

Petrotec

MAGAZINE

THE NEWS THAT MATTERS

ISSUE 1: JANUARY - JUNE 2018

www.petrotec.com.qa

WE'RE

EXPANDING

Petrotec  بتروتك

SERVICE & TECHNOLOGY CENTRE

RECEPTION

09

Petrotec Opens
Pump Repair
Centre

11

Oil Flushing in
Half The Time

14

NATIONAL
SPORTS DAY
2018

Petrotec  بتروتك

CONTENTS



**Health, Safety
Environment and Quality**
- Successful Upgrade of our
ISO Certifications

04

06

Petrotec Sales
- Successes of 2017



Feature
- WE'RE
EXPANDING

08

10

**Spotlight on
Subsidiaries**
- Oil Flushing in
Half The Time!



**From the HR
Desk**
- NATIONAL
SPORTS DAY 2018

14

M E S S A G E

FROM OUR MANAGING DIRECTOR

Welcome to this, our first corporate newsletter of 2018. With the closure of another “economically challenging” year, we have been able to achieve growth in some areas. It is also a good time to focus on adapting strategies and adopting new practices to effectively enable us to conduct our businesses in this ever evolving market.

The investments we made to expand our service & technology centre (STC) in Ras Laffan and our new Q-FAB facilities under construction in Al-Wukair will offer a true One-Stop-Shop support to our clients in Qatar. This edition’s featured article outlines our commitment to bringing new technologies to expand our service capabilities.

Over the course of 2017, I have had the pleasure of meeting some of our main clients to discuss areas where our service offerings could be improved. They expressed commitment to localization and pledged their support to local suppliers, helping us to set our goals and strategy for 2018. We have identified the service gaps and we are working to develop our capabilities in order to cover these areas.

Yours Sincerely,



Clifford W. Lasrado
Managing Director

Petrotec  بترولتك

Health, Safety, Environment and Quality

Our concept Focus on low probability, high impact incidents

Petrotec Group's HSE priority for the year 2018 is to focus on low probability occurrence of high impact incidents. We always believe in continuous improvement (PDCA) and aspire for world class HSE Management system. To achieve it, we have a plan in place to develop real ownership involving everyone to play their role and responsibility.



Our precedence are:

- Explore and develop new ways to improve HSE.
- Leverage collective knowledge and resources from all sections in order to incorporate in our existing procedures.
- To facilitate progress, need to address the barriers that presently impede the flow of information.
- Reviewing Hazard Assessment, Risk Projection, and Decision-making.
- Analysing high risk situations and reliability on control measures.
- Focus on leadership, worker involvement, competence and asset integrity – key elements across all major hazard activities.
- Proactively engage with unit heads involved in major hazards to ensure ongoing focus on safe production and improved major-hazard management.
- Target inspection activity on risk reduction, including sustaining focus on health risks .
- Develop a revised approach to creating and publishing HSE guidance, ensuring it is proportionate, meets the needs of users.
- Undertake post-implementation reviews of key areas of regulation.

HSE IS YOUR RESPONSIBILITY

There is a developing trend in HSE (Health, Safety and Environment) to prosecute individual as well as organisations. Sometimes senior personnel can find themselves in the firing line because they were in-charge when things went wrong. In order to avoid unpleasant situation, please make sure the below points are implemented in your area of operation.

- Communicate our health and safety policy & procedures to all employees.
- Be aware of legal and other requirements and obey them.
- Understand your role and responsibilities pertaining to HSE.
- Follow and implement LSR (lifesaving rules).
- Deal with any hazards promptly - According to the statistics, slips and falls account for more than a third of all workplace accidents - mainly caused by preventable dangers like slippery floor surfaces, trailing cables and poor lighting. Reducing risk is usually straightforward, so act quickly to mop up spillages, repair broken steps and encourage staff to report maintenance faults straightaway.
- Invite feedback from staff on safety improvements - Create a safer workplace by consulting with staff on risk management, inviting feedback on safety issues and encouraging your team to flag up workplace hazards.
- Display safety information clearly - Make sure you stay within the law by clearly displaying safety signs for staff and customers - for example, directions to emergency exits, warnings about moving industrial vehicles or providing information on the

location of first-aid equipment.

- Maintain comfort and cleanliness - Aside from providing basics such as clean working toilets, adequate lighting and drinking water, you must also provide appropriate tools. Try to provide the most ergonomic layout to reduce the chance of injuries such as repetitive strain injury. Buying cheap chairs and desks is a false economy if half your



employees end up with back problems.

- Meet fire safety standards - You are obliged to carry out regular fire safety risk assessments and maintain a fire management plan that identifies possible hazards. Typical workplace breaches can include blocking fire exits, propping open fire doors and failing to train staff in evacuation procedures.
- Learn from any mistakes – Report near misses and If someone is injured, however slight, take steps to ensure it cannot happen again. The law insists you keep a record of all accidents or illnesses that happen to your employees during working hours - this can be a simple record book or a computerised log.
- Keep safety procedures updated - Don't forget to review your procedures at least once a year or more often if you are expanding fast. Keep up to date with legislation - remember it's your job to stay within the law.
- Advise technicians, if they feel that it is risk for them to carry out the requested service, tell them to stop the activity and report to supervisor immediately.
- Avoid sending technicians to work alone and do not carry out critical activities without supervision.

QHSE Coordinator meetings

Our 25 QHSE coordinators gather together on a monthly basis to ensure the Petrotec Group's QHSE yearly objectives are on target for achievement. Each coordinator reports back on the QHSE inspections that he/she carried out during Field visits within the various work locations, and shares the lessons learnt from recent near miss incidents.

In every QHSE meeting, we invite one General Manager from the different divisions/subsidiaries as a special invitee who gives an inspirational talk to the QHSE Coordinators. Mr. Muthu, our QHSE Manager leads the session and presents QHSE statistical tracking and trending data. He will also ensure our coordinators remain abreast of all relevant QHSE laws, code of practices and standards for the country.

The last session was held on January 9th, 2018 and Mr. Venky, General Manager – Petrotec Sales Division was the special invitee.



Mr. Venky - General Manager Petrotec Sales



HSE Coordinators Activities - Safety Training and Safety Walkthrough

Successful Upgrade of our ISO Certifications

Petrotec is pleased to announce that it has successfully transitioned its Quality and Environmental Management Systems to ISO 9001:2015 and ISO 14001:2015 respectively, well ahead of the September 2018 industry deadline. Following months of

rigorous examination of our procedures and performance relating to our Sales & Service activities to satisfy customer requirements, these prestigious certifications is a true testament to Petrotec's dedication to the highest levels of quality and environmental management to meet or exceed the expectations of regulators and our valued customers. The ISO upgrade extends to our Q-FAB and Ocean Team Qatar subsidiaries and merely reflects Petrotec Group's on-going commitment to achieving the highest

standards in all its business operations. Managing Director Clifford Lasrado said: "We are delighted to have been upgraded with the world's most recognised Quality management & Environmental management standards. Here at Petrotec, we have always placed quality and HSE at the heart of the business, achieving consistently high levels of performance and service."



TRACE Certification

Petrotec has completed a comprehensive due diligence process administered by TRACE, the world's leading anti-bribery standard setting organization. Certification by TRACE signifies that we have completed internationally accepted due diligence procedures and have been forthcoming and cooperative during the review process. The successful completion of TRACE certification demonstrates our commitment to commercial transparency, allowing us to serve as a valued business partner to multinational companies.

TRACE has transitioned to a robust on-line Third Party Management System. Now that all of this information is available on-line, TRACE is not reconsidering to include the single certificate page in the report at this



time. The entire reason for completing a due diligence review is to understand the company's ownership, business structure, and background of key employees. A certificate does not provide any of this crucial information, and that is why TRACE offers a full and comprehensive report on the company. Companies can now visit TRACE site in order to search for business partners

that have completed TRACEcertified due diligence and to request a copy of our due diligence report.

If we are asked to demonstrate our completion of TRACE due diligence, please direct the company in question to TRACE TPMS <https://tpms.traceinternational.org/IntermediaryDirectory>.

Enter **Company Name** and **TRACEcertification ID**. Petrotec's details on TRACE site follows:

Company Name: **Petroleum Technology Co / TRACEcertification ID: TC4093-2241**
 Company Name: **Qatar Welding & Fabrication Supplies (Q-FAB) / TRACEcertification ID: TC4092-2330**

Petrotec Sales

About Petrotec Sales

Petrotec Sales have been serving the Qatar Oil & Gas and Industrial markets for almost three decades. We are the Authorized Distribution Partner for globally acclaimed brands. As a channel partner, we offer a comprehensive range of products and complete solutions to our clients. Petrotec Sales has 27 Sales Engineers who work extensively with customers in Qatar, have excellent product knowledge, deep technical

expertise and several decades of industry/ product experience. This enables Petrotec's Sales Engineers to customize our solutions to each customer's needs and deliver highly engineered product solutions. Petrotec Sales is led by Venkatanath Kandalla as our General Manager. Each sales division is headed up by a Senior Sales Manager who leads a team of experienced sales engineers, Inside sales engineers



and an order management team. Over the years, Petrotec has been fortunate to

attract some of the most talented engineers and sales professionals in our industry. Such engineers stay with Petrotec, to build rewarding careers because of Petrotec's entrepreneurial spirit, a commitment to its employees and Petrotec's customer centric culture. Our people are our most valuable asset – they are skilled problem solvers that deliver immense value to our customers with their expertise.



Recent seminar organised by Petrotec - BASF

Successes of 2017

Chemicals & Rotating

BASF/ Ras Gas, Amines- a new product line, 5 yrs contract ~ QAR 45 Million; KG column internals for QAFAC, QAR 12.5 million; QAPCO- John-Zink – Flare application, lot of customer appreciation for quick mobilization during their emergency shutdown, QAR 8 million; BASF- Ras Gas-Claus Catalyst QAR 5 million, replacing incumbent who was doing this since inception of Ras Gas in 1989.



Petrotec - Camfil Seminar in Doha



Drilling team performing BODCNOAT coating in Dukhan

Drilling Several new principals and contracts during 2017 including, but not limited to: Churchill- Breakthrough at NOC & Rasgas; Fishbones-1st ever job in Qatar with Oxy; Vet-cogray- QP contract for 3 years off-shore Wellheads; BOND-COAT -Contract received from QP and the JV formation is in process. BondCoat operations team is all set and delivered on first few batches of the coated pipes to QP. Land for construction of workshop was awarded by QP to Petrotec. Significant contracts awarded by key customers for TAM, MasterFlo, Smith and Interwell during 2017.

Instrumentation & Field Instruments

2017 had a great breakthrough with a new customer segment – Ashghal and a new principal – Honeywell on the Lusail tunnel project. Though the project execution was very challenging, we should close out the year with successful execution of QAR 8.5

million project. Kelton-QP fiscal metering 5 yr contract (QAR 14 million) and OSI- EMI Soft/ QAPCO 3 yr contract for QAR 2.9 million were other significant wins. Swagelok – Trags (QAR 3.5 million), Shell call-off (QAR 3.5 million), JC/ Rotork wins:

MedGulf Al-Wakra Phase 2 (QAR 2.3 million), QChem QAR 1.5 million, BlackCat additional Khuff Wells QAR 1.1 million. In 2017, Petrotec successfully renewed several long term Valve agreements with customers.

Switchgear division wins major order in Qatar

Petrotec Switchgear division, the approved manufacturer of Eaton LV Switchgear systems in Qatar have been awarded a substantial order for a Power Xpert CX Low Voltage (LV) switchgear solution by the Ministry of Education and Higher Education in the Gulf state of Qatar.

The project will involve the installation of 70 electrical panels at the new headquarters for the Supreme Education Council in the capital city of Doha. Eaton and Petrotec won the prestigious project – following a three-way competitive tender – due to the long-standing partnership between the two companies and successful projects delivered to Qatar Foundation and Msheirib properties.

Eaton is the Preferred Supplier of Reliable Electrical Solutions

"We have a long-standing relationship with Eaton in Qatar and across the region," said Biswadeep Gosh, Senior Manager, Sales – Electrical, Petrotec. "This collaboration, other successful projects we delivered to ASTAD Project Management in the past, and our reputation for delivering quality and reliable solutions, ensured we were awarded this order."

Petrotec is a reliable partner in the region

"This win is a great testament to the way we work with Petrotec and how the Eaton teams in Europe and the Middle East work jointly to execute the projects," stated Andre Hamer, director, Market Development, Commercial and Large Projects, Power Distribution Division (PDD), Electrical Sector – EMEA.

"This result confirms our product and



The Supreme Education Council - Doha

commercial capabilities to develop this key market in the region, together with our longtime partner Petrotec," said Eaton's Oswin D' Silva, segment sales leader, Commercial Construction and Infrastructure, Middle East. "The joint approach of local sales and leverage of our total Eaton EMEA capabilities has proven to be a successful combination."

Preparing to fly

Well established and resolutely trusted, Petrotec's experience in welcoming new Technologies is well regarded. One such breakthrough has been via the industrial inspections undertaken by Sky-Futures, one of Petrotec's principals, in which we helped introduce the Qatar market to the prospect of aerial inspections by UAV or drone technology.

Sky-Futures use small, rotary Unmanned Aircraft Systems (UAS) with forward mounted cameras to conduct onshore inspections of oil and gas infrastructure e.g. online flares. The UAS inspection is used to locate possible defects, damage or other areas in need of further inspection or Fabric Maintenance (FM). The UAS is a small Vertical Take-off and Landing (VTOL) aircraft powered by eight propeller motors with a forward mounted camera payload. This report presents the Standard Operating Procedures (SOPs) necessary to conduct the inspection operations.



"There was a regulatory framework to overcome in assuring governmental bodies that we could operate these machines both safely and within legal boundaries," said Sajid Rehman, Senior Sales Manager – Instrumentation Systems & Corporate Sales. "We overcame these challenges via discussions

over nine month's period, and were delighted to be the first company to be approved despite strong competition".

With a powerful foothold in the market, Petrotec and Sky-Futures are currently working to propagate the advantages of drone technology in the oil and gas sector.

"New technology is occasionally more challenging to propagate and promote in the GCC than elsewhere, because there is a prevailing love of tradition and an ascribed way of conducting business that everyone is very much accustomed to. That said, we have been pleased by how open many leading organizations have been to our solutions once the advantages have been ably demonstrated. Inspections via drone of industrial sites entirely prevent downtimes, eliminate the possibility of human injury and altogether can save days of offline losses. We truly believe that companies can save millions and pre-empt problems using this approach", added Mr. Rehman.



We have moved to Jaidah Square

Our Headquarters, which is home to our Sales division, has moved to the Jaidah Square where we occupy the suites 203D & 204D, we thank you for taking the time to update your records and to contact us at the below details:

P.O Box 16069

Suite 203D, Jaidah Square Airport Road, Doha, Qatar

Tel: +974 4441 9603

Fax: +974 4441 9604

Email: petrotec@petrotec.com.qa

www.petrotec.com.qa

Feature

WE'RE EXPANDING

Petrotec expansions offers customers in Qatar

ONE STOP SHOP service offerings



Equipment Details

- 20 Ton & 10 Ton Overhead Crane.
- 5 Ton Radial Jib cranes - 6 nos.
- 3 Ton, 5 Ton and 10 Ton Forklift truck.
- Jet wash system.

- Ventil Universal test unit for control and safety relief valves, fully traceable calibration laboratory for electrical, pressure and temperature.
- Hydro test pump - up to 30,000 psi.

- Gas boosting pump - up to 20,000 psi.
- Lathe Machine - Bed length - 10ft, chuck diameter 22".
- Universal Milling Machine - Table size 48" x 14", Bed 30" x 18", Height 45".

Drilling

Pipe Coating facility in Dukhan

Drilling Department was awarded a contract for external coating of casing and tubing pipes by Qatar Petroleum. Petrotec is working to set up a 10,000 square meter full-fledged facility in Dukhan in collaboration with Bondcoat, the worldwide leader in external casing and tubing coatings for corrosion prevention. The facility should be up and running by June 2018. Our FLINT-COAT casing coating is designed to give superior corrosion protection while also being the most cost efficient product in the Qatar market.



Coming from very humble beginnings on the Salwa Road with only one principle – “To provide our client with a Quality Service”, Petrotec has grown to be Qatar’s leading Specialist Service Provider. Until recently Petrotec Services operated from Street 35 & Street 39 Service Centres in the Salwa Industrial Area. Petrotec is delighted to announce the opening of A State-of-the-Art Workshop Facilities in the Ras Laffan West Support Area. Well located, equipped with the latest technology and staffed by a team of long term employees with extensive experience with equipment services and repairs.

This takes our total facilities area to 54,000

sqm, 18,000 sqm of which is our facilities in Street 39 & Street 35, Salwa industrial area. The new Workshop includes additional 10 & 20 ton cranes, Oxygen clean room, Valve & Weld shop, Pump repair shop, Sand Blasting & Painting etc. The facility also accommodates our JV Service Companies such as Solarca (Chemical Cleaning, Steam & Air blowing), Ocean Team (Oil Care Services), Q-CAL (Calibration Services) and most recently our Pump repair Centre. We further expanded the laydown area by an additional 10,000 m² to accommodate Cargo Carrying Units etc. In addition to the workshop, we have also constructed a 26,000 cubic meter stand-alone Warehouse for our in country inventory.

Q-FAB'S UPCOMING FACILITY AT WUKAIR

Q-FAB is pleased to announce, that effective from Jan 2019, its sales, service & rental division will be moving to its new location based in Wukair.

Q-Fab has now invested in a 23,000 m² land to merge its Sales, Service & Rental divisions in one location to provide complete one point solution to our customers. This dedicated hub will combine skills and expertise to provide a wide range and efficient sales and service for our high-end products.

Unique to its location, the state-of-the art Sales & Service center at Wukair includes a fully equipped workshop and showroom to display a huge array of construction



G



Calibration Laboratories



Control Valve Test Unit



Oxygen Service Clean Room



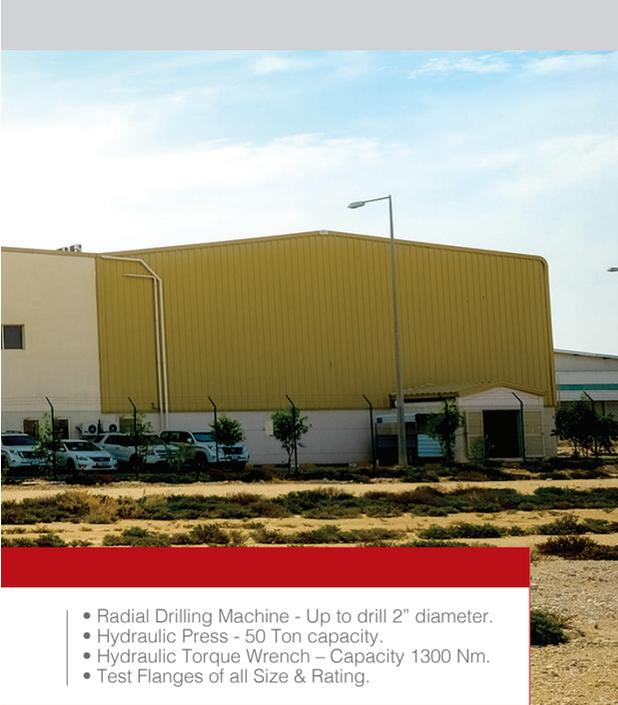
Safety Valve Test Unit



Sand Blasting & Painting



Welding Capabilities



- Radial Drilling Machine - Up to drill 2" diameter.
- Hydraulic Press - 50 Ton capacity.
- Hydraulic Torque Wrench - Capacity 1300 Nm.
- Test Flanges of all Size & Rating.

Mr. Neil Andrew Dey, General Manager – Petrotec Service & Technology Centre (STC) says: *"Maintain, Repair & Overhaul (MRO) Services will be the core growth area for the Qatari Oil, Gas & Petrochemical market for the foreseeable future. We have invested in a state of the art Service Centre right next to the Ras Laffan Industrial City. With increasing preference of our customers on localization, better turn-around time and cost optimization, Petrotec's 'close-to-the-customer strategy' is offering great value to the Qatar oil & gas market."*

Neil's valve repair shop is buzzing with activity right from the day the facility was commissioned, primarily due to the large number of valves sent by Ras Laffan clientele during their shutdowns. In the first year of operation, the shop repaired and overhauled over 1,000 valves.



equipment. The facilities comprise a dedicated Heavy & light equipment workshop with work pits, a dedicated hydraulic service room, a tire foam workshop, a paint booth, rental workshop, reception area & training room.

Facility will also have 1565m2 of covered area as Warehouse. This Warehouse will be dedicated to our parts operations. It is fully equipped with high racking, VNA forklifts and modern inventory management methods & practices.

With the new facility operational, will be another step in Qfab's continuous endeavor in providing one stop shop for all industrial needs of our customers.

Opening of the New Pump Repair Centre in Ras Laffan

Petrotec has recently opened up a 1700 square meter Pump Repair Centre and have been busy ever since. Qatar has been moving towards self-sufficiency for a number of years now and Petrotec has answered that call by building a Pump repair facility near the Ras Laffan facility with Flowserve as a partner. Flowserve has one of the largest installed bases of Pumps in Qatar.

Flowserve has extensive depth and breadth of expertise in the successful application of pre-engineered, engineered, and special purpose pumps and systems. Flowserve can trace its expertise in the pumps industry back to the 18th century. Today, the Flowserve pump portfolio boasts some of the world's most renowned pump brands. The Petrotec Pump facility is able to repair pumps from various industries including Oil & Gas & Refinery pumps. In our short time of being opened we have had a number of successful projects with Clients such as Qatar Cool, Laffan



Refinery, Shell, Qatar Gas South, Qatar Petroleum and the newly formed North Oil Company.

New ventures - Flowserve Dry Gas Seal Facility

Petrotec in partnership with Flowserve is currently setting up a state-of-the-art Dry Gas Seal repair facility for the refurbishment and dynamic testing of Compressors Seals in Qatar to be ready by 2018. It is the first of its kind in the region. Due to their critical nature in the plants they are installed at, Dry Gas Seals require

fast turnaround with a high level of expertise as well as specialized equipment to service and test them. At the moment there are over 500 of Dry Gas seals installed in Qatar, this repair facility will be of great service to a number customers to receive the localized support previously not available.



New Personnel - Nathan Venter Sales & Operations Manager

Petrotec Pump & Seals Division has brought on new personnel. Nathan Venter is the new Sales & Operations Manager for the Pump & Seals Division and has joined the team from Jan 2018. Nathan has recently moved from Flowserve and has worked in Qatar for Flowserve in 2014. He has 11 years' ex-

perience in Rotating equipment working for Fluor, Flowserve & Flowserve distributors in that time.

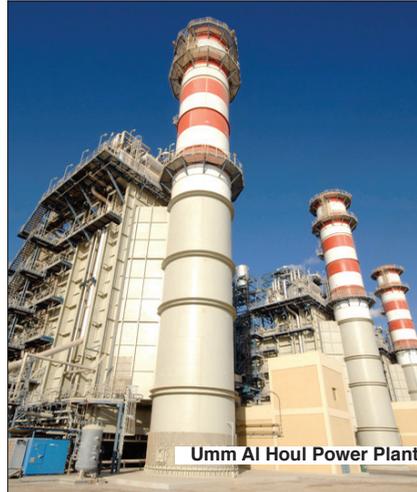
We welcome Nathan to the Petrotec family, and look forward to working with him and the input he will bring.



Spotlight on Subsidiaries

Solarca Qatar successfully completes the Chemical Cleaning on Umm Al Houli Power and Desalination facilities

Solarca Qatar has managed to prove itself that it is the leading company that provides chemical cleaning solutions to various clients in Qatar. One instance of this is the cleaning performed during the QCHEM shutdown in 2017. The cleaning was performed on a spent caustic tank. Numerous attempts were done by various companies in the past to clean the tank, however it was never successful. Solarca was contacted in 2016 to tender to this job and find a solution to the cleaning of the spent caustic tank. After extensive tests Solarca had found a chemical solution that would dissolve the spent caustic sludge. This method of cleaning was the first ever attempted in the state of Qatar. Due to the ingenious technique involving overhead multi-directional rotating beam, the cleaning was attempted. The cleaning proved to be a major success, and in turn a benchmark in proving the capability of Solarca Qatar as the leading chemical cleaning provider in the State of Qatar. Another mile stone achievement for Solarca Qatar, was the pre-



operational cleaning of a combined cycle power plant- " UMM AL HOUL IWPP" built by SAMSUNG C and T, in Wakra. The project involved cleaning of 6 Combined Cycle HRSG with an individual volume of 650 m3, and the 2 balance of plant piping with an individual volume of 450 m3. This project was awarded to Solarca and was completed in a record breaking 4 months from commencement of mobilization to completion of cleaning. This project proves Solarca's capability of understanding the needs of the client and working with strict deadlines and handing over the project before the target deadline back to the client.

About Solarca Qatar:

Solarca Qatar is a joint venture constituted in December 2009, resulting from an agreement between Solarca S.L. and Petrotec. Solarca Qatar established itself as a leader in the field of industrial chemical cleaning and Air & Steam Blowing.

MASS EXCAVATION FOR THE WORLD'S LARGEST ALUMINIUM SMELTER

In 2017, Qfab rented a Surface Miner SM 2500 to a contractor in Bahrain, for the prestigious - Aluminum Bahrain (ALBA) expansion project.

ALBA will become the world's largest single- site Aluminum Smelter, upon completion of the 3.5\$bn expansion project. The proximity of the new extension to the existing infrastructure made it impossible for blasting or to use conventional excavation methods. Qfab did a case study on the project and prepared a method statement on the utilization of the Surface Miner.

ALBA was convinced that the most efficient and cost effective method to carry out the mass excavation was by using the Wirtgen Surface Miner.

Our SM 2500 was part of the fleet of three Surface Miners which milled 800,000 m3 of moderately strong to strong limestone with an instantaneous production rate of more than 160 m3/hour. Important to mention that Qfab Service team was deputed at site to support the equipment, throughout the 10 month project, which was completed incident free.

About QFAB:

Established in 1996, Q-FAB is a Petrotec owned company which supplies engineering products and provides service and maintenance solutions to all of the major industries in Qatar and beyond.



CLIENT: BECHTEL INTERNATIONAL

CONTRACTOR: SURFACE MINING INTERNATIONAL

PROJECT: ALBA POTLINE 6

LOCATION: KINGDOM OF BAHRAIN

PROJECT DATE: JAN- SEP 2017

EQUIPMENT: 3 X WIRTGEN SURFACE MINERS SM2500

TYPE OF JOB: EXCAVATION

Oil Flushing in Half The Time!

Ocean Team has developed oil flushing systems which ensures on-time cleaning efficiently. Before start-up of rotating equipment (i.e. Turbines, Compressors, etc.), oil flushing must be performed to remove impurities originating from the fitting and welding of piping systems during the construction phase of the Project. Lube oil flushing is the final link to ensure the cleanliness of the systems before the commissioning and startup of new plants. When Ocean Team was requested to perform the Lube Oil Flushing on six (6) large Gas turbine and Compressor systems to be used for gas export to Abu Dhabi, a time limit of six weeks was set for the flushing of each plant. Ocean Team developed a specific oil flushing procedure,

which was subsequently approved by all involved parties. Flushing of the first plant took only four (4) weeks but this was further reduced to three (3) weeks for the following plants. Due to our advanced technology, long experience, realistic objectives and high efficiency, the system was ready to be put into operation after only half the time scheduled for the job. And moreover, the quality was to the highest standard with all of the customer's purity requirements being met.

Recent Lube Oil Flushing Projects:

- Barzan Project, Ras Laffan, Qatar (47 Turbines, compressors and Pumps)
- Qatargas PMP Project, Qatar (11 Turbines, compressors and Pumps)
- Qatargas Tr. 7 & 6, Ras Laffan, Qatar (20



Total Purity Solutions

A PETROTEC COMPANY



- Turbines, compressors and Pumps)
- Qatargas Tr. 5, Ras Laffan, Qatar (12 Turbines, compressors and Pumps)

BD Test Separator Cleaning in North Oil Company (NOC)

Ocean Team Qatar was called to carry out the cleaning of the Test Separator which includes the vessel entry. Before performing this job, a method statement was drafted onshore. Along with the client's combined onshore and offshore teams, a thorough Job Safety Analysis was carried out to ensure that the many potential hazards to be encountered during a confined space entry into a hydrocarbon contaminated vessel were identified, and effectively controlled. Team tool box talks were held every day at the worksite and review meetings were held at each stage of the job with our team to capture feedback on progress up to that point as well as ideas and suggestions for the best way to move forward with each new phase of the task.

We found that the vessel was %50 full of oil and wax covered solids, including a lot of gravel type material. This meant that the

solids could not be liquefied and pumped out, as originally hoped. A system was set up for removing the material to mud skips by hand, involving our staff inside the vessel, and all of the campaign team outside to handle the solids. Approximately 13-15 Te of solid material was removed by hand.

The task started with the initial isolations on the 17th December, 2017, and was completed safely, and ahead of schedule. This type of task at the outset can often seem fairly straightforward, however it always requires a great deal of collaboration between different parties during the planning and execution phases, and as was demonstrated in this case things are not always as expected. BD Separator has been successfully leak tested.

"I'd like to take this opportunity to thank Ocean Team Qatar for what was a tremendous effort to undertake this scope



successfully and safely. In this job we have learned very positive lessons and this is largely due to your teams diligence and efforts", said Christopher Clark, Campaign Lead - NOC

"Ocean Team & Fluitec Event"

Reduce Outages, Eliminate Lube-Related Shutdowns

Ocean Team Qatar with its partner Fluitec held the Fluitec's Lubrication -1Day Academy at the Iconic Sheraton Grand Doha Resort in Doha Qatar.

A large number of client's personnel attended the event on how to reduce outage by days and eliminate lube-related shutdowns, trips and fail-to-starts. Our Lubrication Academy provided the most advanced and up-to-date knowledge available to assist plant maintenance and mechanical engineering professionals to manage their lubricating assets, minimise costs and deliver lubricant fill-for-life solutions to their business.

Topics our clients learned:

- How to select the best oil for the application using performance data.



- Why oils fail, how to detect this failure mode and what can do to minimize lubricant-related failures and downtime.

- How varnish forms and what can be done to eliminate varnish concerns permanently.

- What are the most accurate and best value oil analysis tests and how to optimise a Condition Monitoring program.

- How to determine the end of oil's useful life.

- How to double or triple the life of oils.

- When to consider flushing and best practices for oil changes.

- How proper lubricant management can increase bottom line.

About Ocean Team Qatar:

Ocean Team Qatar is a Petrotec owned company, we are specialists in efficient removal of all unwanted contamination from technical fluid-carrying systems such as turbines, compressors, generators, pumps, etc. For many years, we have developed customized purification methods, especially for use in hydraulic, lube oil and process systems in the energy sector, heavy industries and maritime industries.

Spotlight on Subsidiaries

GTS Upgrades Balancing Machine with CAB 920SmartTouch

In its continued efforts to offer the highest quality of services, GTS introduces another state-of-the-art facility with Schenck CAB 920SmartTouch.

Advantages of the latest balancing upgrade:

- Highest ease of use with the highest precision.
- Simplified operating concept and most competent measuring instrument.
- Touch Screen features distinct



interactive symbols and directly interactive input windows.

- Highly visible structuring of the operator interface for easy operation.
- With SmartTouch, all information needed for balancing process are clearly structured and put together.

CAB 920 SmartTouch – Precise Measurement, Easy Balancing– The Reference Point for Balancing.

Qatargas Shutdown 2017 – Mitsubishi Steam Turbine Inspection and Maintenance

Gulf Turbo Services (GTS) successfully accomplished the first phase of the maintenance contract with Qatargas Operating Company Ltd. for the inspection & major overhaul of Mitsubishi (MHI) Steam Turbines. The scheduled overhaul commenced in October 2017 at Ras Laffan Industrial City, Qatar.

GTS managed to efficiently deliver the most critical part of this year's Qatargas shutdown with its highly competent manpower mobilized day and night to perform all inspection and overhauling activities. Having gone through several pre-shutdown meetings and planning activities, the project kicked off with site preparations which include submission

of required documentations, inventory of spare parts and special tools, and submission of approved work execution schedule.

With a team of more than 50 field service personnel, mechanical work was successfully completed within 15 days. After the mechanical completion, GTS team then executed the machinery start-up and commissioning which was carried out smoothly, guaranteeing %100 compliance to Qatargas' requirements & the complete achievement of Goal Zero harm.

As one of the leading rotating equipment specialists in Qatar, GTS strives to increase its presence in the market by continuously providing quality rotating equipment

services to its valued clients in the Middle East. The next phase of this maintenance contract is set to take place in September 2018.

About GTS:

For 10 years now, Gulf Turbo Services W.L.L. continues to be a leading technical service support company on rotating equipment in the Gulf region. GTS has been a reliable rotating equipment specialist company with its wide range of workshop services and field service capabilities. No doubt, GTS has made a name in the industry defined by its expertise and experience.

CALIBRATION SPECIALISTS:

QCAL provides following services to customers in Qatar:

- Validation of Gas Chromatographs
- ISO 17025 Calibration Gases:
 - Natural Gas & LNG
 - Emission Gases: Binary gas mixtures in a nitrogen or air balance (where possible) are available for customers who require calibration gases accredited to ISO 17025 for continuous emission monitoring (CEM) and personal monitoring systems. ISO 17025 accredited mixtures are required for Quality Assurance Level 2 (QAL2) and the Annual Surveillance Test (AST). These gases can also be used for daily/weekly/monthly calibration of CEMS analyzers.

Training on Gas Measurement at QP – WTC

QCAL/EffecTech has conducted training on gas measurement for oil & gas industry professionals at QP – WTC. Course design and provision was carried out by EffecTech's experienced Gas Measurement Specialists, drawing on extensive in-house expertise to offer a world-class learning experience.

ELECTRICAL ENERGY/TARIFF METER CALIBRATION

Energy meter calibration is required to ensure the correct performance of the meter. Power supplier and consumer rely on meter readings to correlate the supplied power with consumed power. QCAL has developed energy meter calibration facility and it is approved by Kahramaa. QCAL is known as leading energy meter calibration agency in Qatar for its quick and quality services. QCAL serves organizations who

purchase power from Kahramaa and QP as well.

QCAL carries out calibration of three phase and single phase meters onsite and at QCAL laboratory as well.

Major Projects:

- Power generation stations
- Bulk consumers such as industrial establishments, commercial establishments, shopping & entertainment complexes, etc.,
- Electrical substations



About Q-CAL:

Q-Cal was established in Qatar in 1998 to provide process equipment calibration, repair, rental and management services.

Q-Cal is accredited to ISO/IEC 17025:2005 by International accreditation services (IAS). IAS is an accreditation body in United States of America and ILAC MRA and Signatory.

شركة قطر لخدمات القياس د.م.م
QATAR CALIBRATION SERVICES W.L.L.



Making waves

A well-known, yet unexpected fact about Qatar's geology, is its high water table. Sometimes rising to above the ground surface. It's this natural phenomenon that poses a threat to any type of construction in the country, requiring oft-times extensive dewatering systems.

A sub-contractor on the project, KWMME's scope of work is to supply dewatering services for micro-tunnelling shafts and open trenches for this pipe laying, which requires a dry environment. The entire dewatering site comprises an area of about 3km² with approximately **3,200m³** of water pumped out per hour, from the lagoon to the sea. The 81 micro-tunnelling shafts measure 6m x 6m, ranging from depths of 12m to 18m. At the start of the project, the volume of water that required dispersal/removal was unexpected, as Business Unit Head Marc Dinnematin explains: "In the beginning, as we were literally the first company to dewater this area, the ground was fully saturated, which we realised when we sunk the first shafts, which filled with water".

"The flows were huge and because of the unpredictable character of Qatar's geology, we encountered numerous cavities, more than on any other project previously. When we did our soil investigation, while we were aware of



them, the number was greater than what we expected".

"Until the water was lowered throughout the work area, the water was flowing freely into the shafts".

PROJECT DATA

Start date: September 2016
End date: January 2018
Size of dewatering area: 3km²
Number of shafts: 81 initially
Distance from sea: approx. 5.5km
Submersible pumps on site: approx. 100
Cubic metres pumped p/h: approx. 3,200m³
Length of 'lay flat' pipe: approx. 50km
Capacity of lagoons: approx. 70,000m³

KWMME had gauged the initial water flow to be around 110 cubic metres per hour per shaft and 60 cubic metres per hour at nominal flow, but the flow into the shafts soared to between **200 and 400 cubic metres per hour**, necessitating more powerful pumps to handle the increased flow.

"We immediately upsized the pumps, pipes and generators. From the design we knew that the water was 'localised'; it wasn't flowing directly from the sea, so we knew it was 'finite' and could therefore be controlled; we knew the flow would eventually subside," he adds.

A dewatering project knows no 'downtime' so the operation runs 7/24 with a workforce of 35 on the site during -24hours, comprising two shifts. The project commenced in September 2016 with due date for completion January 2018 which, Dinnematin says, while optimistic, is possible.

Local location is the big differentiator

Marc Dinnematin, business unit head, Koop Water Management, says that a local presence ensures an ability to adapt quickly to changing conditions

Koop Water Management Middle East's main focus is to offer dewatering, pumping and water treatment services to Qatar's construction and Oil & Gas industries. We are also able to support authorities like Ashghal. With dewatering being such a critical, and often high risk, activity in the project life cycle, what differentiates Koop is their reliability, and their ability to adapt to changing site conditions. This is due to the whole operations and design team being based in Qatar which helps to get the

job done when actions and quick decisions fast are needed.

Another key differentiator is Koop's investment in our human resources, ISO standards and safety. We have found that when staff know that they are valued by their employer, and feel safe in their working environment, they offer clients a higher level of service and strive to achieve even higher standards.

Koop Water Management Middle East (KWMME) have successfully completed dewatering works on the

Doha Metro Gold Line Project in November 2017. KWMME were sub-contracted to provide dewatering for the Sports City Station, Villaggio Station and the Entrance for Al Sadd Station. The scope of works included installation and running a total of 58 deep dewatering wells in order to enable excavation depths up to 26m below existing ground level. The first dewatering system was commissioned in March 2015 with continuous 6/24 x 365 running until November 2017. The scope also included installation



and maintenance of two HDPE pipelines, crossing underneath Al Waab Street, with booster pump stations, in order to pump discharge water both ways between Sports City Station and Villaggio Station. All works over the 33 month period were completed without any serious injury to KWMME staff.

From the HR Desk



long service AWARDS 2017

The year 2017 witnessed 28 Long Service Awards. Employees who completed 25 & 20 ,15 ,10 years with the group received Long Service Awards during the **Beach Cleaning Activity** in December 2017.

NATIONAL SPORTS DAY 2018



In line with Qatar's celebrations on the National Sports Day, Petrotec conducted the sport activities at Al- Arabi Club. A great number of the company's employees and their immediate families took part in the event.

Different sport activities and contests were held including games and fun activities for children and adults, who were so enthusiastic to participate and play. Prizes were given to the winners. Petrotec's participation on the occasion of the Sports Day has become a tradition in our company given our commitment



to this event since its first edition in 2012. Through its participation, Petrotec aims at spreading sport culture and awareness among its employees,

encouraging them to practice sport exercises on a regular basis, which will be positively reflected on their physical well beings and fitness, raising their work performance and productivity, as well as promoting their mutual cooperation and communications.

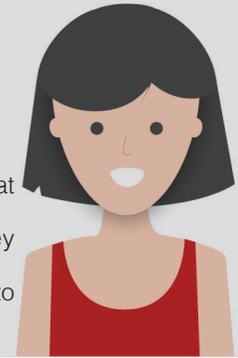
"Our participation in the country's national sports day inspires and promotes the idea of leading a healthy lifestyle through encouraging the employees and their families to practice exercises on a regular basis", said Clifford Lasrado – Managing Director of the Petrotec Group.



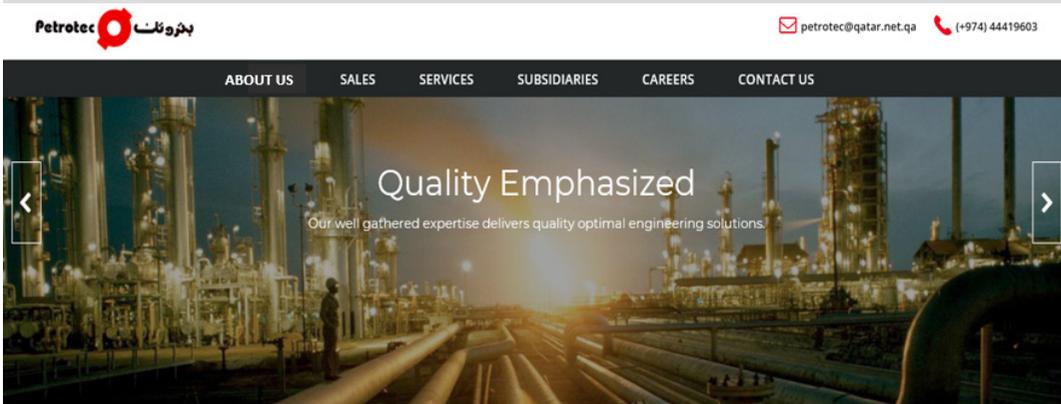
Hi! I'm Amber

Our 1st Virtual Employee Amber

We are pleased to welcome a new, one of a kind employee named Amber to Petrotec Group. Amber is HR's artificially intelligent assistant who is helping leadership act on the areas of improvement that you surface in our culture. Amber will touch base with select few every now and then to understand and empathise with their journey in Petrotec so far. Since she is not human, you can open your heart out without any fear of judgment. Please take 2 minutes of your time to interact with her when you receive an email from her. Look forward to some meaningful interaction.



Our new WEBSITE is launching SOON



www.petrotec.com.qa

We are excited to announce that we are currently in the process of launching a new website to help bring improvements to our customers. Our new website will be faster, easier to navigate and bring a range of new developments, including:

A new, fully responsive design – aimed to provide an optimal viewing and browsing experience across multiple platforms.

An updated image gallery showing off the latest additions to our portfolio.

A more modern, fresher interface, which is fully optimized for user navigation.

Our aim at Petrotec is to constantly expand the

range of our products and services and ensure their presence on the Web. In fact, over the past few months, we have added a multitude of products and services to better serve the Qatar market. It is important for us to be able to showcase our offering in their truest form with descriptive information to benefit each visitor – and our new website will do just that!

Our Marketing and IT teams are currently working hard to ensure that the new website will be released before the end of March 2018. Thank you for bearing with us but the wait will be worth it. Keep an eye on our current website for more information soon!

Employee Profile

Mohammed Shameem joined petrotec in July 1997. Over the years he has managed a number of business units and has contributed enormously to the growth of Petrotec. Shameem currently heads

the Drilling department managing the Sales & Services. Outside of work, his passion is Music and is an avid DJ and volunteers for office parties. Shameem also loves interior decoration and gardening.



e Offer

In 2018 we will be introducing eOffer, an initiative which would drastically reduce the time taken to make an offer to our new employees and automate the offer process. get started right away, just tap any placeholder text (such as this) and start typing.

Newsletter Editors

John Hickey
Sr. Manager - Business Development

Abdelhak Merah
Account Representative - Business Development

Article Contributors

Venkatanath Kandalla (Venky),
General Manager - Petrotec Sales

G. Muthu
QHSE Advisor - Petrotec Group

Krishnan Narayanan
HR Manager - Petrotec Group

Hari Kishore
Service Manager - Q-FAB

Tarek Zein
Business Development Manager - Ocean Team Qatar

Mohammed Shameem
Manager - Drilling (Sales & Services)

Biswadeep Ghosh
Sr. Sales Manager - Electrical

Marc Dinnematin
Business Unit Head - KOOP Middle East

Nathan Venter
Manager - Rotating Equipment

Lorenz Taraja
Commercial & Business Development - GTS

Shreenivasa
T R, Specialist Calibration - Q-CAL

Stefan Shelley
Sales Engineer - Solarca Qatar

About Petrotec

Established in 1989, Petrotec is one of the largest providers of products and services to the energy industry in Qatar. With approximately 600 employees representing 31 nationalities, the company maximises every opportunity to promote its activities in the fastest-growing energy sector in the Middle East. Petrotec represents a key selection of world leading manufacturers and service companies. Our clients in Qatar are provided with comprehensive specialised engineering support from our local team to supplement and enhance the links with our suppliers. This close support keeps both our partners and Petrotec ahead of the competition.

Contact us:

Tel. +974 44419603
Fax. +974 44419604

Suite 203D, Jaidah Square, Airport Road,
Doha, Qatar

petrotec@qatar.net.qa

Petrotec  بثروتك

Follow us:

