships with electromechanical world's leading organizations and manufactures, and a rich pool of local and international building materials' suppliers; we offer a full range of high quality electromechanical and building materials supply and/or contracting services at latest technology, competitive prices, and in time delivery periods.

- Super silent and low emission (chillers and generators) to keep our environment clean and green, this is also a reflection

Climate Solutions | www.argonaut.ae



Launching the Rental Power and Cooling Division



There has been a constant expansion in the District cooling industry, as well as a major development in the infra-structure/ oil and gas and commercial sectors within the GCC region. And as a result the demand to climate solutions is growing every day, with limited competition and need to innovative and find out of the box engineering solutions, Argonaut, launched its unit for rental power and cooling equipped with state of the art cooling and power equipment backed up with 10 years of accumulated experience in this intensely challenging sector.

Argonaut will provide this industry with the latest and highest performance equipment in the market, capitalising on the talented human assets and strong connections with market leaders in the Cooling and climate control business, as well as the young fleet of "brand new" Chillers/generators/pumps/AHU's and package units.

Customer first, is Argonaut's ethos, Argonaut's CRM team Works hard to improve customer contact and overall satisfaction. Our hotline technical operators handle all the customer contact touch points and are able to answer their requests and address their concerns to assure them their satisfaction.

Argonaut's products and services include and not limited to:



Air Cooled Chillers

We have selected and designed our chillers to cope with demanding conditions; hence we have the edge on our competitors, i.e. youngest fleet in the region (brand new), Reciprocating and Screw compressors, R22 and R134a refrigerants, Soft starters and VFDs, from I0 bar to 20 bar working pressure, part load adjustments from 10% to 100%, low noise levels (@75% load 68dBA from 30ft), up to 50% energy savings at 75% load.

Air Handling Units, Packaged & OX Units

We designed to perfection as we considered the suitable air flow, velocity, static pressure,G3 filtration and cooling capacity to cater your individual requirements. Ranging from 3TR to 210TR.

Generators

Our generators are the top performer in the rental industry and has better fuel economy, we have specially consider the noise and emission pollution hence we have designed our exhaust mufflers and canopies on a very high standard Ranging from 50kVA to IMW.

Diesel Tanks

From the leading industry manufacturer and with all local authority approvals our fuel tanks are the safest in the rental market as they are: double skinned, anti-theft, easy to measure markers, standardized to Liters, spillage containment and easy to service. Ranging from 5000Ltrs to 20,000Ltrs.

Pumps

We have bespoke our pumps to deliver the efficiency with economy, from 3bar to 6bar head, from 15 to 50 LPS flow, low energy consumption {32KW} and the brand "Rovatti" (from Italy) reflects our commitment no to compromise on quality.

Energy Solar Panels

We are the first rental company to provide green energy solutions as we are offering flat roof PV solar panels, we are the authorized agent for a renowned German manufacturer "Inventux Solar Technologies", award winning Micromorphous technology uses thin film solar modules.





DAMAC - Park Avenue

Project Owner | Damac Properties

Main Contractor | Detac[Dar for Trading and Consultancy]

Project Consultant | Khatib & Alami ASA Engineering Consultants



DAMAC is the master developer for the entire project at New Cairo, which includes the Park Avenue Shopping district, luxury villas at Hyde Park and a touch of Paris at the French architecturally inspired Centre Ville apartments. Park Avenue will overlook a lush central public park, and will be easily accessible via arterial highways.



Detac awarded Argonaut the Supply, Start Up and Commissioning for the HVAC System of the Mall.



750 MW Combine Cycle Project

 Project Owner | Middle Delta Electricity Production Company (MDEPC)

 Main Contractor | Archirodon

 Project Consultant | PGESCO- Power Generation Engineering and Services Company

 The Middle Delta Electricity Production Company (MDEPC), decided to construct a power plant in Banha Egypt.

 The main purpose of the plant is to meet the country's growing power needs. Steam Turbine Generator and Condenser package and other contract packages of Banha Power Station - 750 MW Combine Cycle Project, which will consist of two 250 MW Combustion Turbine Generators, two Heat Recovery Steam Generators and one 250 Steam Turbine Generator and Condenser. Estimated project value is 736 million USD.

Awarded Scope Supply, Startup and Commissioning of DX- Packaged A/C Units.





Mall Of Arabia

Project Owner | Fawaz Alhokair Group

Main Contractor | Hassan Allam Sons& OCI[Orascom Construction Industries]

Project Consultant | ECG

Riyadh-based FawazAlhokair Group recently completed the construction of their new shopping mall in 6th of October City. "The mall is intended to be the largest in Africa" Al-Hokair Said. The mall of Arabia lies on 441,000 square meters in Sixth of October City, 20 kilometers west Cairo. The Projects cost total reached EGP2.92 Billion.

Awarded Scope

In May 2009, Hassan Allam Sons – Orascom Construction Industries JV (project Main Contractor) and ECG-Engineering Consultants Group (project consultant), awarded Argonaut the supply and commissioning of:

A. 34,60 TR Roof Top package Units.B. 34 package unit with special Design for Return smoke fan section.C. BMS interface.D. R134a Refrigerant.E. Semi Hermetic compressor.



6 October City, Giza, Egypt.

Project Owner | Al Futtaim Group Real Estate

Project Contractor | Al– Futtaim Engineering Egypt

Project Consultant | Mario Associates Engineering Consultants

For the first time IKEA is expanding into Africa with plans for a new store in New Cairo City, Egypt. BSBG has been appointed by AI Futtaim Group Real Estate following completion of IKEA Dubai Festival City in 2005, and most recently IKEA Abu Dhabi located on Yas Island in 2011.

The new IKEA store is located at the prestigious Cairo Festival City (CFC) mixed use development and is physically linked to the CFC retail resort 'Festival Centre'. Construction is underway and IKEA expect to serve nearly 3.4 million visitors in the first year of operations, in what will be the largest constructed IKEA store in the MENA region with over 92,000m2 GBA. The 34,000m2 store comprises three levels of dedicated IKEA car parking for its visitors. Alongside the 6,000m2 Market Hall and 6,150m2 Showroom furniture areas, there will also be a 550 seat, 2,100m2 restaurant.



Al – Futtaim Engineering Egypt awarded Argonaut the scope of Supply, Start Up and Commissioning for Air Curtains, Roof Mounted & Axial inline Fans.



Energy **Solutions**

Sustainability has been a fundamental asset for Argonaut's projects and success. Argonaut envisions a bright future where humans and nature can exist in productive harmony while meeting the needs of our clients thereby creating value for all stakeholders. Sustainability is vital, as it conserves energy, saves money, and reduces pollution and can even save lives.

For the significant role that sustainability plays in our lives.

Argonaut covers all electromechanical works to provide complete technical sustainable solutions for energy saving.

Energy Solutions

AES Mission

Our mission is to provide complete technical sustainable solutions for energy saving and implementing clean energy to provide sustainable solutions, from wind energy to solar energy to biomass etc.

Why AES ?

AES we are committed to deliver a greener future by

- Providing technical excellence to ensure the successful delivery of renewable and sustainable energy projects globally promptly and on budget.
- Delivering outstanding service to our clients to ensure they benefit from the profitable development of renewable energy projects.
- Making a significant contribution to sustainable development by advising on the reduction of carbon footprints locally and globally.
- Bringing environmental, economic and social benefits to local and regional communities around the world.
- Supporting and promoting clean, secure and economically viable renewable energy developments to ensure decreased dependence on fossil fuels with the aim of mitigating the worst effects of climate change.

Scope of Services

Argonaut provides alternative complete energy solutions

- Solar Domestic heating system
- Photo Voltaic Electrical power production
- Solar Backup / UPS system
- Green Ventilation solutions
- Turbocore compressors chillers
- Simultaneous heating/ cooling heat pump (4- Pipes chiller) with Class A efficiency
- Class A+ Chillers
- Chilled Beam Hygienic Solution
- Branchless FCU motors saving up to 80% of power consumption.



Al-Asad Air Base Power Generation

Project Owner | AFCEE

Prime Contractor | ECC International, L.L.C

Al Asad Airfield, the second largest airbase in Iraq, is located in northern Iraq approximately 180 kilometers West of Baghdad and 12 kilometers southwest of the Euphrates River.

The airfield is served by two main runways measuring 14,000 and 13,000 feet. Al Asad, like other military airbases across Iraq, has numerous hardened shelters and hangars with multiple runways and taxiways, patterned after their Russian counterparts. According to the "Gulf War Air Power Survey", Al Asad had 33 hardened aircraft shelters.

At each end of the main runway are hardened aircraft shelters known as "Trapezoids" or "Yogos" which



😑 Al-Ramadi, Iraq

were built by Yugoslavian contractors sometime prior to 1985. Al Asad is protected by a 21 kilometer security perimeter.

This SOW encompasses the full range of methods and technologies supporting activities necessary to design and construct new facilities and infrastructure, remodel and upgrade existing facilities and infrastructure. The work involves, but is not limited to, construction of facilities to support the following units:

Headquarters for the 1st infantry Brigade of the 7th Division of the New Iraq Army 1st Battalion, 1st Brigade,7th Division IA 2ND Battalion, 1st Brigade, 7th Division IA 3rd Battalion 1st Mechanized Brigade, 7th Division IA



Argonaut's scope consisted of all work associated with the generation and distribution of electricity (generators, transformers, switch gears, ect.) for the three FOB's at camp Ramadi.

Experience Record



Permanent Power Supply for FOB Ali FOB Phoenix, and FOB Defender



Project Owner | AFCEE

Prime Contractor | ECC International, L.L.C

This SOW encompasses the full range of methods and technologies supporting activities necessary to design and construct new facilities and infrastructure, remodel and upgrade existing and infrastructure. The work involves, but is not limited to, construction of facilities to support the following units:

Headquarters for the 1st Infantry Bridge of the 7th Division of the New Iraqi Army.

- 1st Battalion, 1st Brigade, 7th Division IA.
- 2nd Battalion, 1st Brigade, 7th Division IA.
- 3rd Battalion, 1st Mechanized Brigade, 7th Division IA.



Argonaut's scope consisted of all work associated with the generation and distribution of electricity (generators, transformers, switch gears, ect.) for the three FOB's at camp Ramadi.

Pyramids Industrial Park

Project Owner | L'Oreal

Project Contractor | Hassan Alam

Project Consultant | SNC Lavalin

L'Oréal Build its first manufacturing facility in the MENA region in Industrial West

L'Oréal, one of the largest companies in France, is the world's largest manufacturer of high-quality cosmetics and perfumes, producing 23 well-known global brands.

The company acquired 105,000 m² of industrial land in Industria West to build its first manufacturing facility in the MENA Region.

Located in the 10th of Ramadan industrial zone, Industria West is the first project of Pyramids Industrial Parks (P.I.Parks). The industrial park has a surface area of 1,1 million m² comprising industrial and logistics plots, services and offices buildings.



 Solar Cleaning System [Provide our own design for automatic cleaning system for Solar panels to prevent any dust which reduce the solar panel efficiency].



Egypt



ANA HR/Finance Branch School W5J9JE-10-D-0005-0005

Project Owner | USACE [US Army Corps of Engineers]

Prime Contractor | FCEC /UIProjects JV

This project consists of the site-adapt facilities, design/build facilities, and the site and infrastructure design/build for the Human Resources and Finance Branch School (HR/Finance School), of the Afghanistan National Army (ANA). The site is located near the existing Kabul Military Training Center (KMTC) in Kabul, Afghanistan. The HR/Finance School will be co-located with the Logistics Branch School (LOG School), and the Combat Services Support School (CSS). The combined campuses will accommodate approximately 2,200 personnel consisting of students and staff.



Supply of Power, External and Internal distribution system of the EMT Conduits & Fittings / Electrical Water Heaters / Transformers.

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Kabul, Afghanistan



