

# COMPANY PROFILE



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## **ABOUT PPC**

### **Background**

Pioneer Power Contracting is an indigenous petroleum services and construction company. PPC was formed as an endeavour by industry experts to offer comprehensive premium solution within the upstream and downstream sector with the agility and dynamism critical to oil fields.

Having strong relations and JVs with global market leaders, PPC strives to be one of the leading pipeline projects and oil field service providers in the industry.

We guarantee to deliver high-end quality products and services to our clients and offer a Solid platform to our partners both internationally & locally aiming to enter the oil, gas and pipelines market in KSA.

### **History**

Pioneer Power Contracting, (PPC) was established as Intended Pipelines Constructions and Services Company. It has a team of accomplished crew with extensive experience of more than 20 years.

### **Integrity**

Integrity at PPC is more than the business conduct policies and procedures we follow.

We set high expectations for ourselves and build trust in each other, with business partners, shareholders and the communities where we work and live. We say what we're going to do – and then do it.

### **Inclusion**

We value diversity in culture, background, perspective and experiences.

We strive to provide our employees with a collaborative, supportive and inclusive work environment where they can maximize their full potential for personal and business success. This happens when our employees, contractors, and other stakeholders feel valued themselves, and value others for who they are.

### **Collaboration**

We are a company of driven, accomplished professionals who are more than the sum of their training and experience.

We actively partner with our communities, governments, and business partners to find and create shared values, making a positive difference together. We foster constructive, solution-oriented dialogues; we genuinely listen to one another and seek out perspectives different from our own.

### **Leadership**

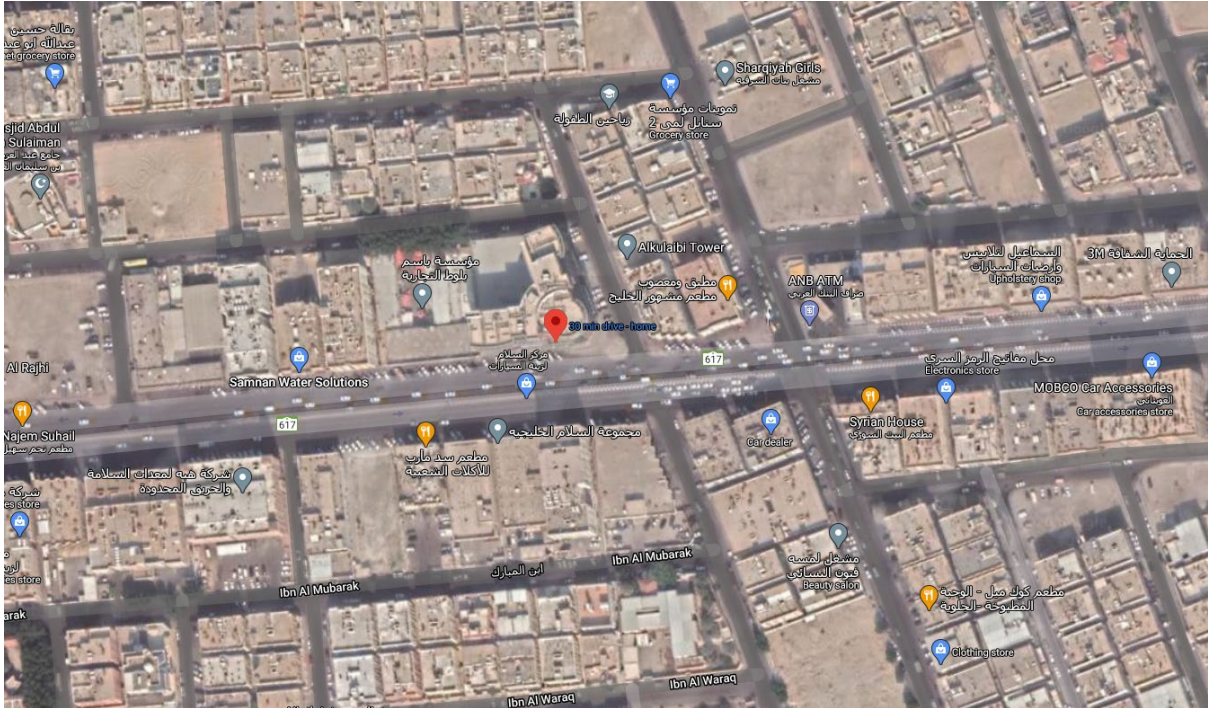
Our values are of utmost importance at PPC and that commitment starts from the top down. Our leadership team is committed to making sure those values permeate throughout our organization and everything we do. Meet the people responsible for leading PPC forward.



## PPC LOCATION

We are a Dammam based company ensuring ease of convenience and flexibility as and when required, reflecting on our commitment to deliver unrivalled services to our clients.

Our infrastructure which also includes an oil and gas retail park can accommodate and undertake a wide spectrum of services and activities throughout Saudi Arabia.



**PPC Head Office Location**



**Yard Location**

## **CODE OF CONDUCT**

### **Professional conduct & Integrity**

We conduct all of our activities professionally and with integrity. We take great care to be completely objective in our judgment and any recommendations that almost we give, so that issues are never influenced by anything other than the best and proper interests of our clients and partners. We deal with people fairly and respectfully. Our reputation and success depend on fair dealing. Each employee must deal fairly with all of our stakeholders, including clients, employees, and service providers, as well as our competitors.

We do not violate our clients' policies and no employee should take unfair advantage of anyone through manipulation, concealment, abuse of privileged information, misrepresentation of material facts, or any unfair dealing practice.

### **Health, Safety, and Environment**

Our capability is centered on our Integrated Management System (IMS), based upon best practice industry standards, recognized by International Oil Companies and certified to ISO9001 (Quality Management System), ISO18001 (OHS Management System Requirements) and ISO14001 (Environmental Management System Requirements).

Developed over more than 18 years of onshore and offshore oil and gas project delivery, the IMS includes corporate policies, Management System Standards (MSS), procedures and practices. It underpins delivery of our core services, including industry-leading HSE solutions that are practical, cost effective, tailored to client requirements and in accordance with the relevant health and safety regulations.

### **Quality Assurance**

We maintain the quality of what we do through constant ongoing review with our clients, of all aims, activities, outcomes and the cost-effectiveness of every activity. We encourage regular review meetings and provide regular progress reports. We strive to meet as exceed our client's expectations while being mindful of the need to provide cost-effective solutions and maintain a sustainable business model. We strongly believe in win-win approaches and will take all measures to achieve thriving relationships with our partners, customers, and clients.

### **Ethics**

We always conduct our services honestly and honourably and expect our clients and suppliers to do the same. Our employees, partnerships, and the methods imparted through our operations take proper account of ethical considerations, together with the protection and enhancement of the moral position of our clients and suppliers.

### **Confidentiality**

We are committed to maintaining the highest degree of integrity in all our dealings with potential, current and past clients, both in terms of normal commercial confidentiality, and the protection of all personal information received in the course of providing the business services concerned. We extend the same standards to all our customers, suppliers and associates.

## Anonymity and Confidentiality

In PPC we encouraged our employees to provide their name when raising a concern. This allows those who respond to the concern to contact them if additional information is needed to look into the concern thoroughly. Providing the name also helps us ensure that the concerned employee does not experience retaliation for making a good faith report.

If someone choose to identify themselves when making a report, filing online, PPC will endeavor to keep their information confidential, sharing it only on a need-to-know basis among those directly handling or overseeing the issues you reported.

## Resources Protection

All employees must protect the company assets and ensure their efficient use. All company assets should be used for legitimate business purposes. Any personal use of the company assets must be either approved in advance or incidental and insignificant in cost and time. We must preserve, and not change, hide or destroy any records that are subject to an investigation or which may be used in any official proceeding.

## Financial System

An efficient financial sector is one of the pillars of a well-functioning market economy. Our financial infrastructure consists of the support for the financial system found in the legal and the regulatory framework governing financial transactions, the practices surrounding audit, accounting and financial disclosure and the operations of the payment system.

The main functions of the financial sector are the following:

- to reduce transaction costs by providing a stable and widely acceptable medium of exchange
- to encourage savings in financial assets by supplying financial instruments with attractive yields and different maturities
- to improve efficiency of resource utilization by screening alternative investment proposals and by monitoring the behavior of borrowers and issuers of equity
- to make risky investments practicable by pooling, pricing and redistributing risks of financial assets.

## Conflicts of Interest

Conflicts of interest are not always clear-cut and easy to define and require case-by-case analysis. We expect that All employees shall identify conflicts of interest before taking any conflicted action and address the conflict. Employees must not use their positions, or the knowledge gained as a result of their positions for private or personal advantage. Regardless of the circumstances, if employees' sense that a course of action they have pursued, or are presently pursuing, or are contemplating pursuing may involve them in a conflict of interest with our company operations, trade secrets, or interests of any of our partners or clients, they should immediately disclose such conflict of interests to their superiors to take the appropriate action.



## SERVICES OVERVIEW

PPC has the capacity to outperform and exceed our customer's expectations. Our client's need is our mandate and we deliver our services with unmatched quality, responsiveness, and can-do attitude.

### **Piping and Pipeline Construction**

Pipeline construction projects look much like a moving assembly line. A large project typically is broken into manageable lengths called "spreads," and utilizes highly specialized and qualified workgroups. Each spread is composed of various crews, each with its own responsibilities. As one crew completes its work, the next crew moves into position to complete its piece of the construction process.

#### **Tasks Include:**

- **Pre-Construction Survey**

Before construction begins, crews survey environmental features along with proposed pipeline segments. Utility lines and agricultural drainages are located and marked to prevent accidental damage during pipeline construction. Next, the pipeline's centerline and the exterior right of way boundaries are staked.





- **Clearing and Grading**

The pipeline right of way is cleared. Temporary erosion control measures are installed prior to any earth-moving activities.



- **Trenching**

Topsoil is removed from the work area and stockpiled separately. Crews use backhoes or trenching machines to excavate a pipeline trench. The soil that is excavated during ditching operations is temporarily stockpiled on the non-working side of the trench.





- **Pipe Stringing**

Individual joints of pipe are strung along the right of way adjacent to the excavated ditch and arranged so they are accessible to construction personnel. A mechanical pipe-bending machine bends individual joints of pipe to the desired angle at locations where there are significant changes in the natural ground contours or where the pipeline route changes direction.



- **Pipeline Welding**

After the stringing and bending are complete, the pipe sections are aligned, welded together, and placed on temporary supports along the edge of the trench. All welds are then visually and radiographically inspected.



- **Coating Pipe**

Line pipe, normally mill-coated or yard-coated prior to stringing, requires a coating at the welded joints. Prior to the final inspection, the entire pipeline coating is electronically inspected to locate and repair any coating faults or voids.



- **Lowering Pipe in and Backfilling**

The pipe assembly is lowered into the trench by side-boom tractors. The trench is backfilled using a backfilling or bladed equipment; no foreign materials are permitted in the trench.





## Pipeline Services

PPC Pipeline Service provides a wide range of pipeline services that are executed by top-notch Engineers in the Oil & Gas Industry. Our aim is to provide our clients with quality services that conform to standards and clients' requirements and exceed their expectations in a timely and cost-effective manner.



### Services Offered:

- Chemical Cleaning
- Pipeline Descaling and Cleaning
- Hydro Services
- Pipeline Hot Tap
- Valve Services
- Cathodic Protection
- Glass Reinforced Epoxy Pipe Services
- Sandblasting & Painting



### Chemical Cleaning:

The presence of internal scale and its removal is a major challenge in process systems and its ancillary equipment. PPC is working proactively together with its customers to find an effectual manner of solution. The industry has placed a greater emphasis on long intervals between cleaning/maintenance, hence requiring improved chemicals and methods. PPC has devised cleaning methods that can be used during decommissioning activities.

#### Purpose

- Removal of organic and inorganic scale/desalination
- Extended maintenance intervals
- Increased efficiency of the equipment
- Increased efficiency of process systems
- Black Powder Removal
- Improved equipment economics
- Black Powder build-up mitigation



### Pipeline Descaling and Cleaning

Pipeline descaling is the removal of hard calcium and wax deposits in pipelines. This is done to restore the original flow rate in the line; to allow inspection tools to assess the pipeline integrity and reduce the overall operating costs.

At PPC, we use special scrappers able to pulverize the hard calcium deposits without disrupting the fluid flow.



### Pipeline Hot Tap

PPC utilizes the latest technology like TM1200xl with power pack/hydraulic, T101 to carry out hot tap services.

This service allows for the maintenance of pipelines without emptying the pipeline. With the hot tap technology, a pipe or tank can continue to be in operation whilst we carry out maintenance or make modifications to them.



### Valve Services

PPC is highly recommended for valve inspection, maintenance, and repair, hydrostatic testing or leak detection. Our methods have achieved 100% valve repairs and leak detection success.

Our testing and maintenance equipment are highly mobile and very cost-effective. Our hydrostatic testing, valve servicing/repairs, and leak detection services eliminate the usual high cost of maintaining facilities.



### Cathodic Protection

We utilize the current techniques of cathodic protection in corrosion monitoring to give our clients optimum satisfaction.

We utilize Pipeline Current Mapper (PCM) technology to complement the conventional test methods to provide a cost-effective method which overcomes the limitations of existing techniques used in evaluating the effectiveness of cathodic protected pipes and Facilities.



### Glass Reinforced Epoxy Pipe Services

We provide complete engineering services from procurement to design & engineering, prefabrication & spooling, installation & maintenance of GRE piping system of various sizes and pressure rating.





### Sandblasting & Painting

We offer sandblasting services using steel grit to clean or etch pipe surfaces before applying paint to prevent corrosion.



## Testing and Commissioning Services

### Purging / De-Gassing:

Nitrogen purging is the replacement of an undesired atmosphere by the inert gas nitrogen. During the commissioning of a process plant, the replacement of air by purging with nitrogen is known as “oxygen freeing” or “startup purging”. During a turnaround, the replacement of a hydrocarbon atmosphere with nitrogen is familiarly known as “degassing” or “shutdown purging”.



### Nitrogen/Helium Leak Detection:

Leak detection on process systems using helium and nitrogen gas is the most accurate and quantifiable method. On an offshore production platform module, or within a petrochemical complex, the elimination of hydrocarbon leakage is of operational priority and importance. Such containment loss can lead to hazardous situations, environmental impact, and huge financial loss.





### Pipeline Pigging:

Whether you're performing major maintenance or remedial treatments on your pipeline, using nitrogen as an inert propellant for moving "pigs" through your pipeline makes good sense. Nitrogen is the gas of choice to displace oxygen, retard oxidation, break the "fire triangle" and prevent explosions.



### Hydrostatic Testing:

Here at PPC, we will provide our customers with professional technicians to perform a hydrostatic test. We will furnish all equipment necessary to prove, clean, fill and test the line. We will also provide the compressors, dryers, and pigs to dewater and dry the line. We will also furnish the launchers and receivers' necessary, the reports and PE certifications for the hydro tests. In the instance of a leak happening during a hydro test, our technicians are trained to recognize, locate, and take appropriate action. We have experience in the proper sourcing of water prior to the test, and the proper disposal following the test.

For our online customers who cannot stop production, we have 2 phase separation units that will handle up to 200 mmscf of gas per day. For the more critical pipelines with close meter stations, we provide filters that will handle 150 mmscf of gas per day. PPC can also provide tested piping to connect from the pipeline to the separators. These units will allow us to clean pipelines for inspection without flow interruption. Chemicals are obtained from multiple sources to custom blend high-quality products for maximum performance to remove debris in the pipeline.





### Dewatering:

After a successful hydrostatic test, water must be removed from the pipeline prior to the introduction of the product. While this is sometimes performed by displacing the water directly with the product, in most cases, the water is removed separately by dewatering with air. This is particularly the case where complete drying is required.



PPC provides a wide variety of air compressors to suit the project requirements. These project requirements are usually met using primary screw compressors, but if high pressure is required positive displacement booster compressors will be added to provide pressure up to 5,000 psig.

### Nitrogen Fracking:

Gaseous nitrogen can provide performance and cost advantages over water-based fluids in certain formations. Although water-based fracturing fluids are widely used for hydraulic fracturing because they are inexpensive and offer good proppant transport into the fracture, they do have drawbacks. Water-based fluids are



unsuitable for water-sensitive formations because they can cause water saturation around the fracture and clay swelling, which may significantly hinder the mass transport of hydrocarbons from the fracture to the wellbore. Nitrogen gas is an excellent alternative to water-based fluids in water-sensitive formations, depleted reservoirs, and shallow formations.

### Gas Lifting:

Nitrogen is used in well applications to reduce the weight of fluid in the wellbore. Nitrogen is pumped through coil tubing (or gas lift tubing) and discharged at the well perforations. As the nitrogen gas flows up the production casing, it expands and reduces the weight of fluid in the column, allowing the well to flow.



## Rental Equipment

Partnering with Pioneer Power Contracting will give you better operational efficiency, more uptime and tighter control over cost.



Using the highest standards in the industry, Pioneer Power Contracting rental equipment, which is manufactured by our partner, provides exceptional reliability, helping our customers keep their cost down.

Our rental equipment includes the following:

- Nitrogen Generator Units
- Nitrogen Tanks
- Air Compressors
- Boosters Compressors
- Containerized Mounted Nitrogen Systems
- Light Tower
- Vaporizer
- Gensets
- Vacuum Pumps
- Hydrostatic Testing Pump
- Filling Pumps



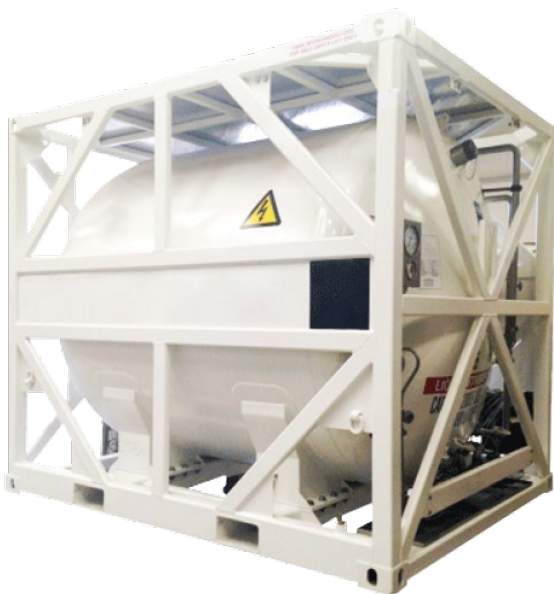
### Nitrogen Generator Units

With capabilities to supply nitrogen at purities of 90% - 99.9% with a wide range of flows ranging from 100 scfm – 30,000 scfm at pressures from 100 psig – 5,000 psig with Boosters.



- **Nitrogen Tank**

With capabilities from 2000-Gal to 5000-Gal, Compressor systems, pipelines are purged with nitrogen to avoid the risk of explosions or fire.



- **Air Compressors**

With capabilities to produce flows from 100 scfm up to 1525 scfm at pressures ranging from 100 psig to 500 psig.



- **Boosters Compressors**

With capabilities up to 12,000 psig.



### Containerized Nitrogen Membrane Generator Unit:

#### Key Features:

- Nitrogen flow rates up to 4,000 Scfm from a single unit.
- Supply pressures 100 -500 psig standard.
- Nitrogen purities from 90-99%.
- Field-tested and proven feed air pre-treatment systems to ensure long system life with over 500 systems in operation.
- Nitrogen dew point -70°F.
- Fully automatic nitrogen purity controls.
- Systems supplied with certified oxygen analyzers and nitrogen flow meters for accurate monitoring and control.
- Systems can be supplied with remote operational control and monitoring.
- Built for all 3rd party certifications, i.e., NIOSH, MSHA, all.
- Classified areas for explosive gases and dust environments.

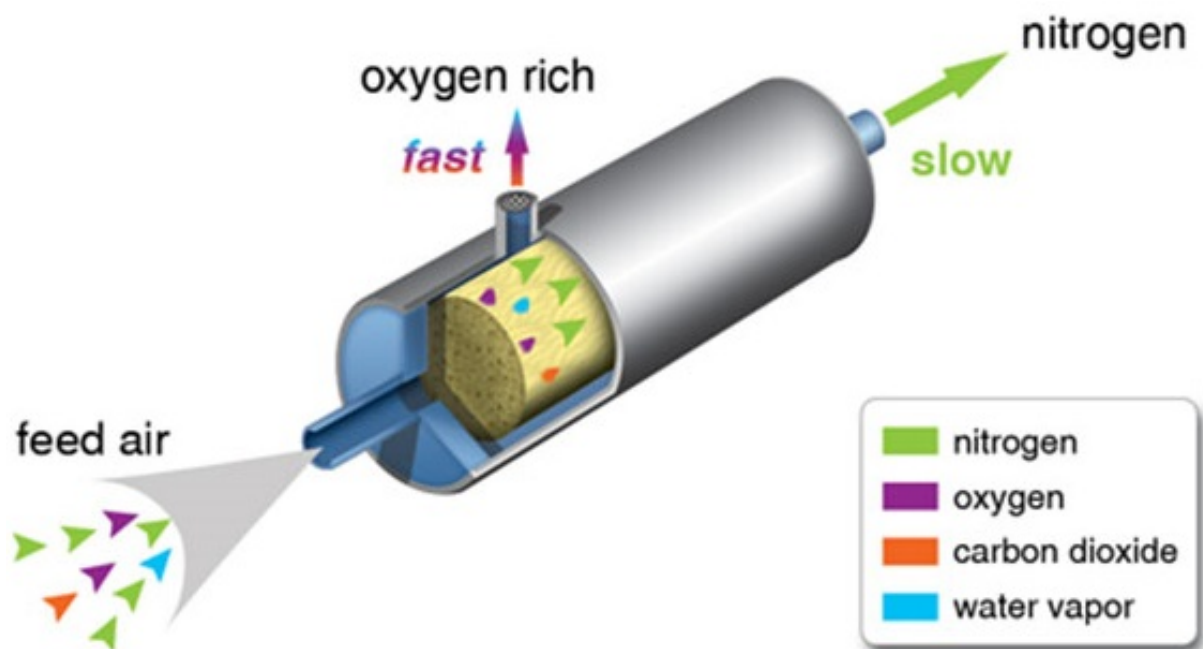




## Nitrogen Membrane

### Here's how it works:

Compressed air is fed through a cylinder-shaped bundle of hollow fiber membranes, containing several hundred-thousand fibers, each about the size of a human hair. As the pressurized air enters one end of the fibers and flows to the opposite end of the module through the fiber bores, oxygen, and water vapor flow out the sides of the fiber leaving the nitrogen and exit the end of the fibers thus producing Nitrogen to your exact purity requirements.



### Truck Mounted Nitrogen Generators:

NGU 2000					
Membrane Inlet Pressure (PSI)	Nitrogen Purity (%)	Membrane Inlet Temperature (F)	N2 Flow Rate (SCFM)	Feed Air at Membrane Inlet (SCFM)	Membrane Recovery Rate N2
350 - 365	95.0	125	3000	5400	57%
350 - 365	98.0	125	1600	5400	57%
350 - 365	99.0	125	1100	5400	57%
350 - 365	99.5	125	700	5400	57%

NGU 3000					
Membrane Inlet Pressure (PSI)	Nitrogen Purity (%)	Membrane Inlet Temperature (F)	N2 Flow Rate (SCFM)	Feed Air at Membrane Inlet (SCFM)	Membrane Recovery Rate N2
340	95	125	3000	5257	57.07%
340	96	125	2550	4765	53.51%
340	97	125	2100	4245	49.48%
340	98	125	1675	3761	44.54%
340	99	125	1225	3253	37.66%
340	99.5	125	800	2782	28.76%

### Key Features:

- Enhanced mobility and rapid deployment.
- Complete self-sustainability.
- High and low-pressure nitrogen delivery options.
- Wide operational temperature range.
- No need to haul in liquid nitrogen or nitrogen tube trailers.
- Single-platform equipment installation.
- Complete automation and improved serviceability.
- Environmentally Friendly - All system blows downs captured for proper disposal.
- Rapid unit set up - Nitrogen online within one hour of pulling up to a customer site.

### • Light Tower

Ranging from 1,600 Watts to 4,000 Watts.



## Vaporizer

Vaporizers are used together with cryogenic tanks to evaporate Oxygen (O), Nitrogen (N), Argon (Ar) other gaseous liquids transported stored liquefied. The ambient temperature meets the energy required the cryogenic liquid passing through the evaporator evaporates to the gas phase re-used.

Our vaporizers are produced by the serial-parallel connection of finned pipes produced by special aluminum alloy extrusion method. This evaporator type, which can provide high heat transfer thanks to the space created by the open flaps, is enough to provide the required gas capacity in many applications.





ATMOSPHERIC VAPORISER SPECIFICATIONS		
1.	MODEL	SNT 3100 L2
2.	Quantity	1 No
3.	Capacity of Vaporizer	3100 Nm <sup>3</sup> /Hr
4.	Fluid to be vaporized	Nitrogen/Oxygen/Argon
5.	Duty	8 Hours
6.	Design Code – Guideline	ASME Sec VIII Div. I, ED 2015
7.	Working Pressure	33 Bar
8.	Mechanical Design Temperature	-196 °C / + 65 °C (only for Mech. Design purpose)
9.	Gas outlet temperature	100 C below ambient
10.	The material of construction: ➤ Fins ➤ Bends and Headers ➤ Flanges ➤ Companion Flanges ➤ Structural and Frame ➤ Shipping Frame	Aluminum A 6063 T5 Aluminum A 6063 T5 Aluminum A 6063 T5 S.S. 304 Aluminum A 6063 T5 Carbon Steel
11.	Inlet / Outlet at B/L	Inlet 2" # 300, Outlet 3" # 150
12.	Defrosting time (hours)	4-6 hours
13.	Inspection	IN HOUSE/TUV
14.	Special features	DNV 2.7-1 type frame from all side (Carbon steel material for frame), Forklift pockets 4 nos. casting corner post 8 Nos. Thick wire mesh on roof top to keep the sling and to protect the fins
15.	Approximate Dimension	For SNT 3100 L2 L: 6057 mm x W: 2438mm x H: 2591mm

- **Gensets**

Ranging in size from 75 – 200 kW.



**Vacuum Pump**

Vacuum Pumps of diversified range are available and can be provided upon demand.



## Hydrostatic Testing Pump



## Filling Pump





## Certifications

- **Internal Certifications**

To ensure the most efficient operations and the safest working conditions, our experienced technicians and operators are thoroughly trained and tested regarding every aspect of our equipment from manufacturing knowledge to operating to servicing nitrogen generators and more.

- **PPC Partner External Certifications**

The numerous certifications and accreditations that we've earned throughout the world help us ensure many of the highest quality standards in the industry.

Some of those certifications include:

- Transportation Worker Identification Credential (TWIC)
- Safe Gulf Offshore
- Safe Land
- Rig Safe
- BOEMRE
- Basic Offshore Safety Induction & Emergency Training (BOSIET)
- Basic Offshore Induction and Emergency Training with HUET
- National Institute for Occupational Safety and Health (NIOSH)
- Mine Safety and Health Administration (MSHA)

## Logistics



In PPC we always aim to the top spot of the logistics services in Saudi Arabia and beyond, our capable team of well experienced and ambition specialist, an excellent fleet of trucks and machinery is constantly providing the unlimited solutions for all of our clients' difficulties.

PPC well understands the importance of protecting the clients most valuable assets and personnel, so and focuses on delivering the clients goods on time as per its conditions defiant and facing all of the route's obstacles.

PPC looks to provide transportation services to other companies by complementary or replacing their internal logistics operations with a cost-effective and efficient manner.

Our logistic fleet include the following earth moving machinery & vehicles with increase of new arrivals every year.

- Dump Truck
- Boom Truck
- Bulldozer
- Excavator
- Backhoe Loader
- Roller Compactor
- Tanker
- Forklift

### Why Partner with Pioneer Power Contracting?

**Flexible** – complete line of nitrogen generators and air compression equipment with all the support equipment needed to get the job done in a safe and timely manner. PPC can perform the job for you or you can rent the equipment and do it yourself.

PPC nitrogen generators eliminate the troublesome logistics and timing of liquid nitrogen supply while providing nitrogen at the most cost-effective means possible.

PPC nitrogen systems are designed to deliver a continuous stream of nitrogen on-location avoiding the high cost of delivered liquid nitrogen, scheduling and delivery of liquid transports, or run-outs and shutdowns due to late deliveries. You would never run out of nitrogen or have to terminate a job prematurely while waiting for a nitrogen bulk transport for supplemental liquid.

**Supportive** - Thoroughly trained and tested technicians and operators support every aspect of our equipment.

### 24 Hour Call-Out Service

PPC technicians and operators are available on call 24 hours a day, 7 days a week.

Their extensive knowledge and experience in dealing with a wide variety of applications enable them to mobilize the right equipment and supplies to get the job done with very short notice.

In some circumstances, when hydrostatic testing is not possible, components or systems may be tested with nitrogen. However, system design specifications must be reviewed, and a detailed risk analysis completed before testing with a compressible medium.



## Caliper Survey & Pre-Commissioning Services:

The range of services includes pressure tests, pumping, an organization of intelligent pigging, chemical and mechanical cleaning of pipelines, caliper pigging, and drying.

Experienced and committed employees and the modern technical equipment ensure reliable execution of the tasks on time. Our employees are constantly up to date with the latest Technology – as for example, the development of filing pumps and high pressure and the further development of pigging systems is carried out under own direction.

Services at a glance:



**Pressure Test:** Pressure tests with water, air, and gas according to legal regulations and standards for more safety.

**Cleaning of Pipelines:** Chemical Cleaning & Mechanical Cleaning.

**Caliper Pigging:** Data generation for internal geometry of pipelines with the multi-channel-caliper pig, an innovative research method.

**Drying of Pipeline Systems:** Drying with air & Drying with nitrogen.

**Intelligent Pigging:** Ultrasound and Magnetic Flux Leakage Detection.

**Pigging:** Pigging aligned to individual pipe characteristics and technical specifications.

### General information about the PPC Multi-Channel Caliper-Tool:

The PPC Multi-Channel Caliper-Tool is a newly developed and constructed pipeline inspection tool. The Multi-Channel Caliper Tool is capable of detecting dents, ovalities, girth welds, changes in wall thickness and other pipeline features such as T-pieces, valves and other installations. The advantage of the Multi-Channel system is to give additional information about the shape and the o'clock position of the defect. Each sensing arm has a sensor and measures separately the inner diameter of the pipeline. The Body of the Tool is the basic part of the Tool. Depending on the size, the body consists of one, two or three modules. All other components are fixed to the basic body, such as the Cups, the Odometer system, and the Spider. The Cups enable the Tool to be transported with the medium through the pipeline. The odometer system measures the longitudinal information of the survey. Two odometer wheels ride on the pipe wall and measure the distance the tool travels through the pipeline. The Spider of the Multi-Channel Caliper Tool continuously measures the inside diameter of the pipeline through an array of sensors that are spring-loaded to hold them in contact with the pipe wall. Each sensing arm is equipped with a sensor, enabling to get measurement data from each arm. As the Tool moves through the pipeline, very small radial movements in the sensors are detected and recorded.



Each PPC Multi-Channel Caliper Tool is equipped with a transmitter to locate the tool with the external tool locator.

### Multi-Channel Caliper Tool Preparation:

All PPC Multi-Channel Caliper Tools will be assembled, checked and calibrated with the highest precision. Only the best quality parts and materials for building the Tools will be used, enabling a maximum of quality for them. Each new system will be checked in our special test laboratory. It will be checked at a minimum time in the life of 1000 km without large abrasion or damage. Only after successful completion of same, the Tool will get the clearance for a project. After the test procedure and calibration, a Final check will be done. It comprised the function, the parts, the spare parts, the equipment, the paperwork and the transport documentation, enabling to assure the maximum of safety and quality for the completion of the whole project.

## Calibration

With the Help of the calibration, the measurement of the tool will be correlated to the real ID reduction.

A calibration tool and calibration brigs will be used for simulating various ID changes such as dent and ovalities.

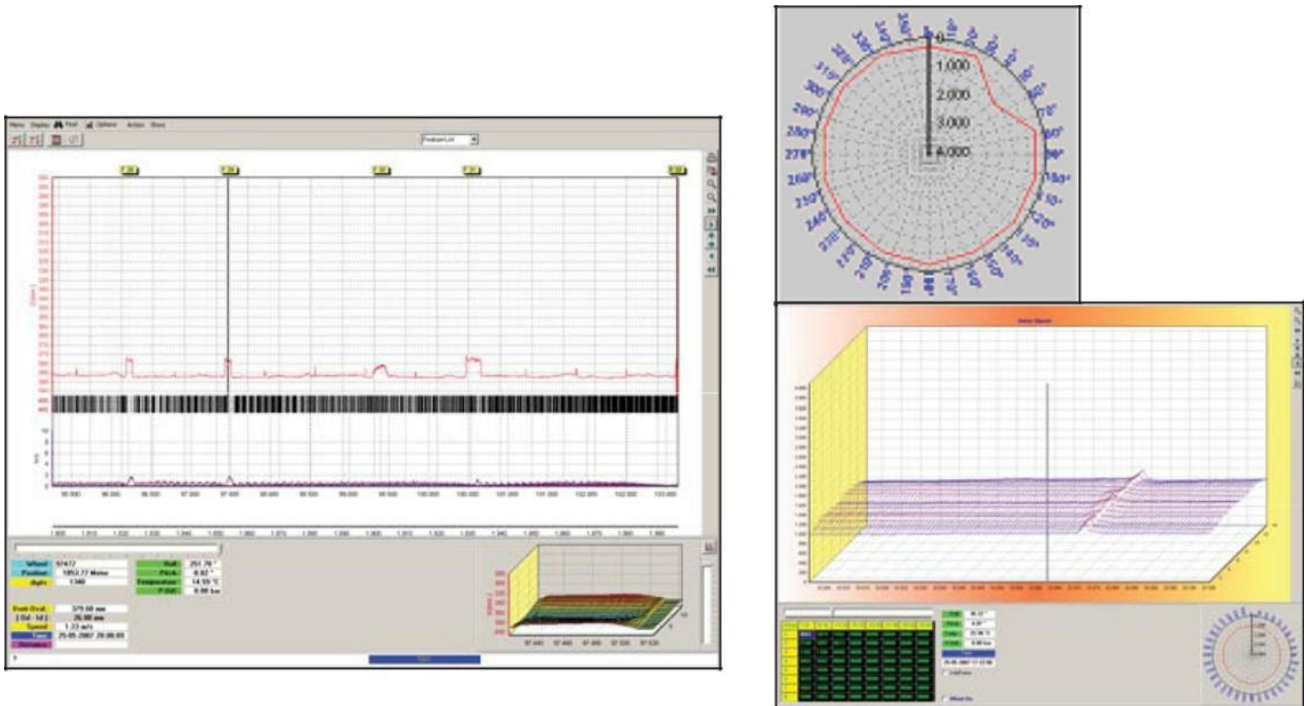
For the Evaluation of a survey, the requirements of the pipeline owner will be considered.





## Evaluation

Just after completion of the survey, the recorded data will be transferred to a laptop (Computer), enabling to give the first result directly on the work site for further action, if required.



The Final Report contains all important information of the survey such as the date and time, velocity of the tool, girth welds, bends, installations, dents, ovalities, marker, calibration, feature list and a statement of the detected indications. Especially for the defects a separate defect data sheet with the major information about the defect area on one data sheet will be provided. The Final-Report will be prepared and forwarded to the Client.

PPC uses Caliper Survey Tools in vast quantity. Few of them are elaborated in below.

## 06" PPC MULTI-CHANNEL CALIPER-TOOL

### Specification

#### General Information:

Total Length	Approx. 1000 mm
Weight	Approx. 55 Kg
No. of Modules	4
No. of Sensor arms with Double Wheels	10
Max survey lengths	Approx. 800 km
Battery life	200 Hours
Recommended Tool Speed **	0.1 – 3 m/s
Maximum Pressure	100 Bar
Temperature Range	-20 to +80 °C
Minimum Bend Radius	3D for 90° Bends (1.5D if requested)
Minimum ID in Straight Pipe	126 mm / 75% of OD

#### Following Features/ Installations can be detected:

- Ovalities
- Dents
- Valves
- Bends
- Girth Welds
- T-pieces
- Internal Diameter changes

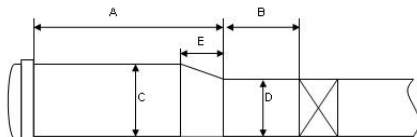


#### Measurement Accuracy:

General Measurement	Accuracy
Accuracy of distance information	± 0.1m from reference girth weld
Accuracy of internal Diameter changes	± 0.1 % / 0.17 mm
Dent	± 0.1 % / 0.17 mm
Ovality	± 0.1 % / 0.17 mm
Girth Welds	± 0.1 % / 0.17 mm
O'clock positioning	± 18°

#### Sensitivity of the gauging System (Threshold):

Dent & Ovality	± 0.1 % / 0.17 mm
Girth Welds	± 0.1 % / 0.17 mm



Note:

All given values are approximate.

The above-mentioned accuracies depend on acceptable run conditions.

Constant speed during the inspection, Clean pipe, Pipe book given to PPC department for evaluation.

During the survey with compressed air, the pipeline must have backpressure of 5 bars.

\*\* At tool speeds above 3 m/s, the girth weld indications become inaccurate due to dynamic overreaction of the sensing fingers. For best results, we recommend tool speeds between 0.1 and 1.5 m/s.

PPC reserves the right to introduce technical changes and modifications without prior notice.

Recommended Dimensions for Launcher & Receiver		
Dimension	Launcher	Receiver
A	> 2000 mm	> 2000 mm
B	> 500 mm	> 500 mm
C	> 1.3 D	> 1.3 D
D	06"	06"
E	100 mm	100 mm

## 10" PPC MULTI-CHANNEL CALIPER-TOOL

### Specification

#### General Information:

Total Length	Approx. 2200 mm
Weight	Approx. 55 Kg
No. of Modules	3
No. of Sensor arms with Double Wheels	10
Max survey lengths	Approx. 800 km
Battery life	600 Hours
Recommended Tool Speed **	0.1 – 3 m/s
Maximum Pressure	100 Bar
Temperature Range	-20 to +80 °C
Minimum Bend Radius	3D for 90° Bends (1.5D if requested)
Minimum ID in Straight Pipe	204 mm / 75% of OD

#### Following Features/ Installations can be detected:

- Ovalities
- Dents
- Valves
- Bends
- Girth Welds
- T-pieces
- Internal Diameter changes

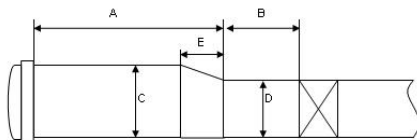


#### Measurement Accuracy:

General Measurement	Accuracy
Accuracy of distance information	± 0.1m from reference girth weld
Accuracy of internal Diameter changes	± 0.1 % / 0.27 mm
Dent	± 0.1 % / 0.27 mm
Ovality	± 0.1 % / 0.27 mm
Girth Welds	± 0.1 % / 0.27 mm
O'clock positioning	± 18°

#### Sensitivity of the gauging System (Threshold):

Dent & Ovality	± 0.1 % / 0.27 mm
Girth Welds	± 0.1 % / 0.27 mm



Note:

All given values are approximate.  
The above-mentioned accuracies depend on acceptable run conditions.  
Constant speed during the inspection, Clean pipe, Pipe book given to PPC department for evaluation.  
During the survey with compressed air, the pipeline must have backpressure of 5 bars.  
\*\* At tool speeds above 3 m/s, the girth weld indications become inaccurate due to dynamic overreaction of the sensing fingers. For best results, we recommend tool speeds between 0.1 and 1.5 m/s.  
PPC reserves the right to introduce technical changes and modifications without prior notice.

Recommended Dimensions for Launcher & Receiver		
Dimension	Launcher	Receiver
A	> 2400 mm	> 2400 mm
B	> 500 mm	> 500 mm
C	> 1.3 D	> 1.3 D
D	10"	10"
E	140 mm	140 mm



## 36" PPC MULTI-CHANNEL CALIPER-TOOL

### Specification

#### General Information:

Total Length	Approx. 2000 mm
Weight	Approx. 350 Kg
No. of Modules	1
No. of Sensor arms with Double Wheels	30
Max survey lengths	Approx. 800 km
Battery life	800 Hours
Recommended Tool Speed **	0.1 – 3 m/s
Maximum Pressure	100 Bar
Temperature Range	-20 to +80 °C
Minimum Bend Radius	3D for 90° Bends (1.5D if requested)
Minimum ID in Straight Pipe	685 mm / 75% of OD

#### Following Features/ Installations can be detected:

- Ovalities
- Dents
- Valves
- Bends
- Girth Welds
- T-pieces
- Internal Diameter changes

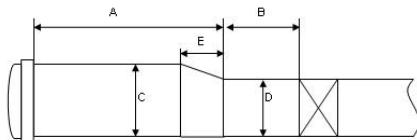


#### Measurement Accuracy:

General Measurement	Accuracy
Accuracy of distance information	± 0.1m from reference girth weld
Accuracy of internal Diameter changes	± 0.1 % / 0.91 mm
Dent	± 0.1 % / 0.91 mm
Ovality	± 0.1 % / 0.91 mm
Girth Welds	± 0.1 % / 0.91 mm
O'clock positioning	± 6°

#### Sensitivity of the gauging System (Threshold):

Dent & Ovality	± 0.1 % / 0.91 mm
Girth Welds	± 0.1 % / 0.91 mm
Circumferential Location Accuracy	± 5.0°



**Note:**

All given values are related to the outer diameter.

The above-mentioned accuracies depend on acceptable run conditions.

Constant speed during the inspection, Clean pipe, Pipe book given to PPC department for evaluation.

During the survey with compressed air, the pipeline must have backpressure of 5 bars.

\*\* At tool speeds above 3 m/s, the girth weld indications become inaccurate due to dynamic overreaction of the sensing fingers. For best results, we recommend tool speeds between 0.1 and 1.5 m/s.

PPC reserves the right to introduce technical changes and modifications without prior notice.

Recommended Dimensions for Launcher & Receiver		
Dimension	Launcher	Receiver
A	> 2200 mm	> 2200 mm
B	> 500 mm	> 500 mm
C	> 1.1 D	> 1.1 D
D	36"	36"
E	450 mm	450 mm

## 46" PPC MULTI-CHANNEL CALIPER-TOOL

### Specification

#### General Information:

Total Length	Approx. 2350 mm
Weight	Approx. 300 Kg
No. of Modules	1
No. of Sensor arms with Double Wheels	36
Max survey lengths	Approx. 800 km
Battery life	800 Hours
Recommended Tool Speed **	0.1 – 3 m/s
Maximum Pressure	100 Bar
Temperature Range	-20 to +80 °C
Minimum Bend Radius	3D for 90° Bends (1.5D if requested)
Minimum ID in Straight Pipe	880 mm / 75% of OD

#### Following Features/ Installations can be detected:

- Ovalities
- Dents
- Valves
- Bends
- Girth Welds
- T-pieces
- Internal Diameter changes

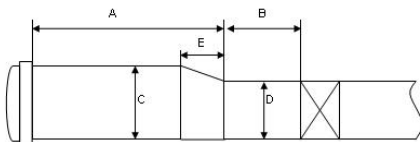


#### Measurement Accuracy:

General Measurement	Accuracy
Accuracy of distance information	± 0.1m from reference girth weld
Accuracy of internal Diameter changes	± 0.1 % / 1.16 mm
Dent	± 0.1 % / 1.16 mm
Ovality	± 0.1 % / 1.16 mm
Girth Welds	± 0.1 % / 1.16 mm
O'clock positioning	± 5 °

#### Sensitivity of the gauging System (Threshold):

Dent & Ovality	± 0.1 % / 1.16 mm
Girth Welds	± 0.1 % / 1.16 mm
Circumferential Location Accuracy	± 5.0 °



**Note:**

All given values are related to the outer diameter.  
The above-mentioned accuracies depend on acceptable run conditions.  
Constant speed during the inspection, Clean pipe, Pipe book given to PPC department for evaluation.  
During the survey with compressed air, the pipeline must have backpressure of 5 bars.  
\*\* At tool speeds above 3 m/s, the girth weld indications become inaccurate due to dynamic overreaction of the sensing fingers. For best results, we recommend tool speeds between 0.1 and 1.5 m/s.  
PPC reserves the right to introduce technical changes and modifications without prior notice.

Recommended Dimensions for Launcher & Receiver		
Dimension	Launcher	Receiver
A	> 2500 mm	> 2500 mm
B	> 500 mm	> 2500 mm
C	> 1.1 D	> 1.1 D
D	46"	46"
E	580 mm	580 mm

## 56" PPC MULTI-CHANNEL CALIPER-TOOL

### Specification

#### General Information:

Total Length	Approx. 2700 mm
Weight	Approx. 450 Kg
No. of Modules	1
No. of Sensor arms with Double Wheels	50
Max survey lengths	Approx. 800 km
Battery life	800 Hours
Recommended Tool Speed **	0.1 – 3 m/s
Maximum Pressure	100 Bar
Temperature Range	-20 to +80 °C
Minimum Bend Radius	3D for 90° Bends (1.5D if requested)
Minimum ID in Straight Pipe	1066 mm / 75% of OD

#### Following Features/ Installations can be detected:

- Ovalities
- Dents
- Valves
- Bends
- Girth Welds
- T-pieces
- Internal Diameter changes

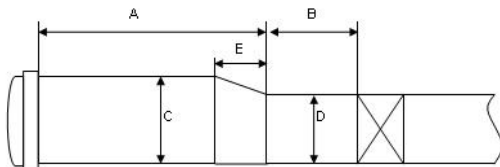


#### Measurement Accuracy:

General Measurement	Accuracy
Accuracy of distance information	± 0.1m from reference girth weld
Accuracy of internal Diameter changes	± 0.1 % / 1.42 mm
Dent	± 0.1 % / 1.42 mm
Ovality	± 0.1 % / 1.42 mm
Girth Welds	± 0.1 % / 1.42 mm
O'clock positioning	± 3.6°

#### Sensitivity of the gauging System (Threshold):

Dent & Ovality	± 0.1 % / 1.42 mm
Girth Welds	± 0.1 % / 1.42 mm
Circumferential Location Accuracy	± 5.0°



**Note:**

All given values are related to the outer diameter.  
The above-mentioned accuracies depend on acceptable run conditions.  
Constant speed during the inspection, Clean pipe, Pipe book given to PPC department for evaluation.  
During the survey with compressed air, the pipeline must have backpressure of 5 bars.  
\*\* At tool speeds above 3 m/s, the girth weld indications become inaccurate due to dynamic overreaction of the sensing fingers. For best results, we recommend tool speeds between 0.1 and 1.5 m/s.  
PPC reserves the right to introduce technical changes and modifications without prior notice.

Recommended Dimensions for Launcher & Receiver		
Dimension	Launcher	Receiver
A	> 2900 mm	> 2900 mm
B	> 500 mm	> 500 mm
C	> 1.1 D	> 1.1 D
D	56"	56"
E	710 mm	710 mm



## Quality Policy

## QUALITY POLICY

The Company is committed to providing complete customer satisfaction to the best of its abilities and to ensuring that all internal procedures and practices are suitable for that purpose.

In addition, the Company complies with applicable legislation and regulations as well as the recommendations and ethics of industry bodies to which it subscribes. This commitment extends to the continual improvement of quality and environmental performance together with the prevention of pollution.

To achieve this, result the Company has adopted a policy of operating a coordinated Quality Management System meeting the requirements of the ISO 9001:2000 standard, by providing the framework for setting and reviewing management objectives and targets.

It is the Company's policy to maintain an electronic communications network covering all aspects of the services provided that links all offices and the ships being operated. While standard formats are used, the facility exists to adjust the format to suit the specific requirements of an individual contract.

The Company appreciates and emphasizes to staff that the use of standard formats is a means of ensuring that quality standards are maintained to a consistent level thus meeting the needs and expectations of customers.

The aim of standardization is not to remove flexibility, which is certainly a requirement in our industry, but to provide a medium of documentation and communication relevant to the business in general and to a specific contract in particular. This ensures that the work undertaken can be monitored and audited in order to confirm compliance with the contract and the ISO standard.

Directors and Managers have the responsibility of ensuring that the policy is communicated and understood by all personnel engaged in tasks that can influence quality matters, that they are aware of their obligations under the standard and are provided with adequate, suitable resources.

The Quality Manager is authorized to monitor and maintain the Quality Management System and to report to the Company's Management Review Meeting on the continued suitability and achievement of quality objectives.

The Company is aware of its responsibility to provide resources for the control of the Quality Management System including, where appropriate, competence, technology and finance. Maximum effort is directed towards providing satisfactory services whilst ensuring that any problems that do arise are resolved in an expedient and professional manner.

## HSE Policy



## **HSE POLICY**

**Pioneer Power Contracting is totally committed to the (HSE) Health, Safety, Environmental and ensuring implementing compliance and towards accomplishing all of the company goals and objectives.**

PPV has the following priorities and prerequisites in conducting its business:

- The safety of staff during working operations.
- The health of PPC's personnel, customers, suppliers and contractors.
- Minimizing environmental impacts associated with its activities.
- Keeping the authorities and the public informed.
- Compliance with applicable legislation

The following principles must be applied every day and at all sites in order to succeed in our commitment:

- Remove or alleviate hazardous situations in order to minimize risks to personnel
- Set HSE performance objectives, measure results, assess and continually improve processes, through the use of an effective management system
- Monitor the health of our personnel on a regular basis to ensure that workers have the physical ability to perform their duties
- Guarantee and monitor that our activities have minimal impact on the environment.
- Minimize our impact on the environment through pollution prevention, reduction of natural resource consumption and emissions, and the reduction and recycling of waste
- Apply our technical skills to all Health, Safety and Environment aspects in the design and engineering of our services and products
- Promote awareness of issues relating to Health, Safety and Environment towards our employees and contractors, improving their individual skills through appropriate training programs and information.
- Develop, maintain and test procedures and resources for dealing with emergencies in order to reduce the impact of incidents to a minimum
- Report and analyze all accidents, incidents and anomalies.
- Monitor our performance and check our management system in order to improve rules and procedures in conducting our activities.
- Maintain a consistent and transparent dialogue with authorities, local realities and other stakeholders, openly communicating our HSE policies, standards, programs and performance.

## References

## REFERENCES

### International

- Pipeline Services International
- SNC Lavalin
- (Package I, II & III)
- Magna Flow
- Sunoco
- ConocoPhillips
- Mainstream
- Enterprise Products
- Greene's Pipeline Services
- Aggreko
- Graco
- High Tech Rentals
- Helix
- Resolute
- Shell
- Quality Air Services
- Chevron
- AMEC
- North West Equipment
- Baker Hughes
- Boots and Coots
- OXY
- Peabody Mining
- Penicle
- Cinatra Clean
- Noble
- Halliburton
- Tech Foam
- Arch Mining
- Aker Solutions
- Sunoco
- Weatherford
- BW Offshore
- CONSOL Energy
- Key Energy
- Air Drilling Associates
- Basic Energy
- BJ Services
- ExxonMobil
- TD Williams
- Kinder Morgan
- BP
- Fuel Energy
- Moran Towing

## Local

**Project:** SRG-2 (J-509) (SAU)

**Diameter:** 56-Inch

**Pipeline Length:** 150 KM

**Client:** ARAMCO

**Date:** 2016

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**Project:** Quad Loop Pipeline (SAU)

**Diameter:** 56-Inch

**Pipeline Length:** 36.55 KM

**Client:** ARAMCO

**Date:** 2020

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**Project:** Northern Arabia Area Unconventional Gas System-B Project

**Diameter:** 30-Inch

**Pipeline Length:** 60 KM

**Client:** SNC - Lavalin

**Date:** 2018

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**Project:** Pre-Commissioning & Civil Works

**Diameter:** 14-Inch

**Pipeline Length:** 70 KM

**Client:** Abahsain Consolidated Co. Ltd

**Date:** Ongoing

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**Project:** Pre-Commissioning & Civil Works

**Diameter:** 16-Inch

**Pipeline Length:** 70 KM

**Client:** Abahsain Consolidated Co. Ltd

**Date:** Ongoing



## Caliper Survey

Pipeline Owner	Client	Project	Diameter	Length of Pipeline	Medium	Period	Remarks
2016							
KEM ONE	Technipipe pipeline technologies	La Fosette - Lavera (FR)	18"	20 km	Brine	December 16	Multi-Channel
Petronas	EUREKA EFEKTIF	PGPP, KP30 - KP0 (MY)	36"	30 km	Air	December 16	Multi-Channel
DDEIO	NDT Global GmbH & Co. KG	VS - AO (DK)	06"	1 km	F-35	December 16	Multi-Channel
BPGE	NDT Global GmbH & Co. KG	FL-3, Sutum - Horst (DE)	08"	0,97 km	Water	November 16	Multi-Channel
BPGE	NDT Global GmbH & Co. KG	FL-3, Scholven - Sutum (DE)	06"	7,2 km	Water	November 16	Multi-Channel
DDEIO	NDT Global GmbH & Co. KG	Karup - Vestbjerg (DK)	06"	110 km	F-35	November 16	Multi-Channel
SINOPEC	SYNOMATE	PTP-NM KP0 - KP110 (TH)	28"	110 km	Air	October 16	MC + Mapping
Fluxys	Denys NV	Tessenderlo - Diest (BE)	24"	16,7 km	Air	October 16	Multi-Channel
Exxon Mobil	NDT Global GmbH & Co. KG	Le Havre - Port Jerome (FR)	22"/26"	35 km	Crude oil	October 16	Multi-Channel
DPF	Technipipe pipeline technologies	ETBE - MTBE Pipeline (FR)	10"	3,4 km	ETBE	October 16	Multi-Channel
Bayern Oil	NDT Global GmbH & Co. KG	Vohrburg - Münchsmünster (DE)	10"	14 km	Diesel	October 16	Multi-Channel
Bayern Oil	NDT Global GmbH & Co. KG	Münchsmünster - Vohrburg (DE)	10"	14 km	Water	October 16	Multi-Channel
Bayern Oil	NDT Global GmbH & Co. KG	Vohrburg - Neustadt (DE)	08"	19 km	Diesel	October 16	Multi-Channel
Bayern Oil	NDT Global GmbH & Co. KG	Münchsmünster - Vohrburg (DE)	06"	14 km	Water	October 16	Multi-Channel
Uniper SE	Wetnetz	Datteln - Beisenkamp (DE)	10"	3 km	Water	September 16	Multi-Channel

Pipeline Owner	Client	Project	Diameter	Length of Pipeline	Medium	Period	Remarks
Lyondell Basell	Technipipe pipeline technologies	La Feuillane - Lavera (FR)	08"	19,3 km	Water	September 16	Multi-Channel
Bayern Oil	NDT Global GmbH & Co. KG	Neustadt - Vohburg (DE)	10"	19 km	Diesel	September 16	Multi-Channel
Bayern Oil	NDT Global GmbH & Co. KG	Neustadt - Vohburg (DE)	10"	19 km	Diesel	September 16	Multi-Channel
Evonik	NDT Global GmbH & Co. KG	Rhede - Marl (DE)	16"	33 km	Brine	September 16	Multi-Channel
Evonik	NDT Global GmbH & Co. KG	Gelsenkirchen - Marl (DE)	12"	10,4 km	Water	August 16	Multi-Channel
PERN	POLAQUA	Nieporet - Rasztow	32"	15,6 km	Air	August 16	Multi-Channel
SINOPEC	SYNOMATE	PTP-NM KP16 - KP1 (TH)	28"	15,80 km	Air	August 16	Multi-Channel
SINOPEC	SYNOMATE	PTP-NM KP19+832 - KP31+075 (TH)	28"	11,3 km	Air	July 16	Multi-Channel
SINOPEC	SYNOMATE	PTP-NM KP71 - KP89 (TH)	28"	18,5 km	Air	July 16	Multi-Channel
GRTgaz	Spac / Denys	ARC DE DIERREY LOT5 Test section 5+6 (FR)	48"	15,7 km	Air	July 16	Multi-Channel
GRTgaz	Spac / Denys	ARC DE DIERREY LOT5 Test section 3+4 (FR)	48"	17,9 km	Air	July 16	Multi-Channel
GRTgaz	Spac / Denys	ARC DE DIERREY LOT5 Test section 2 (FR)	48"	14,8 km	Air	July 16	Multi-Channel
GRTgaz	Spac / Denys	ARC DE DIERREY LOT5 Test section 1 (FR)	48"	9,8 km	Air	July 16	Multi-Channel
FBG	NDT Global GmbH & Co. KG	Würselen - Altenrath (DE)	10"	90 km	Jet Fuel	July 16	Multi-Channel
Saudi Aramco	PETROGISTIX	SRG-2 (J-509) (SAU)	56"	150 km	Air	June 16	Multi-Channel
GRTgaz	Max Streicher	ARC DE DIERREY LOT5 (FR)	48"	63 km	Air	June 16	Multi-Channel
OMV	NDT Global GmbH & Co. KG	Steinhöring – Burghausen (DE)	12"	61,2 km	Crude oil	May 16	Multi-Channel
GRTgaz	Spac / Denys	ARC DE DIERREY LOT5 Test section 3 (FR)	48"	6,6 km	Air	April 16	Multi-Channel
GRTgaz	Spac / Denys	ARC DE DIERREY LOT5 Test section 5 (FR)	48"	6,2 km	Air	April 16	Multi-Channel
GRTgaz	Spac / Denys	ARC DE DIERREY LOT5 Test section 4 (FR)	48"	11,3 km	Air	April 16	Multi-Channel

Pipeline Owner	Client	Project	Diameter	Length of Pipeline	Medium	Period	Remarks
GRTgaz	Spac / Denys	ARC DE DIERREY LOT5 Test section 1 (FR)	48"	9,8 km	Air	April 16	Multi-Channel
SINOPEC	SYNOMATE	PTP-NM KP70 - KP59 (TH)	28"	11,4 km	Air	April 16	Multi-Channel
GRTgaz	Spac / Denys	ARC DE DIERREY LOT5 Test section 2 (FR)	48"	14,7	Air	March 16	Multi-Channel
GRTgaz	Max Streicher	ARC DE DIERREY LOT4 PK 50,8 – PK 55,7 (FR)	48"	5,15 km	Air	March 16	Multi-Channel
GRTgaz	Max Streicher	ARC DE DIERREY LOT4 PK 50,8 – PK 40 (FR)	48"	10,8 km	Air	March 16	Multi-Channel
SINOPEC	SYNOMATE	PTP-NM KP31 - KP43 (TH)	28"	11,9 km	Air	March 16	Multi-Channel
SPMR	NDT Global GmbH & Co. KG	Villette de Vienne (FR) - Vernier (CH)	12"	255 km	Diesel	March 16	Multi-Channel
BP-Europe	NDT Global GmbH & Co. KG	Gustavsburg - FL Frankfurt (DE)	12"	23 km	Jet Fuel	February 16	Multi-Channel
<b>2015</b>							
OMV	NDT Global GmbH & Co. KG	Burghausen - Feldkirchen (D)	08"	87,2 km	Diesel	December 15	Multi-Channel
OMV	NDT Global GmbH & Co. KG	Feldkirchen - Erding (D)	08"	36,2 km	Jet Fuel	December 15	Multi-Channel
Chevron	Saipem s.a	CRX-Pipelién Project - Angola(AO)	20"/22"	94,7 km	Water	November 15	Multi-Channel
DDEIO	NDT Global GmbH & Co. KG	Aalborg NE - Aalborg SE (DK)	06"	1,3 km	Water	November 15	Multi-Channel
Geogaz- Lyondell	Technipipe pipeline technologies	Geogaz - Lyondell; Fos sur Mer (FR)	06"	27,8 km	Water	September 15	Multi-Channel
GRTgaz	Spac / Denys	ARC DE DIERREY LOT5 Test section 5 (FR)	48"	6,2 km	Air	April 16	Multi-Channel
GRTgaz	Spac / Denys	ARC DE DIERREY LOT5 Test section 4 (FR)	48"	11,3 km	Air	April 16	Multi-Channel
GRTgaz	Spac / Denys	ARC DE DIERREY LOT5 Test section 1 (FR)	48"	9,8 km	Air	April 16	Multi-Channel
SINOPEC	SYNOMATE	PTP-NM KP70 - KP59 (TH)	28"	11,4 km	Air	April 16	Multi-Channel
GRTgaz	Spac / Denys	ARC DE DIERREY LOT5 Test section 2 (FR)	48"	14,7	Air	March 16	Multi-Channel

Pipeline Owner	Client	Project	Diameter	Length of Pipeline	Medium	Period	Remarks
GRTgaz	Max Streicher	ARC DE DIERREY LOT4 PK 50,8 – PK 55,7 (FR)	48"	5,15 km	Air	March 16	Multi-Channel
GRTgaz	Max Streicher	ARC DE DIERREY LOT4 PK 50,8 – PK 40 (FR)	48"	10,8 km	Air	March 16	Multi-Channel
SINOPEC	SYNOMATE	PTP-NM KP31 - KP43 (TH)	28"	11,9 km	Air	March 16	Multi-Channel
SPMR	NDT Global GmbH & Co. KG	Villette de Vienne (FR) - Vernier (CH)	12"	255 km	Diesel	March 16	Multi-Channel
BP-Europe	NDT Global GmbH & Co. KG	Gustavsburg - FL Frankfurt (DE)	12"	23 km	Jet Fuel	February 16	Multi-Channel
<b>2014</b>							
OMV	NDT Global GmbH & Co. KG	Burghausen - Feldkirchen (D)	08"	87,2 km	Diesel	December 15	Multi-Channel
N.A.	KVV Ungarn	Sec. Gödöllő (HU)	32"	2,5 km	Air	February 14	Multi-Channel
CLH	NDT Global GmbH & Co. KG	Barcelona – Aeroporto del Prat (ES)	06"	12,6 km	Jet Fuel	February 14	Multi-Channel
GAZ-System	POL AQUA	Goleniow - Swinoujscie (PL)	32"	80 km	Air	January 14	Multi-Channel
<b>2013</b>							
Ferngas GmbH Oberösterreich	ARGE Oberösterreich VAM / Kremsmüller	Haidach (AT) - Puchkirchen (AT)	32"	34,2 km	Air	December 13	Multi-Channel
PTTEPI	Greene's Energy Group	Myanmar Offshore (MM)	28"	242 km	Air	November 13	Multi-Channel
GASCADE	ARGE Max Streicher, PPS, Vorwerk	Midal-Süd Loop Lot 1 to 3 (DE)	40"	88,7 km	Air	November 13	Multi-Channel
DDEIO	NDT Global GmbH & Co. KG	Aalborg NE - Aalborg SE (DK)	06"	1,3 km	Water	November 15	Multi-Channel
Geogaz- Lyondell	Technipipe pipeline technologies	Geogaz - Lyondell; Fos sur Mer (FR)	06"	27,8 km	Water	September 15	Multi-Channel
DONG	PSE	Stenlille (DK)	12"	2,2 km	Air	July 14	Multi-Channel
Chevron	Saipem s.a	CRX-Pipelién Project - Angola(AO)	20"/22"	94,7 km	Water	November 15	Multi-Channel



Pipeline Owner	Client	Project	Diameter	Length of Pipeline	Medium	Period	Remarks
OMV	NDT Global GmbH & Co. KG	Feldkirchen - Erding (D)	08"	36,2 km	Jet Fuel	December 15	Multi-Channel
DONG	PSE	Stenlille (DK)	12"	1,6 km	Air	July 14	Multi-Channel
Snam Rete Gas	Max Streicher	Zimella - Cervignano, PK65-PK104 (IT)	56"	39,3 km	Air	June 14	Multi-Channel
GRTgaz	Spac/Denys	Corbi - Marquay (FR)	48"	52,8 km	Air	June 14	Multi-Channel
TAL/SIOT	NDT Global GmbH & Co. KG	Trieste - Ingolstadt (IT, AT, DE)	40"	465 km	Crude oil	June 14	Multi-Channel
PTTEPI	Greene's Energy Group	Myanmar Onshore (MM)	28"	58 km	Air	May 14	Multi-Channel
N.A.	KVV Ungarn	Szada - Rakospatak (HU)	32"	15,5	Air	March 14	Multi-Channel
N.A.	KVV Ungarn	Ronhány - Rád (HU)	32"	14,4 km	Air	February 14	Multi-Channel
TMMES	Romstar Group Malaysia	Malaysia Onshore (MY)	10"	1,5 km	Air	November 13	Multi-Channel
TOTAL	NDT Systems & Services GmbH & Co. KG	Le Havre(FR) - Hargeville (FR)	20"	143,7 km	Crude oil	November 13	Multi-Channel
TOTAL	NDT Systems & Services GmbH & Co. KG	Gargenville (FR) - Grandpuits (FR)	20"	118,3 km	Jet Fuel	November 13	Multi-Channel
Ferngas GmbH	ARGE Oberösterreich VAM / Kremsmüller	Zagling (AT) - Kühschinken (AT)	20"	4,3 km	Air	October 2013	Multi-Channel
GRTgaz	Spac/Denys	Loon Plage (FR) - Pitgam (FR)	32"	16,8 km	Air	October 2013	Single-Channel
Petronas Carigali	Romstar Group Malaysia	Malaysia Offshore (MY)	32"	164 km	Gas	September 13	Multi-Channel
Petronas Carigali	Romstar Group Malaysia	Malaysia Offshore (MY)	24"	82 km	Gas	September 13	Multi-Channel
Bord Gais Networks	Sicim S.p.A	Baunlusk AGI (IRL) - Great Island (IRL)	16"	46,1 km	Air	August 13	Single-Channel
FBG	NDT Systems & Services GmbH & Co. KG	Kehl (DE)	08"	9 km	Jet Fuel	August 13	Multi-Channel
Petronas Carigali	Romstar Group Malaysia	Malaysia Offshore (MY)	24"	157 km	Gas	August 13	Multi-Channel

Pipeline Owner	Client	Project	Diameter	Length of Pipeline	Medium	Period	Remarks
BP Norge AS	KTN Norway	BP Norway Offshore (NO)	20"	37 km	Water	April 13	Multi-Channel
Monting d.o.o	ROSEN Europe B.V.	Sibenik - Dugopolje (HR)	20"	60 km	Air	March 13	Single-Channel
Monting d.o.o	ROSEN Europe B.V.	Benkovac - Sibenik (HR)	20"	37 km	Air	March 13	Single-Channel
Snam Rete Gas	Snam Rete Gas	Sant' Eufemia - Tarsia (IT)	16"	94,5 km	Gas	February 13	Multi-Channel
TAL	TAL-OR	Ingolstadt - Karlsruhe (DE)	26"	263,2 km	Oil	January 13	Multi-Channel
Snam Rete Gas	Snam Rete Gas	Calderari - Bivio Gigliotto (IT)	16"	36,6 km	Gas	February 13	Multi-Channel
<b>2012</b>							
Snam Rete Gas	Snam Rete Gas	Raffadali - Sciarra (IT)	30"	85 km	Gas	December 12	Multi-Channel
Net4Gas	ARGE Denys – Alpine v.o.s.	TS 20 – TS 24 (CZ)	56"	18,3 km	Air	November 12	Single-Channel
Net4Gas	ARGE Denys – Alpine v.o.s.	TS 13 – TS 20 (CZ)	56"	20,9 km	Air	November 12	Single-Channel
Gas Connect (AT)	ARGE WAG 2011	Lichtenau - Rappottenstein (AT)	48"	27,6 km	Air	November 12	Single-Channel
Net4Gas	ARGE Denys – Alpine v.o.s.	Primda – End TS 12 (CZ)	56"	66,57 km	Air	October 2012	Single-Channel
GmbH	Max Streicher GmbH & Co KG aA	Windberg – Schwandorf (DE)	40"	72,24 km	Air	September 12	Multi-Channel
RAG.AUSTRIA .ENE	Kremsmüller Industrieanlagenbau KG	UGS Pfaffstätt – Oberkling (AT)	16"	2,9 km	Air	September 12	Multi-Channel
RAG.AUSTRIA .ENE	Kremsmüller Industrieanlagenbau KG	Auerbach – Oberkling (AT)	24"	0,7 km	Air	September 12	Multi-Channel
Net4Gas	ARGE Denys – Alpine v.o.s.	Lot 2 & 3 Test section 8 (CZ)	56"	4,9 km	Air	August 12	Single-Channel
BP-GE	BP-GE	Gelsenkirchen (DE)	12"	23 km	Water	September 10	Multi-Channel

Pipeline Owner	Client	Project	Diameter	Length of Pipeline	Medium	Period	Remarks
Gas Connect (AT)	ARGE WAG 2011	Bad Leonfelden - Rainbach (AT)	48"	17,2 km	Air	August 12	Multi-Channel
GASCADE	Max Streicher	Lubmin - Horst, Lot 3b, 4 & 5 (DE)	56"	87 km	Air	August 12	Multi-Channel
GASCADE	Max Streicher	Umlegung Südal Burghausen (DE)	28"	0,3 km	Air	June 12	Multi-Channel
PGN Indonesia	PT Farrel Indonesia	Bojonegara - Cikande (ID)	24"	33 km	Air	June 12	Single-Channel
Snam Rete Gas	Snam Rete Gas	San Benedetto - Chieti (IT)	26"	74,8 km	Gas	June 12	Multi-Channel
Gas Connect (AT)	Bohr & Rohrtechnik GmbH	Schwechat - Mannswörth (AT)	20"	3,3 km	Air	June 12	Multi-Channel
Snam Rete Gas	Snam Rete Gas	Recanati - San Benedetto (IT)	26"	69,8 km	Gas	June 12	Multi-Channel
Snam Rete Gas	Snam Rete Gas	Cartoceto - Recanati (IT)	26"	69,9 km	Gas	June 12	Multi-Channel
Snam Rete Gas	Snam Rete Gas	Rimini - Cartoceto (IT)	26"	53,8 km	Gas	June 12	Multi-Channel
Snam Rete Gas	Snam Rete Gas	Rimini - Sansepolcro (IT)	26"	74 km	Gas	May 12	Multi-Channel
Snam Rete Gas	Snam Rete Gas	Foligno - Gallese (IT)	22"	83 km	Gas	May 12	Multi-Channel
Snam Rete Gas	Max Streicher	San Polo -Collalto (IT)	24"	16,2 km	Air	May 12	Single-Channel
GASCADE	ARGE NEL Niedersachsen	Wingas 7 - OGE 1 (DE)	56"	20 km	Air	May 12	Single-Channel
TECO (MY)	Romstar Group Malaysia	Malaysia Offshore (MY)	12"	10,3 km	FWS	May 12	Multi-Channel
Nusantara Regas	PT Tonsco Indonesia	Indonesia Offshore (ID)	24"	15,3 km	Water	April 12	Single-Channel
EPS	ARGE EPS Baden-Württemberg	DPA 4A (DE)	10"	4,74 km	Air	April 12	Multi-Channel
RAG	Max Streicher	Anbindeleitung Überackern (AT)	36"	0,35 km	Air	March 12	Single-Channel

Pipeline Owner	Client	Project	Diameter	Length of Pipeline	Medium	Period	Remarks
BHP Billiton	JV Clough-Streicher	Wet Gas Pipeline (AU)	20"	15,5 km	Air	March 12	Single-Channel
BHP Billiton	JV Clough-Streicher	Sales Gas Pipeline (AU)	20"	67 km	Air	March 12	Single-Channel
RAG	RAG-Austria	Puchkirchen - Haag (AT)	20"	21,2 km	Gas	March 12	Multi-Channel
Exxon Mobil	Technipipe	Le Havre (FR)	14"	35 km	Crude oil	February 12	Multi-Channel
<b>2011</b>							
Exxon Mobil	Romstar Group Malaysia	Malaysia Offshore (MY)	12"	3.4 km	FWS	January 12	Multi-Channel
Petronas Carigali	Romstar Group Malaysia	Malaysia Offshore (MY)	16"	24.4 km	M.Phase	December 11	Multi-Channel
Exxon Mobil	Romstar Group Malaysia	Malaysia Offshore (MY)	12"	3.72 km	FWS	December 11	Multi-Channel
Petronas Carigali	Romstar Group Malaysia	Malaysia Offshore (MY)	10"	24.6 km	Water	December 11	Multi-Channel
SKO	Romstar Group Malaysia	Malaysia Offshore (MY)	08"	12.3 km	Gas	December 11	Multi-Channel
OMV	ARGE WAG 2011	Enzersfeld - Sierndorf (AT)	48"	18.3 km	Air	December 11	Single-Channel
Snam Rete Gas	Snam Rete Gas	Chieti - San Salvo (IT)	22"	93 km	Gas	November 11	Multi-Channel
PT. Pertamina Gas	PT Farrel Indonesia	Indonesia (ID)	20"	35 km	Gas	October 11	Single-Channel
Petronas Carigali	Romstar Group Malaysia	Malaysia Offshore (MY)	16"	4.2 km	Water	October 11	Multi-Channel
Petronas Carigali	Romstar Group Malaysia	Malaysia Offshore (MY)	12"	1.2 km	Water	October 11	Multi-Channel
Petronas Carigali	Romstar Group Malaysia	Malaysia Offshore (MY)	08"	1.66 km	Gas	October 11	Multi-Channel
EPS	ARGE EPS Baden-Württemberg	Holzleuten - Lienzingen (DE)	10"	103.4 km	Water	October 11	Multi-Channel



Pipeline Owner	Client	Project	Diameter	Length of Pipeline	Medium	Period	Remarks
EPS	ARGE EPS Baden-Württemberg	Eggenstein - Lienzingen (DE)	10"	45.9 km	Water	October 11	Multi-Channel
EPS	ARGE EPS Baden-Württemberg	Münchsmünster - Dewangen (DE)	10"	140.8 km	Water	September 11	Multi-Channel
Repsol	U.T.E Manchuela	Pliego to Caratgena (ES)	14"	77 km	Air	August 11	Single-Channel
Repsol	U.T.E Manchuela	Elche to Pliego (ES)	14"	80 km	Air	August 11	Single-Channel
Repsol	U.T.E Manchuela	Puertollano to Elche (ES)	14"	199 km	Air	August 11	Single-Channel
TENP	Open Grid Europe	Mittelbrunn - Schwarzach (DE)	38"	114 km	Air	August 11	Multi-Channel
CALTEX OIL MY	Romstar Group Malaysia	Malaysia Offshore (MY)	10"	0,963 km	Water	August 11	Multi-Channel
Petronas Carigali	Romstar Group Malaysia	Malaysia Offshore (MY)	08"	4,5 km	Crude oil	August 11	Multi-Channel
Petronas Carigali	Romstar Group Malaysia	Malaysia Offshore (MY)	08"	0,683 km	M.Phase	August 11	Multi-Channel
WINGAS	Max Streicher/Sicim/Bonatti	OPAL Radeland - Olbernhau (DE)	56"	189 km	Air	June 11	Multi-Channel
BP	KTN Norway	BP Norway Offshore (NO)	10"	7.5 km	Water	May 11	Multi-Channel
BP	KTN Norway	BP Norway Offshore (NO)	10"	5.9 km	Water	May 11	Multi-Channel
SPSE	NDT Systems & Services AG	Fos sur Mer - Lavera L - 1 (FR)	34"	12 km	Water	May 11	Multi-Channel
FBG	NDT Systems & Services AG	Pfungstadt - Rhein/Main (DE)	08"	46.1 km	Jet Fuel	May 11	Multi-Channel
SPSE	NDT Systems & Services AG	Fos sur Mer - Lavera L - 2 (FR)	34"	12 km	Naphta	April 11	Multi-Channel
FBG	NDT Systems & Services AG	Pfungstadt - Aschaffenburg (DE)	08"	45.3 km	Jet Fuel	April 11	Single-Channel
DDEIO / DORSA	NDT Systems & Services AG	Brovad -Fredericia Shell (DK)	10"	21.5 km	Diesel	March 11	Single-Channel

Pipeline Owner	Client	Project	Diameter	Length of Pipeline	Medium	Period	Remarks
DDEIO / DORSA	NDT Systems & Services AG	Brovad - Vandel (DK)	10"	51.8 km	Diesel	March 11	Single-Channel
NET4Gas/WIN GAS	Max Streicher	Brandov (CZ) - Olbernhau (DE)	56"	1.7 km	Air	March 11	Multi-Channel
Gas-Union GmbH	August-Fichter GmbH	Kelsterbach - Mörfelden (DE)	16"	7.59 km	Air	January 11	Multi-Channel
<b>2010</b>							
ENIMED S.p.A	TECMA Srl for Ghizzoni S.p.A	Ragusa (IT) - Tesoro (IT)	08"	8.4 km	Air	December 10	Single-Channel
PLINACRO d.o.o	TECMA Srl for Ghizzoni S.p.A	VRHOVINE-PLASKI & VRHOVINE-Gospic(CRO)	20"	29.8 & 38.6 km	Air	November 10	Single-Channel
OMV PETROM	HABAU - PPS	Rumania (RO)	10"	4.4 km	Air	November 10	Single-Channel
FBG	NDT Systems & Services AG	Ginsheim - Pfungstadt (DE)	10"	35.6 km	Jet Fuel	October 10	Multi-Channel
BASF/Infracor	NDT Systems & Services AG	Kelsterbach - Ludwigshafen (DE)	10"	67 km	Water	October 10	Multi-Channel
ENI R & M	TECMA Srl	Venice (IT)	42"	11 km	Crude oil	September 10	Multi-Channel
TAL/SIOT	TAL/SIOT	Trieste Tank Farm C/D (IT)	42"/36"	11 km	Crude oil	September 10	Dual-Diameter Multi-Channel
BP-GE	BP-GE	Gelsenkirchen (DE)	10"	1.15 km	Water	September 10	Multi-Channel
RAG	Arge Rohrbau	Auerbach - Haiming(AT)	36"	25.8 km	Air	August 10	Single-Channel
GRT Gaz	SpieCapag	Genelard - Etrez (FR)	24"	30.5 km	Air	August 10	Single-Channel

## Pre-Commissioning Services

### February 2000 to June 2002

Client	Germanischer Lloyd (Malaysia) Sdn. Bhd.
Project	Cakerawala Gas Field Development Project for Carigali-Triton Operating Company
Scope of Work	Provision of Technical/Engineering Services/Personnel for fabrication and construction of offshore facilities Provision of Inspection Services/Personnel for the offshore installation and construction of offshore facilities

### December 2000

Client	Icon Engineering Pte. Ltd
Project	Installation of Platform at Bunga Kekwa field for Lundin
Scope of Work	Provision of Supervisory and rigging /welding personnel for the offshore construction.

### December 2001 to May 2002

Client	Saipem Asia (M) Sdn. Bhd.
Project	Wenchang, China and Batam.
Scope of Work	Provision of Safety personnel for the offshore construction activities.

### January 2002 to April 2002

Client	Germanischer Lloyd (Malaysia) Sdn. Bhd.
Project	Gas Transmission and Distribution Project Sakernan-Kuala Tungkal at Hicom Petro-Pipes Sdn. Bhd.
Scope of Work	Provision of Inspection Services/Personnel for the fabrication of spiral welded carbon steel tubulars.

### March 2002 to July 2002

Client	Global Offshore Malaysia Sdn. Bhd.
Project	Installation and testing of subsea pipelines for Chevron (Thailand) Offshore Installation of platform and pipelines in Semarang Kecil field for Petronas Carigali Sdn. Bhd.
Scope of Work	Provision of Pigging and hydrotesting services including supply of manpower, equipment and instrumentation for the project.

#### June 2002 to June 2003

Client	Germanischer Lloyd (Malaysia) Sdn. Bhd.
Project	BRA CCP Topside Project, Vinashin Site Vietnam for Talisman Energy.
Scope of Work	Provision of Technical/Engineering/Inspection/Personnel for fabrication and construction of offshore facilities.

#### Early 2003 to June 2003

Client	Germanischer Lloyd (Malaysia) Sdn. Bhd.
Project Location	Muthurajah Tank, Wattala Sri Lanka for Intec
Scope of Work	Provision of Inspection and surveillance services

#### 2003 to 2004

Client	PT Sempec Indonesia
Project	Betara Complex Development Project – Phase 3
Scope of Work	Provision of technical support for development of installation procedures to complete the installation of the terminal.

#### April 2003 to 2005

Client	Germanischer Lloyd (Malaysia) Sdn. Bhd.
Project & Location	PM-3 CAA Phase 2 & 3 Development, MSE Pasir Gudang, Johor Malaysia for Talisman Malaysia Sdn. Bhd.
Scope of Work	Provision of Technical/Engineering Services/Personnel for fabrication and construction of offshore facilities.

#### June 2003 to Dec 2004

Client	Germanischer Lloyd (Malaysia) Sdn. Bhd.
Project	Offshore, Talisman 35-A & BR-K Hook-up & Commissioning
Scope of Work	Provision of Inspection Services.

#### April 2003 to Dec 2005

Client	Carigali-Triton Operating Company (CTOC)
Project Location	Offshore Cakerawala, JDA Gas Field, Malaysian-Thailand.
Scope of Work	Provision of Technical, Engineering and Inspection Services.

#### June 2003 to Dec 2003

Client	Pegasus Oil & Gas Consultants Sdn. Bhd
Project Location	Offshore /onshore Iran
Scope of Work	Provision of the Engineering services



#### June 2003 to Dec 2003

Client	Nippon Steel Construction (M) Sdn. Bhd.
Project Location	Offshore/onshore Sarawak for Sarawak Shell Bhd.
Scope of Work	Provision of the Technical, Engineering services.

#### June 2003

Client	Oilfield Pipeline Inspection Sdn. Bhd.
Project	Transportation & Installation of Offshore Facilities in Sarawak for Sarawak Shell Berhad, pre-commissioning of 32" B11DR-A to E11R-B Pipeline.
Scope of Work	Provision of Dewatering, Vacuum Drying and Nitrogen Packing for Nippon Steel Construction Sdn. Bhd.

#### June 2003 to April 2008

Client	Germanischer Lloyd (Malaysia) Sdn. Bhd.
Project	Talisman Hook-Up & Commissioning Project, Kemaman Supply Based, Terengganu, Malaysia.
Scope of Work	Provision of the Technical, Engineering services.

#### December 2003

Client	Nippon Steel Construction (M) Sdn. Bhd.
Project	Transportation & Installation of Offshore Facilities in Sarawak for Sarawak Shell Berhad, pre-commissioning of 32" B11DR-A to E11R-B Pipeline.
Scope of Work	Supply of the equipments and spares.

#### Year 2004

Client	Germanischer Lloyd (Malaysia) Sdn. Bhd.
Project	Trans Thai Malaysia Pipeline Project, Sungai Petani, Kedah Malaysia.
Scope of Work	Provision of the Inspection Services.

#### Year 2004 to 2005

Client	Germanischer Lloyd (Malaysia) Sdn. Bhd.
Project	Development of the facilities for Sudan Oil Field.
Scope of Work	Provision of the Inspection Services.

#### April 2005

Client	Geocean SAS
Project	Sakhalin Project
Scope of Work	Provision of construction technical personnel for the installation of pipeline.

#### March 2005 - 2007

Client	PT GL Nusantara
Project	Kerisi Development Project
Scope of Work	Provision of inspection services for fabrication of crane and pipe coating.

#### Feb 2005 to Sep 2008

Client	Germanischer Lloyd (Malaysia) Sdn. Bhd.
Project	Cakerawala Gas Field Development
Scope of Work	Provision of inspection services for hook up and commissioning.

#### April 2005

Client	Germanischer Lloyd (Malaysia) Sdn. Bhd.
Project	Ruby B Topsides
Scope of Work	Provision of marine warranty services for the load out of Ruby B Topsides.

#### March 2005 to Oct 2008

Client	Germanischer Lloyd (Malaysia) Sdn. Bhd.
Project	Bulan, Bumi, Suriya Field Development Project
Scope of Work	Provision of technical, engineering and inspection services.

#### June 2006

Client	PT Geocean Indonesia
Project	PGN Phase 1, South Sumatera – West Java Gas Pipeline Project
Scope of Work	Provision of HDPUF application for pipeline field joint in-fill.

#### Feb 2007 to Oct 2008

Client	Germanischer Lloyd (Malaysia) Sdn. Bhd.
Project	Bulan, Bumi, Suriya Field Development
Scope of Work	Provision of inspection services for hook-up and commissioning.



## **MANPOWER AND EQUIPMENT CAPABILITIES**

### **Overview**

The Manpower and Recruitment policy covers all policies and procedures, which are related to PPC the manpower strength of the Company and the process of recruitment.

### **Objective**

- To enable the Company to implement its business strategy by:
- Planning for manpower requirements
- Recruiting quality talent
- Promoting Saudization

### **Responsibility**

The Human Resources Department of PPC under the overall authority of the Head – Corporate Human Resources is responsible for ensuring compliance with the manpower and recruitment policy. Corporate Human Resources along with the Function Heads and the CEO and PMO finalize the annual manpower plan, which also outlines the manpower budget for the year.



L / No.	Company Owned Equipment(s)	Current Number of Units
01	Nitrogen Generation Unit (Membrane)	2
02	Nitrogen Generation Unit (Liquid)	1
03	High-Pressure Pump (Up to 12,000 PSI)	2
04	C Pump	2
05	Filling Pump / Flooding Pump	3
06	Air Compressor – XRVS 1350	5
07	Oil-Free Compressor	2
08	Dryer	2
09	Booster	1
10	Chemical Injection Pump	1
11	Hydro Testing Pump	3
12	Dump Truck	5
13	Trailer	2
14	Boom Truck	2
15	Forklift	2
16	Bulldozer	1
17	Excavator	3
18	Backhoe Loader	2
19	Roller Compactor	2
20	Diesel Tanker	1
21	Generator Set	2
22	Welding Machine	4
23	Air Compressor Unit	4
24	Water Tanker	1
24	Cars	6



## Classification Indicators of Human Resource Management

General Manager	1
Sales Manager	1
Operations Manager	1
Finance Manager	1
Secretary	1
Assistant Admin	1
Accountant	1
Operations Coordinator	1
Engineer	5
Manager, QA/QC	1
HSE Supervisor	1
Operator	10
Labor	10
Welder	10
Helper	6
Office Boy	1
Driver	2

## SAUDI ARAMCO VENDOR ID



Saudi Aramco E-Reference No. 0003746

## **Registration Approval Letter**

**Attention : PIONEER POWER FOR CONTRACTING COMPANY**

**CR Number : 2050140304**

**Supplier Type: Service Provider Only**

**Country : Saudi Arabia**

We are pleased to inform you that PIONEER POWER FOR CONTRACTING COMPANY is now registered in the Saudi Aramco Supplier Management System under Vendor Code No. 10068139, provided your company continues to meet all relevant Saudi Arabian and Saudi Aramco standards.

This registration, however, should not be construed as a commitment by Saudi Aramco to procure from you. Being registered as a supplier only grants your company the opportunity, along with other registered sources, to respond to requests for submitting proposals in accordance with Saudi Aramco's established policies and procedures. All procurement instruments including but not limited to service contracts, purchase agreements, or purchase orders will be issued based on the name and address included in your commercial registration (CR), as stated in your Supplier Registration.

Saudi Aramco wishes to remind you that being recognized as a supplier carries with it serious obligations and responsibilities to act in a legal and ethical manner. We wish to remind you of the Saudi Aramco Supplier Code of Conduct (SCOC) which you acknowledged. Failure to abide by the principles set forth in the SCOC can result in adverse actions being taken by Saudi Aramco against you including suspension of you as a supplier. Saudi Aramco also expects each of its suppliers to satisfy each of the requirements of any procurement instrument which might be placed and to act responsibly and reliably as a supply chain supplier.

Material Suppliers should apply for Saudi Aramco Supplier Portal access by forwarding a request to [portal-registration@aramco.com](mailto:portal-registration@aramco.com). The Supplier Portal is the main electronic business tool used between Saudi Aramco and its suppliers and serves to improve the flow and accuracy of key supply chain information.

For further information or assistance please contact the Saudi Aramco Supplier Help Desk by forwarding a request to [SupplierHelpDesk@aramco.com](mailto:SupplierHelpDesk@aramco.com) or via the unified call center 800-116-1168 for In-Kingdom suppliers or +966 (11) 290-8950 for Out-of-Kingdom suppliers.

Moamar Khazal Al Usaimi, Supervisor  
**Supplier Registration Unit**  
**Supplier Relationship Management Div**

It is the responsibility of the supplier to update Saudi Aramco Supplier Registration Profile through Ariba for the following:

1. Change of Name / Commercial Registration Number / Address / Owner(s)
2. Any change of the supplier location
3. Discontinue supply of approved commodities (9COMs and 9CATS)

This is an electronically generated letter by Saudi Aramco. To verify Supplier approval status, please contact Supplier Help Desk at [supplierhelpdesk@aramco.com](mailto:supplierhelpdesk@aramco.com)

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**PIONEER POWER CONTRACTING LLC. (PPC)**