



*Your Reliable Industrial Services Partner...*

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## Major Customers

We are privileged to serve and are registered with following major companies...

☞ Saudi Aramco - Vendor No : 10054813.



☞ SABIC - Vendor No : 000506473.



☞ Ma'aden - Vendor No : 11455.



☞ SADARA - Vendor No : 1000002475.





## Major Customers



We are privileged to serve and are registered with following major companies...

John Hopkins - Vendor No : 1000001556

مركز جونز هوبكنز أرامكو الطبي  
Johns Hopkins Aramco Healthcare

☞ Jacobs - Vendor No : 75565921

**JACOBS**

☞ Equipment & Technical Services Co. (ETECHS)



☞ Fluor **FLUOR**

☞ Bechtel





## Project references

Jubail Sources (team) are pleased to be involved in following major (but not limited to) projects within “Saudi Arabia”

⇒ **Ma’aden Aluminium Company (Rolling Mill) – RAS AL KHAIR**

LSTK installation of weighing scale after scalper – Year 2017

**Customer:** Ma’aden Aluminium Company (Rolling Mill)

⇒ **Ma’aden Infrastructure Project (MIC), Ma’aden Housing – RAS AL KHAIR**

Various civil, electro-mechanical works for security systems – 2016 - 2017

**Customer:** ETECHS - Equipment & Technical Services Co. / MIC (Ma’aden Infrastructure Company)

⇒ **SAB TANK – Sabic, Al Jubail**

LSTK installation of warehouse rack lightings (cable containments, cable pulling, lighting installation, distribution panels, etc – Year 2017

**Customer:** Al- Iman / SAB TANK (SABIC)

⇒ **Satellite GOSP Project, Khurais**

Involved in various civil works (fencing, etc) – 2016 - ongoing

**Customer:** GAMA AL MOUSHEGAH ARABIA/ SAPIEM/ ARAMCO

⇒ **Petrokemya - SABIC - Jubail Industrial City**

Installation of complete sound system in cafeteria - 2016

**Customer:** Petro Kemya

⇒ **HADEED Steel Plant – Sabic , Al Jubail**

LSTK installation of Air compressor and utilities works – Year 2015 – 2016

**Customer:** HADEED (SABIC)

⇒ **Saudi Kayan – Sabic, Al Jubail**

Compressor Overhauling (Shutdown works) – Year 2015

**Customer:** Saudi Kayan / Sabic

⇒ **Petro Rabigh, KSA**

Industrial cleaning works (with Terra Technology) – 2015

**Customer:** Petro Rabig



## Project references

**Jubail Sources (team) are pleased to be involved in following major (but not limited to) projects within “Saudi Arabia”**

⇒ **Ras tanura refinery, Ras tanura**

Various civil works (foundations, fencing, etc) – Year 2014 - 2015

**Customer:** Futai Arabia/ ARAMCO

⇒ **Ma’aden Aluminium Smelter, RAS AL KHAIR**

Electro-Mechanical LSTK works for Holding Melting F’ces and Launderers at cast house – Year 2012 - 2013

**Customer:** Bechtel/ Ma’aden

⇒ **Basic Chemical Industry Company, Dammam**

Various mechanical and piping works at MPT plant (BCI) – Year 2014

**Customer:** BCI – Basic Chemical Industry

⇒ **Petrokemya - SABIC - Jubail Industrial City**

Various electrical works (LSTK contract) – Year 2013 – 2014

**Customer:** Petro Kemya

⇒ **FLARE HEADER PROJECT, Advanced Petro Chemical, Al Jubail**

Electro-Mechanical works (LSTK contract) – Year 2012

**Customer:** Advance Petro Chemical

⇒ **JESCO, Seamless pipe manufacturing facilities, Al Jubail**

Installation of various Machineries and systems for pipes bevelling – Year 2010 – 2011

**Customer:** JESCO (A TAQA Affiliate)

⇒ **Gulf Packing Industries Ltd, Al Jubail**

Installation of metalize, slitter machine – Year 2011

**Customer:** Gulf Packing Industries Ltd



## Project references



Jubail Sources (team) are pleased to be involved in following major (but not limited to) projects within “UAE”

⇒ **EGA (Emraites Global Aluminium), Emal, Abu Dhabi, UAE**

Electro-mechanical LSTK works for Holding Melting Furnaces at cast house – Year 2013 - 2014

**Customer:** SNC Lavalin/ EGA/ Emal

⇒ **EGA (Emraites Global Aluminium), Emal, Abu Dhabi, UAE**

Electro-mechanical LSTK works for Liquid metal transfer system – year 2014

**Customer:** SNC Lavalin/ EGA/ Emal

⇒ **Dubai Drydocks World, UAE**

Various projects (Hydro /sand blasting, painting, equipment rental)

⇒ **Boskalis, UAE**

Hydro-blasting and painting of pontoons

⇒ **Grandweld, UAE**

Sand blasting of new structure (Burboon)

⇒ **Goltens, UAE**

Sand and Hydro-blasting , equipment rental

⇒ **Dubai Municipality, UAE**

Washing of sewage plans tanks

⇒ **Al Mammut, UAE**

Washing of steel structure

⇒ **Al Jaber, UAE**

Hydroblasting of barge

⇒ **Technomak, UAE**

Equipment rental

⇒ **Gmmostech, UAE**

Equipment rental and hydro/grit blasters

⇒ **Topaz/Nico, UAE**

Rental of equipment and hydro/grit blasters

⇒ **Maridive Oil Services, UAE**

Repairing of UHP pump

⇒ **Aban, UAE**

Repairing of various centrifugal submersible pump



## Product supply references



Jubail Sources with partner Terra Technology have supplied following units on LSTK basis (*design, engineering, manufacturing and testing*)

- ⇒ Ultra High Pressure units
- ⇒ High Pressure units
- ⇒ Gear Pumps
- ⇒ Centrifugal Pumps
- ⇒ Submersible Pumps
- ⇒ Chemical Injection Packages

The units were supplied to major companies from Oil & Gas and Maritime industries.



Dear Sir,

We are pleased to introduce our company Jubail Sources Est.

We are registered as an authorised vendor with Saudi Arabian Oil Company (Saudi Aramco), Saudi Arabian Basic Industries (SABIC), Ma'aden Aluminium Co, SADARA, John Hopkins, Fluor, Bechtel, etc.

Being an **ISO-certified** organisation (ISO 9001: 2008), Jubail Sources devotes great efforts and resources to maintain the excellence that is deemed essential by the best industrial standards.

**Ultra-High Pressure** and **High-Pressure** industrial cleaning using state-of-the art **German technology** and **automated equipments** is one of our speciality services.

Through a joint-venture with (Terra Technology) an international provider of such services, we can ensure best-in-class quality services completed in a duration significantly shorter than currently offered within the local market. This will help operations companies reduce equipment downtime for T&I activities.

Following are some of our (but not limited to) specialised services being offered,

- ⇒ **Supply services** (Equipment rental, human resource supply and materials supply from worldwide renowned brands and manufacturers)
- ⇒ **Industrial Cleaning Services** (with an international service provider: Terra Technology)
- ⇒ **Projects, Plant Operation and Maintenance (O & M) Services.**
- ⇒ **Other specialised services such as industrial coating and painting works.**

Along with these specialised services, Jubail Sources possess dedicated and certified project management team to manage and execute medium to large scale projects on LSTK basis.

These are all exhibited in enclosed company profile in further details.

We keen to initiate business opportunities with your prestigious company and would be pleased to provide any clarifications or furnish any additional information you may need.

Looking forward to hearing from you.

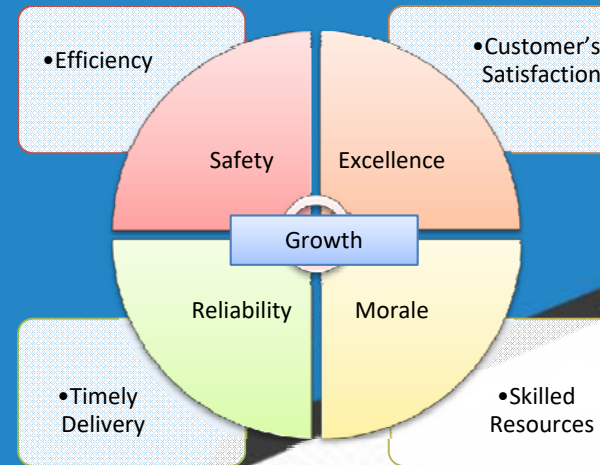
Yours sincerely,



Mohammed Shabbir  
General Manager

## JUBAIL SOURCES

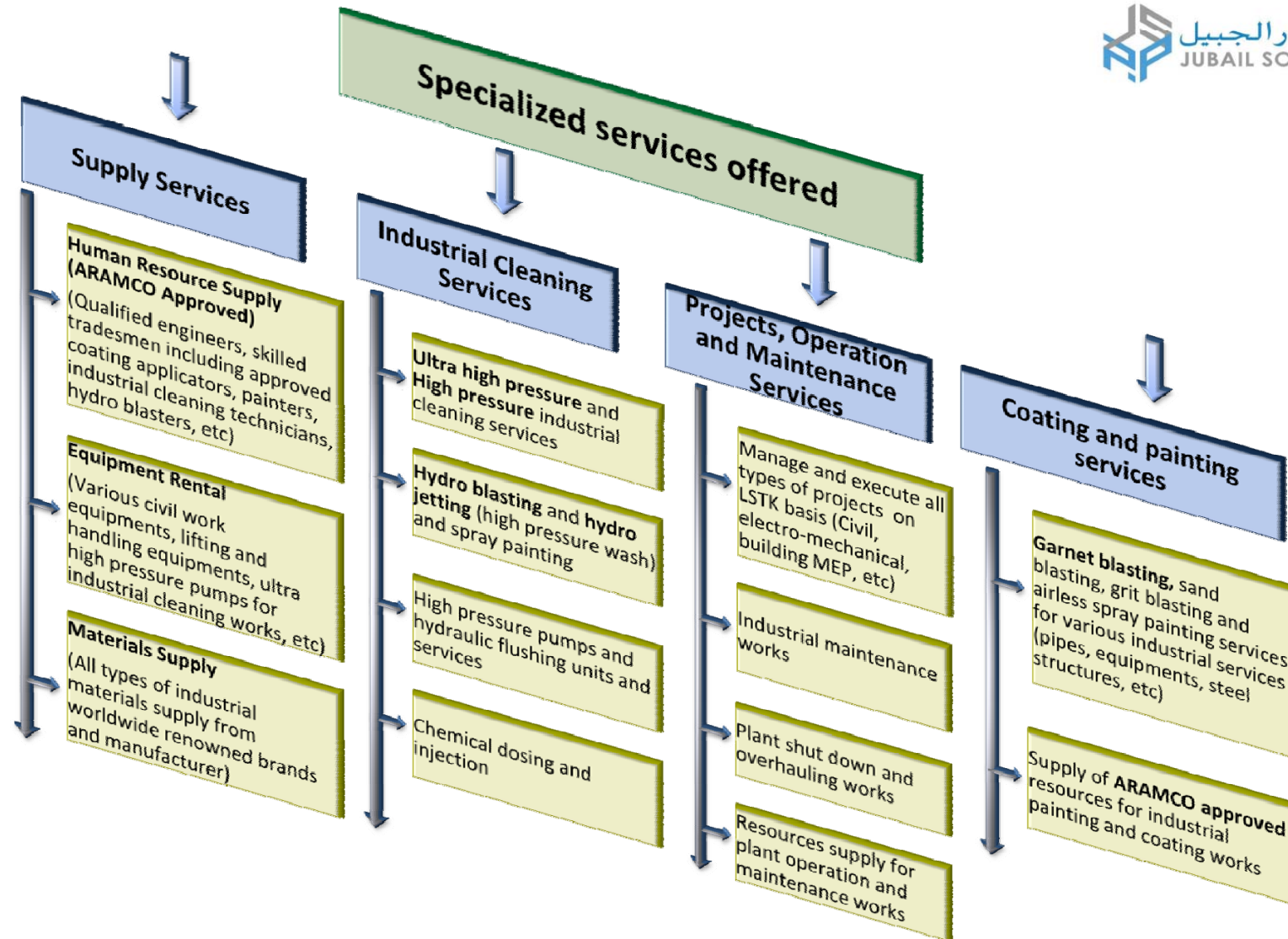
is an industrial services company that has shaped its structure to meet the various needs of its customers. With trained and experienced personnel, Jubail Sources has the capacity and expertise to satisfy the customer's business requirements in a timely and efficient manner. We are committed to Safety, Excellence, Reliability and Morale as the main values of our company. We are devoting great efforts and resources to remain committed to our values and whilst maintaining excellence that is deemed necessary by the best industrial standards of which we are in compliance with. The adequacy of our organizational processes is further supported by our compliance to the requirements of ISO 9001: 2008 which we are certified by.



**Jubail Sources** is an integrated one-stop provider of a wide range of Industrial Solutions. As an Industrial Services Provider to various industries such as Petrochemicals, Refineries Oil & Gas, Power Generation and Desalination, Aluminium and Steel the product and services portfolio covers every link in the project value chain.

Our products and service portfolio includes: all types of industrial material supply, equipment rental, human resource supply, managing and executing medium to large scale industrial projects (civil, electro-mechanical, instrumentation, etc). In our efforts, at all times we are combining creativity, specialization and constant self-renewal with the reliability that makes us a partner of choice. Our team comprises of well experienced, certified and qualified professionals. Our organization was structured with built-in flexibility that allows us to sustain our excellence while adopting to the dynamic, ever changing, business demands and requirements.





## Supply Services

### EQUIPMENT RENTAL

Count on Jubail Sources for all your equipment rental needs. Solving equipment shortages, downtime, production demands & no long term commitments are just a few reasons why Jubail Sources is your best option for temporary and long term equipment requirements. Our range of equipment include (but not limited to):

- Forklifts
- Manlift
- Cranes
- Loaders
- Dump Truck
- Excavators
- Tankers
- Tower Light
- Welding Machines

*Includes “Ultra High Pressure” and “High Pressure” pumps for industrial cleaning works manufactured using state-of-the-art German technology*



## Supply Services

### JUBAIL SOURCES EQUIPMENT RENTAL DIVISION

In addition to having one of the newest fleets in Saudi Arabia, Jubail Sources provides superior quality services that will exceed client's expectations and meet international industrial standards.

#### LIGHT TOWERS

"Working at night can be a challenge for those who don't rely on trusted brands of light towers that are provided by Jubail Sources Equipment Rental."

- Diesel Powered
- 4 x 1000 watt metal halide lamps
- Tower height = 9 meters
- 6KW generators
- Large fuel tank capacity providing more than 68 hours of conditions running time.



#### MATERIAL HANDLING

Moving building materials on construction sites or at warehouses makes the forklift a Jobsite essential.

##### MATERIAL HANDLING

- Capacity 3.7 Ton to 4.2 Ton
- Reach 12 to 17 meter
- 4 WD and large diameter tires for extreme conditions
- Ergonomically designed cabs with ROPS for operator comfort and safety

##### INDUSTRIAL & CONSTRUCTION FORKLIFTS

- Available capacities 2.7 ton to 16 ton
- Higher capacity up to 30 tons can be made available upon request
- Side shift / fork positioner
- Solid and air tire

#### WELDING MACHINES

Welding is an important function required in many industries. Operator safety and reliable, efficient equipment are top priorities at Jubail Sources Equipment Rental.

- Voltage 400 AMP - 500 AMP
- Output 110V - 220V
- Diesel Powered



#### AIR COMPRESSORS

At Jubail Sources Equipment Rental, we carry late model air compressors and tools from the industry's best manufacturers. Whether you are sandblasting, painting, drilling or breaking up concrete, Jubail Equipment Rental will have the compressor you need to get the job done.



| RATED PRESSURE ( BAR ) | CFM       |
|------------------------|-----------|
| 7                      | 185       |
| 7                      | 375 - 392 |
| 8.6                    | 750 - 850 |
| 10.3                   | 1600      |





## Supply Services



### AERIAL LIFTS

#### BOOM LIFT

With a wide range of models to choose from, Jubail Sources are ready to help, support and provide boom lifts in virtually every size from trusted manufacturers.

- Telescopic and articulated models
- Platform heights available from 14 meters to 42 meters
- Large self-leveling work platform with proportional controls



#### SCISSOR LIFT

Whether it's an indoor aerial construction, a maintenance projects or completing an outdoor aerial project with limited access and less than ideal ground conditions, Jubail Sources Equipment Rental has the aerial lifts you need to complete the job.

#### ELECTRIC SCISSOR LIFT

- Platform heights available to 10 meters
- Narrow aisle models and tight turning radius capability for better maneuverability
- 220V AC outlet on work platform
- Non-marking tires
- Extendable work platform with skid-resistant plating
- Pothole guards to reduce tip-over hazards



#### SCISSOR LIFT

- Platform heights up to 13 meters with diesel and dual fuel system
- 4WD with wide treaded tires to handle rough conditions
- Large extendable work platforms
- Proportional drive and multi-speed lift functions



### GENERATORS

Jubail Equipment Rental is capable of providing the latest model generators providing extraordinary power solutions to our customers in times of need. Whether it is a plant shutdown, major sporting event, desert project or power solution. Please contact us for help in determining the correct size unit for your job.

#### INDUSTRIES WE SERVE

- Construction
- Industrial
- Oil and Gas
- Petrochemical
- Power & Water
- Shipbuilding & Repair
- Drilling & Mining
- Entertainment

#### APPLICATIONS & USAGES

- Construction Job Sites
- Temporary Power Relief
- Disaster & Emergency Response
- Highway & Bridge Maintenance
- Outdoor Events

#### GENERATOR RANGE

- |                  |                  |                  |
|------------------|------------------|------------------|
| • 28KW / 35KVA   | • 48KW / 60KVA   | • 80KW / 100KVA  |
| • 120KW / 150KVA | • 160KW / 200KVA | • 220KW / 275KVA |
| • 260KW / 325KVA | • 480KW / 600KVA |                  |



### SAFETY & SERVICE

Jubail Sources Equipment Rental provides the highest quality service standards in the industry, our professional services team provides Your crew with operations training, and equipment safety requirements.

## Supply Services

### HUMAN RESOURCE SUPPLY

Various industrial projects such as Petrochemical, Oil and Gas, etc calls for the mobilisation of a large number of people in remote areas. The access to numerous qualified professional in such areas is not easy. Jubail Sources understands the different phases of such industrial projects and is able to deliver the required human resources in a shortest possible time period.

Our Schedule of Human Resource Supply covers (but not limited to):

- Engineers
- Technicians
- Supervisors
- Foreman
- Fitters/Fabricators
- Operators
- Riggers
- Skilled Labors
- Welders
- Safety Officers

*Includes **Industrial cleaning technicians, hydro blasters, and painters***







## Supply Services

### MATERIAL SUPPLY

Jubail Sources is a leading material supplier to the local and international engineering and contracting companies & to the end users catering to the requirements of the oil and gas, petrochemical, power and desalination, aluminium and steel and other associated industries. Our material supply brand is mostly recognized for shortest lead-times, on-spec delivery with the most competitive prices. Our Material supply portfolio covers (but not limited to):

- Pipes and Fittings
- Industrial Valves
- Pumps and Compressors
- Electrical and Instrumentation Products
- Paints and Coating
- Heavy and light structural metals(including gratings, etc)



*Jubail Sources is an authorized distributor and partner with the following major manufacturers world wide...*



Biotech Intl, Inc



Inncon industries



Suman industries





**Kalrez®** speciality “O rings” for Chemical Process Industry and for Oil & Gas industry

DuPont™ Kalrez® perfluoroelastomer parts are available in a number of different compounds that are formulated to optimize properties to give the best possible performance in various applications. Modification of the finished properties is achieved by use of fillers and other additives

Table 1 summarizes the basic physical properties of the most commonly used Kalrez® products for the chemical and hydrocarbon processing industries. Descriptions of the key attributes for each product and their general areas of application follow.

Table 1. Typical Physical Properties<sup>1</sup>

| DuPont™ Kalrez® Products                                     | Standard |       |       | Specialty |                     |                     |       |        |
|--|----------|-------|-------|-----------|---------------------|---------------------|-------|--------|
|  | 6375     | 7075  | 4079  | 6380      | 7090                | 0090                | 0040  | 1050LF |
| Maximum Application Temp <sup>2</sup> , °C                   | 275      | 327   | 316   | 225       | 325                 | 250                 | 220   | 288    |
| °F   | 527      | 620   | 600   | 437       | 617                 | 482                 | 428   | 550    |
| Durometer Hardness, Shore A <sup>3</sup> , points ±5         | 75       | 75    | 75    | 80        | 90                  | 95                  | 70    | 82     |
| 100% Modulus <sup>4</sup> , MPa                              | 7.24     | 7.58  | 7.24  | 6.89      | (50% Modulus) 15.51 | (50% Modulus) 14.20 | 6.61  | 12.40  |
| psi  | 1,050    | 1,100 | 1,050 | 1,000     | 2,250               | 2,060               | 960   | 1,800  |
| Tensile Strength at Break <sup>4</sup> , MPa                 | 15.16    | 17.91 | 16.88 | 15.86     | 22.75               | 19.51               | 13.72 | 18.60  |
| psi  | 2,200    | 2,600 | 2,450 | 2,300     | 3,300               | 2,830               | 1,990 | 2,700  |
| Elongation at Break <sup>4</sup> , %                         | 160      | 160   | 150   | 160       | 75                  | 80                  | 180   | 125    |
| Compression Set <sup>5</sup> , %<br>70 hr at 204 °C (400 °F) | 25       | 12    | 25    | 38        | 12                  | 40                  | 38    | 35     |
| Tr10 <sup>6</sup> , °C                                       | −3       | −4    | −2    | −5        | −5                  | −7                  | −17   | −4     |
| °F   | 26.6     | 24.8  | 28.4  | 23.0      | 23.0                | 19.4                | 1.4   | 24.8   |

<sup>1</sup> Not to be used for specifications

<sup>2</sup> DuPont proprietary method; performance will vary with seal design and application specifics

<sup>3</sup> ASTM D2240

<sup>4</sup> ASTM D412, 500 mm/min (20 in/min)

<sup>5</sup> ASTM D395 – Method B, pellets

<sup>6</sup> ASTM 1329





Supply Services

**DuPont™ Kalrez® : Chemical Process Industry (CPI), Product Selector Guide...**

*Recognized as the leading supplier of perfluoroelastomer parts for over 40 years, DuPont offers a variety of high performing products that are formulated to give the best possible seal performance in numerous aggressive environments. Excellent balance of finished properties is achieved through careful use of proprietary polymers, cure systems, fillers and additives, resulting in superior seals for a broad range of applications.*

*This selector guide summarizes key physical properties and attributes of the most commonly used Kalrez® products for the chemical process industry, providing general chemical compatibility guidance.*

*For more detailed information about each product, please consult the Kalrez® Application Guide online at [Elastomers Chemical Resistance Guide](#) and [Kalrez® Application Guide](#) or contact a Kalrez® application engineer to assess performance fit in your specific application.*



The miracles of science™







**DuPont™ Kalrez® : Chemical Process Industry (CPI),  
Product Selector Guide...**



**Supply Services**

**Product Selector**

The following guide is a quick/easy tool for the selection of Kalrez® products for the chemical process industry.

| DuPont™ Kalrez® Products   |  |   |   |   |  |                                 |                                   |  |
|--|--|---|---|---|--|---------------------------------|-----------------------------------|--|
| Chemical Environment   | 6375   | 4079  | 7075  | 7090                                    | 7275   | 6380                            | 0040                              | 0090                                     |
|  | General Purpose<br>-<br>Broadest Chemical Resistance | High Temperature<br>-<br>High Mechanical Strength | Highest Temperature Resistance<br>-<br>Lowest Compression Set | High Temperature,<br>-<br>High Hardness | Specialty<br>-<br>Oxidizing & Reactive Chemical Environments | Specialty<br>-<br>Strong Amines | Specialty<br>-<br>Low Temperature | Rapid Gas Decompression (RGD) Resistance |
| Acids  | X  | XX  | XX  | XX                                      | X  | X                               | XX                                | X  |
| Inorganic Bases  | XX   | X   | X   | X                                       | X  | XX                              | X                                 | XX                                       |
| Hydrocarbons   | XX   | XX  | XX  | XX                                      | X  | X                               | XX                                | XX                                       |
| Solvents   | XX   | XX  | XX  | XX                                      | X  | X                               | X                                 | XX                                       |
| Hot Water/Steam  | XX   | ---   | ---   | ---                                     | X  | X                               | ---                               | XX                                       |
| Amines (Organic Bases)   | X  | ---   | ---   | ---                                     | X  | XX                              | ---                               | XX                                       |
| Vinyl or Acrylic Monomers  | X  | ---   | ---   | X                                       | XX   | X                               | ---                               | X  |
| Silanes and Chlorosilanes  | X  | X   | X   | X                                       | XX   | ---                             | ---                               | ---                                      |
| Synthetic Oils   | X  | XX  | XX  | XX                                      | X  | ---                             | X                                 | X  |
| Strong Oxidizers (e.g., Nitric Acid, O <sub>3</sub> , ClO <sub>2</sub> ) | ---  | ---   | ---   | ---                                     | XX   | X                               | ---                               | ---                                      |
| Aldehydes  | X  | ---   | ---   | ---                                     | XX   | X                               | ---                               | ---                                      |
| Streams of Unknown Composition   | XX   | ---   | ---   | ---                                     | X  | XX                              | X                                 | X  |
| Ethylene or Propylene Oxide (Pure)                                       | X  | ---   | ---   | ---                                     | XX   | XX                              | ---                               | XX                                       |
| Dry Heat   | X  | XX  | XX  | XX                                      | X  | ---                             | ---                               | X  |
| High Pressure / Extrusion Resistance                                     | ---  | ---   | ---   | XX                                      | ---  | ---                             | ---                               | XX                                       |
| RGD (Rapid Gas Decompression Resistance)                                 | ---  | ---   | ---   | X                                       | ---  | ---                             | ---                               | XX                                       |
| Maximum Service Temperature <sup>1</sup> , °C (°F)                       | 275 (527)  | 316 (600)   | 327 (620)   | 325 (617)                               | 300 (572)  | 225 (437)                       | 220 (428)                         | 250 (482)                                |
| Lowest Service Temperature <sup>1</sup> , °C (°F)                        | -20 (-4)   | -19 (-2.2)  | -18 (-0.4)  | -26 (-14.8)                             | -20 (-4)   | -22 (-7.6)                      | -42 (-43.6)                       | -21 (-5.8)                               |
| Color  | Black  | Black   | Black   | Black                                   | Light Brown  | Cream                           | Black                             | Black                                    |
| Durometer, Shore A <sup>2</sup>  | 75   | 75  | 75  | 90                                      | 75   | 80                              | 70                                | 95                                       |
| Elongation at Break <sup>3</sup> , %                                     | 160  | 150   | 160   | 75                                      | 160  | 160                             | 180                               | 80                                       |
| Compression Set <sup>4</sup> , % (70 hours at 204°C/400°F)               | 25   | 25  | 12  | 12                                      | N/A  | 38                              | 38                                | 19                                       |
| Compression Set <sup>5</sup> , % (70 hours at 204°C/400°F)               | 30   | 30  | 15  | 12                                      | 22   | 40                              | 41                                | 33                                       |
| Tensile Strength at Break <sup>6</sup> , MPa (psi)                       | 15.16 (2198)   | 16.88 (2448)                                      | 17.91 (2598)  | 22.75 (3300)                            | 14.50 (2103)   | 15.86 (2300)                    | 8.96 (1300)                       | 19.49 (2827)                             |



***Specialized in Flexible 'Anaconda' Conduit:***

*Anamet Inc. was established in the USA in 1908, just prior to the mass production of cars. A pivotal moment in the Company's history came with introduction of Anaconda – a brand of conduit that has become synonymous with quality, reliability and performance all around the world. The Company continued to expand, and in 1945 established its first manufacturing facility and sales organization in Europe in Amsterdam. Success bred success and today Anamet has manufacturing facilities and sales outlets in the USA, Canada and in Europe, enabling us to provide a first class service to our customers – wherever they are.*

***Multiflex: Wide selection of mechanically strong conduits***

*Available in a wide range of executions, Anaconda Multiflex conduits are usually supplied without cover. However for applications involving instrumentation in clean environments, the SLI and UI types are available with a protective cover. Whether you require square locked or fully interlocked, galvanised steel, stainless steel or aluminium, braided or unbraided, Anamet has a product to meet your requirements. With each type of conduit there is a matching range of fittings including straight or elbow design, nickel plated brass or stainless steel in ISO, PG or NPT.*

*Galvanised steel conduits are from -55°C to +300°C (Type FCEN, SL and UIG), Stainless steel conduits are from -100°C to +600°C (Type SLI and UI), Aluminium Type RWA conduit range from -45°C to +260°C.*



**Multitite: The solution when a light, flexible conduit is required**

Anaconda Multitite are galvanised steel conduits with a PVC, Polyolefin or PU cover. Due to their flexibility they are suitable for use in applications where mechanical protection is not the main priority, but flexibility of movement is. For each type of conduit a fitting solution in straight (IP 54) or straight and elbow (IP 65 or IP 68) is available.

Square locked galvanised steel conduits with PVC cover are type FCD (from NW 8 till NW 50) or the extra robust FCE (from NW 10 till NW 50) Square locked galvanised steel conduits with PU cover are type FCD-PU-V0 (from NW 12 till NW 50)



**Sealtite: State-of-the-Art Conduits that offer Excellent Mechanical Protection:**

Anaconda Sealtite - Anamet's flagship range of conduits. Available in galvanised steel, stainless steel and bronze with a PVC, TPE, TPU or Polyolefin cover. Other cover types are available depending on the application. Offering high integrity performance, Anaconda Sealtite conduits conform to the highest specification criteria and approvals demanded by the train industry, UL/CSA, FDA and the military industry due to their ability to provide excellent mechanical protection in tough and demanding operating environments. A wide range from 1/4" to 6" is available. For each type of conduit we also offer a fitting solution.

Types EF, OR, HC, HTDL, FG and CW are supplied with PVC cover, Type HCX with TPE cover and Types HFX and ZHUA with TPU







### **Anaconda Sealtite Special: Special Conduits for Special Applications:**

Anamet has developed a range of high quality conduits for specific industrial applications. These conduits are made to the very highest specification and feature a stainless steel core and, depending on the application, a cover made of PVC, TPE or TPU. For applications requiring a high level of EMC shielding Anaconda Shieldtite has been developed, while for antistatic applications, such as ATEX environments, Anaconda Antistatic (AS) is available. Anaconda NWC is designed for nuclear applications, Anaconda FG (Food Grade) for the food industry. To complement these high quality conduits, a wide range of stainless steel fittings in size range 1/4" to 2" is available.



### **Anaconda fittings: the perfect match with Anamet conduits:**

The Anaconda range of fittings covers all common types, from straight, 45° and 90° elbows to swivels, cable-hose and ATEX versions. The range is available in nickel plated brass and stainless steel AISI 303 (some types are also in AISI-316) with UL/CSA, GOST and/or ATEX approvals. Thread sizes are in ISO (from M12 to M105), Pg (from Pg9 to Pg48) or NPT (from NPT 3/8" to NPT 4"). Other types like Unef or Gas / BSPT are available on request. Nickel plated brass fittings and stainless steel fittings temperature range is from -45°C to +105°C, galvanised steel fittings are from -55°C to +300°C.



### ***Hiprojacket: Heat Protection Solutions Conduit, Cables, Hydraulic Hoses***

*Hiprojacket are woven or braided glass fibre sleeves with a silicone cover that are designed to protect conduits, hoses or cables against welding splatters, molten splash and excessive temperature rushes. Each type of Hiprojacket sleeve can be combined with fittings in straight or elbows (IP 54 or IP 67). Thermojacket is an alternative solution which is made of specially treated glass fibre that can withstand temperatures up to 538°C. Hiprojacket (DN 6 - DN 127) sleeves, woven or braided, have a continuous temperature operating range of -55°C to +260°C and a peak temperature for 20 seconds up to +1640 °C. Thermojacket (DN 6 - DN 102) woven, acryl saturated sleeves have a continuous temperature operating range of -55°C up to +538°C.*



### ***Hiprojacket Special Products: Heat Protection Tapes, Wraps and Blankets for Pipes, Hoses, Cables and People***

*Hiprojacket special products include tapes, blankets and wraps. These products are made of woven glass fibre sleeve with a silicone cover. They are available in various sizes and executions enabling them to be used in a wide variety of applications where cables, hoses, components or work zones need to be protected against sparks, molten splash, furnace or heat blasts from furnaces. Type Hiprotape (DN 25 – DN 127) woven glass fibre is formed into an easy to wrap tape and has a continuous operating range of -55°C to +260°C and a peak, up to 20 seconds, of +1640°C.*

*Ideal for use with Hiprojacket sleeve to protect fitting connections. Type Hiproblanket, (1016 mm wide with lengths up to 45 meter) is made of woven glass fibre formed into a blanket and has a continuous operating temperature of -55°C to +260°C and a peak, up to 20 seconds, of +1640°C. Ideal for zone blast protection of people or sensitive equipment. Type Hiproblanket Wrap (DN 25 - DN 305) is made of woven glass fibre sleeves with hook and loop fasteners with a continuous operating range of -55°C to +260°C and a peak, up to 20 seconds, of +1640°C. peak. Since the Wrap can be unfastened and removed, ideal for applications when access to cables or hoses is required.*



***BW Corrugated hoses: Strong, reliable and high integrity products***

*Anaconda stainless steel corrugated hoses are designed for industrial applications in which gases or fluids are transported. They are designed to withstand high pressure, high temperature and various chemical substances. Available in stainless steel AISI 316L, Monel and other materials. Anamet can offer solutions to a wide variety of applications. Our offering is complemented by a wide range of matching flanges and fittings, enabling us to produce practically every type and combination to specification.*

*Stainless steel hoses available from full vacuum up to 400 bar (from DN 6 to DN 200) Monel hoses available up to 250 bar (from DN 6 to DN 100).*

***Anaflex: Quick assembly system that cuts installation time and saves money***

*Anaflex-click is an innovative and new development designed for HVAC and solar applications for the transport of fluid, but can also be used as a flexible conduit for the mechanical protection of sensitive wiring and/ or cabling. Made of stainless steel corrugated hose. The hose is supplied with a set of nickel plated brass fittings which simply click onto the hose in seconds. The assembly is then ready for connection. Installation is quick, easy and reliable making the life of the installation engineer a lot easier – especially in tight and difficult to access areas.*

*We also offer a wide range of gasmeter connectors with welded on fittings in accordance to various international standards.*



***Expansion joints: Making complex installations possible***

*Anamet expansion joints are designed for use with piping systems for the transport of fluids or gases. They can be manufactured and supplied for axial, angular and/or lateral movement executions in line with specifications. Because of their special and often unique design characteristics, the final solution has to be carefully engineered and developed*

***Rubber & Teflon hoses: Lightweight and flexible solutions for the food and chemical industries***

*Anamet's range of rubber and Teflon hoses are designed for use in the food, pharmaceutical and light chemical industries. They are available in a wide range of executions, enabling customers to meet the specific requirements of their particular application. We have a specialism in rubber hose assemblies for marine applications.*



Specialize in “HMB X” Bacteria Testing Device



Supply Services

**Biotech Intl, Inc**

### HMB X Theory of operation...

*There are essentially two methods, both indirect, for gaining information about aerobic microbial populations. These are: **Growth** and **Biochemical**.*

*The traditional manner (**Growth method**) by which the contamination level of microbes is determined, is to take a bit of the contaminated sample, dilute it appropriately, streak it onto a nutrient plate or nutrient paddle, incubate for **24-72** hours, manually count the colonies that grow, then calculate (from the known dilution ratio) the density of viable organisms in the original sample. This was the method of Pasteur and it has changed little; the principal modernizations coming in the nutrient selections available. The assumption made when using growth methods is that each viable organism will multiply sufficiently during the incubation to produce one (and only one) **VISIBLE COLONY**--- visible to the naked eye. The result of this examination is expressed in **COLONY FORMING UNITS PER MILLILITER (CFU/ML)**. Growth methods are called **COUNTS**. They are not, in fact, bacterial counts at all, but **estimates of the density** of viable organisms in the sample. The published precision for this method is around  $\pm 30$  percent.*



*Biochemical tests (HMB) measure the level of some marker molecule that is produced by microorganisms while metabolizing or during reproductive activity. They are, therefore, measures of **ACTIVITY**---that is, biochemical tests reveal “what the organisms are doing in the system.” The HMB measures the level of an enzyme that reacts with the reagents used in the test. Enzymatic action is very fast and thusly the results are available immediately. Activity and counts are not the same measurement. Both are useful, often complementary, but, in any given system there may or may not exist a useful correlation between the two. Because enzymes work very fast, results are available immediately. The precision of biochemical tests is around  $\pm 3$  %.*



Specialize in “HMB X” Bacteria Testing Device

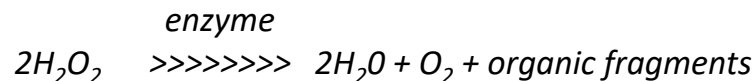


Supply Services

## Biotech Intl, Inc

### HMB X Theory of operation...

The HMB test is based on the fact that aerobic organisms produce a category of enzymes called Peroxidases while metabolizing. It is the total amount of these Peroxidases that is measured by the HMB test. Peroxidases are produced in proportion to the rate of metabolic activity. Thusly, the quantity of enzyme present in a sample is a measure of the **current total biological activity**. In the HMB procedure, the reagent reacts with the enzyme to produce Oxygen. The Oxygen produced is measured as (an increase in) the partial pressure of Oxygen in the head space of a closed test tube (from the test kit) and converted to BioMass Range (BMR). The following simple chemical equation obtains:



It is the produced  $\text{O}_2$  that is measured and converted by the HMB to biological activity.



In metalworking fluids (emulsions or synthetics), for example, the HMB is used as a screening test to monitor sumps for changes in the amount of biological activity. The user usually starts by determining what the HMB reads when the system is “normal.” Then, by taking readings on a regular basis, the results show that the system is still in control, or when the onset of biological growth is occurring. By testing the sumps regularly (at some frequency determined by the user) and recording the BMR results, change from some predetermined level may be detected well before any damage from increased activity can occur.

Action thresholds and modes of action are, of course, dictated by the type of system and level of increase.

**An important note on correlation:** It was noted above that useful correlations between activities and counts may or may not exist for a given system. The HMB measures biological activity, while growth methods estimate the density of viable organisms, whether or not they are active. There are so many things in industrial solutions that affect both these tests that a correlation algorithm, if one exists, will surely be system dependent.





Specialize in “HMB X” Bacteria Testing Device



Supply Services

## Biotech Intl, Inc

### HMB X Theory of operation...

*This means that a correlation curve must be developed for the product, or class of products, of interest. Once this curve has been developed, it can be used as a guide to the number of organisms in the system for which it was developed.*



*A broadly generalized curve has been developed at the factory to convert between BMR and CFU/ML. This algorithm has been programmed into the HMB IV and the HMB X. The range of applicability for this generalized curve should be carefully scrutinized by the user. A discussion with BioTech is recommended. When precise correlation for a given system is desired, a specific correlation algorithm must be developed on the user's system.*

*Developing a correlation algorithm is, however, usually not the best way to use the HMB. Nearly all customers simply record the BMR readings and note when significant changes occur.*

**A note on guidelines for metalworking fluids:** *Various models of the HMB devices have been used to determine the contamination in aqueous systems since 1986. They are in use in some 20 countries. All HMB devices are calibrated to the same standards and give the same results on any given sample. Over the years, BioTech has accumulated a significant database on various types of coolants used in many applications. For guidance in “what you might expect” from your system it is best to contact BioTech. During a short discussion much valuable information can be imparted rather quickly.*

### **Other applications:**

*The HMB can be used in many venues (metalworking, cooling towers, paper mills, waste treatment, fuels, soils, foods, bioterror, etc;). For information about any of these applications, or for other applications not noted above, contact BioTech for guidance or for written procedures.*



Specialize in "HMB X" Bacteria Testing Device



Supply Services

## Biotech Intl, Inc

### HMB X Specifications...

**15 minute biological activity test for metalworking fluids, biofilm in cooling towers, can plants, Aluminum rolling fluids, waste treatment (activated sludge) and other...**

1. Digital alpha-numeric Display:

| <u>MODE</u> | <u>DISPLAYS</u>      |
|-------------|----------------------|
| BMR*        | 0.00 to 19.99 BMR    |
| CFU/ml      | 0.0E0 to 9.9E9       |
| Timer       | 15:00 to 0:00 (MMSS) |

2. Speaker emits a beep/chirp each time unit is turned on or off

Physical:

|        |  |
|--------|--|
| Case   | Molded ABS Plastic                                     |
| Weight | 16 oz.   |
| Size   | 7.5" x 5" x 1"   |
| Probe  | extended coil cord<br>Screw on Probe Protective Sleeve |
| Input  | Custom 3 Button Keypad                                 |
| Output | Direct Drive LCD display                               |

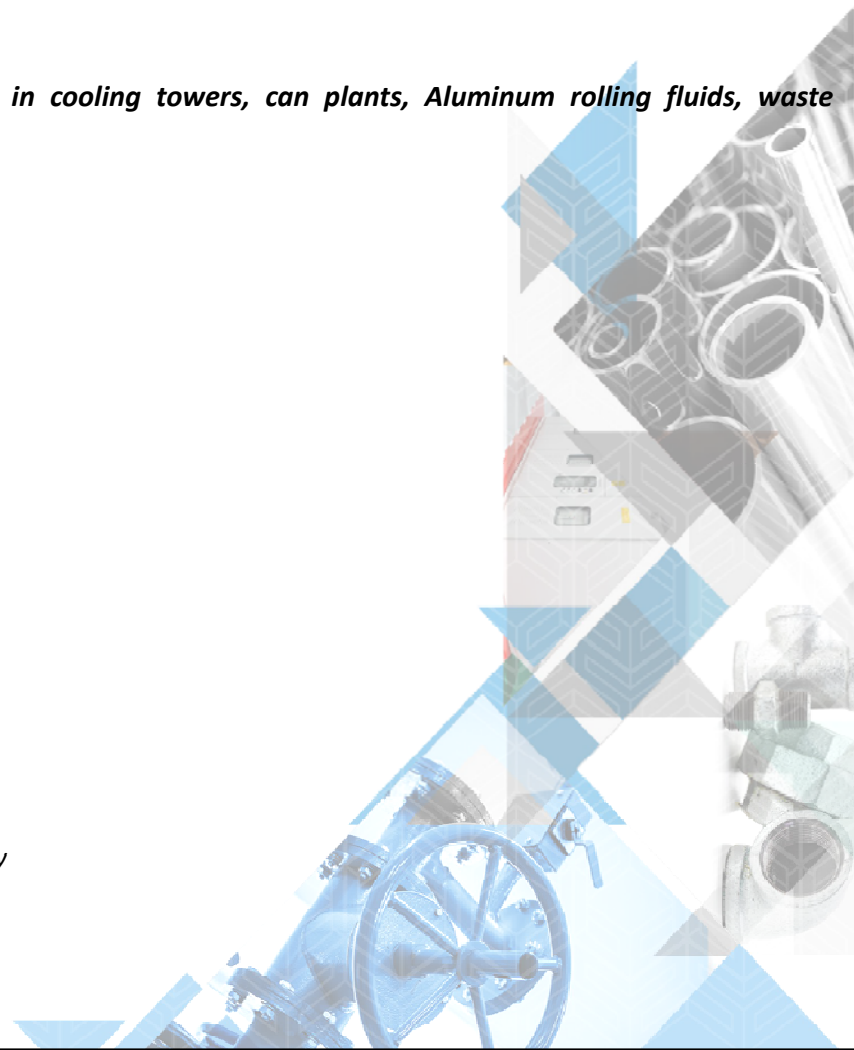
Functional:

|  |  |
|--|--|
| <i>Microprocessor controlled / two reporting modes</i> |  |
| <i>Power</i>   | <i>One standard 9V Battery</i>                           |
| <i>Calibration</i>                                     | <i>Self calibrated on each activation</i>                |
|  | <i>Biannual cal, certification and repair at factory</i> |

Features:

- 15 Minute Timer
- CFU/ml or BMR reporting modes
- Automatic Shutoff after 3 minutes

\*BioMassRange





*Specialize in "Industrial Gloves" including...*

Impact Gloves

Oil Field

Single Palm

Double Palm

Flame Retardant

Jersey

Chore

Hot Mill

Coated Gloves

Terry Cloth

Machine Knit

Palm Dip

Leather

Cut-Resistant

Disposables

Sleeves

Aprons





***Provide Packaging for Excellence...***



- Bags ▶
- Beakers ▶
- Bottles & Jars ▶
- Caps/Closures/Lids ▶
- Chemical Solutions ▶
- Filtration Products ▶
- Flasks ▶
- Gloves ▶
- Graduated Cylinders ▶
- Jugs ▶
- Lab Supplies ▶
- Metal Containers ▶
- Pails & Carboys ▶
- Paper/Fiber Containers ▶

- Qorpak Store ▶
- Scales & Balances ▶
- Stir Bars ▶
- Syringe Dispensers ▶
- Vials & Tubes ▶
- Water & Wastewater Analysis Products ▶
- Weigh Dishes & Papers ▶

*Jubail Sources, can offer all these variety of Qorpak products (from world wide) at best possible price and lead time...*

### ***Lab Glassware, Supplies, Containers & Packaging***

*Dedicated to consistently providing our customers in every industry with outstanding service and competitive pricing on our top-quality packaging and laboratory supplies.*



**Flasks**



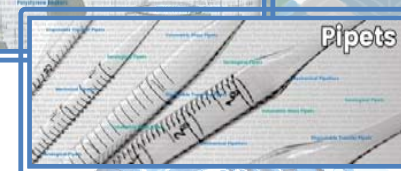
**Plastic Bottles & Jars**



**Filtration Products**



**Beakers**



**Pipets**



**Renowned manufacturer for ...**

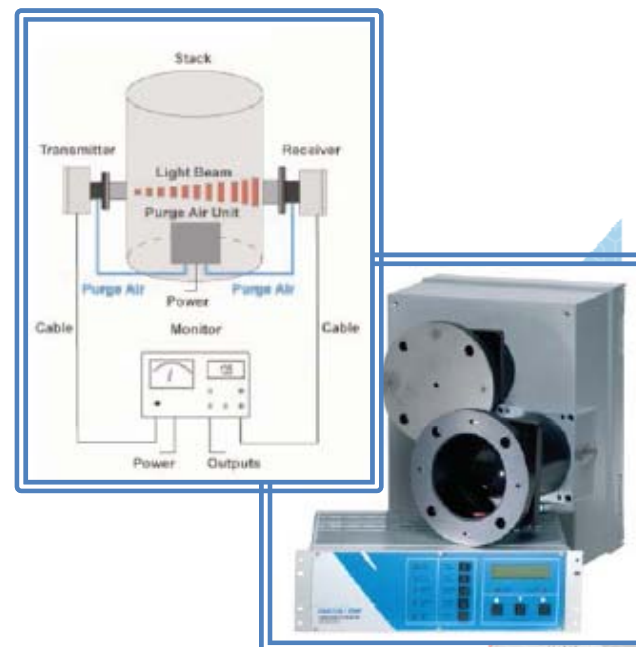
- ⇒ Multi Gas Analyzers,
- ⇒ CEMS (Continues Emission Monitoring Solutions)
- ⇒ Process Analyzers and Monitoring Instruments
- ⇒ Dust and Opacity Monitor
- ⇒ Controls and Instrumentation

**IS 2500 Multi Gas Analyzer**

For Process & Pollution Monitoring



...CO  
CO<sub>2</sub>  
NO<sub>x</sub>  
SO<sub>2</sub>  
CH<sub>4</sub>  
C<sub>6</sub>H<sub>6</sub>  
CH<sub>3</sub>OH  
H<sub>2</sub>O  
HCL  
NH<sub>3</sub>  
Plus many more gases and vapors, all measured with the world-beating IS 2500 MGA

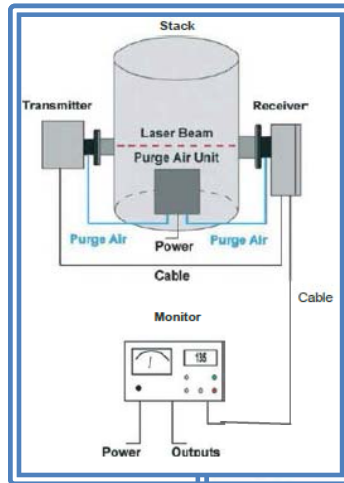


*CEMTREX products are currently used within SABIC affiliates and offer new technologies in the field of process analyzers and are more economic and reliable than commonly used products.*

*Jubail Sources, have a special tie-up with Centrex for supplying these sophisticated instruments at better prices and lead time...*

### **LM 2189 – Laser Dust Monitor:**

*Accuracy Chopped Laser Light Source – Excellent choice for low dust applications.*



#### **Features:**

- ⇒ Manual Zero and Calibration checks
- ⇒ Long monitoring paths possible
- ⇒ Minimum optics needed
- ⇒ Less maintenance
- ⇒ Wide operation range (1mg/m<sup>3</sup>...2g/m<sup>3</sup>)
- ⇒ Analog and digital display

#### **Application:**

- ⇒ Power plants
- ⇒ Cement factories
- ⇒ Iron and Steel factories
- ⇒ Tunnels

#### **Principle of operation:**

The measurement system is based on the single pass method. The laser beam crosses the measuring section once only and the receiver unit measures and evaluates the laser beam's weakening caused by the dust content. The optical value is converted to a mass value with the help of calibration constant.

The dust monitor features two operational modes: normal and compensated. Normal operation is intended to use for higher concentration (from 10 mg/m<sup>3</sup> upwards). The compensated mode is meant to be used for very low dust concentration (<10 mg/m<sup>3</sup>), where the gradual dirt contamination of the detector surfaces to be corrected.

#### **Advantages of using a laser light source:**

- ⇒ No optics in the transmitter
- ⇒ Calibration: once a year
- ⇒ The alignment of the beam



# SITEC

High-Pressure Technology

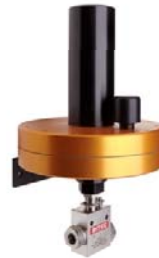


Supply Services

***State-of-the-art German technology for High Pressure and Ultra High Pressure generation systems...***

*Includes...*

- ⇒ Valves
- ⇒ Fittings
- ⇒ Tubing and Hoses
- ⇒ Pressure Vessels
- ⇒ Pressure Generators
- ⇒ HP Systems
- ⇒ Tools and accessories





Inncon industries



Suman industries



Supply Services

*Well known Indian manufacturers for industrial instruments (Thermocouple, Temperature sensors, RTD, Pressure Gauge, Rota meter, level switch, Industrial heaters, etc)*





*And*





“Jubail Sources” with “Terra Technology” together offers following major products and services in Kingdom (Saudia Arabia)...

- ⇒ **Industrial cleaning** services using high pressure and ultra high pressure hydro jetting technology.
- ⇒ **Design, engineering and supply** various types of industrial **ultra high pressure** and **high-pressure** pumps and pump system skids.
- ⇒ All types of **pumps repair**
- ⇒ **Fluid transfer** equipment and services.
- ⇒ **Hydraulic power packs** and flushing units and corresponding services.
- ⇒ **Chemical injection** and dosing packages with corresponding services.
- ⇒ **Water and waste water treatment** plants and filtration units.

The high pressure and ultra high pressure pumps are manufactured using German technology using pumps from KAMAT Pumpen GmbH and Speck Triplex pumps.

Manufacturing and assembling of our equipment are according to API 610, API 674, API 675 and API 676 standards.





To Whom It May Concern

Herewith **Terra Technology** entitles

**Jubail Sources Est.**

PO BOX 11207  
Jubail City 31961, Saudi Arabia

as official agent for

**Ultra High Pressure & High Pressure Technology and Related Accessories and  
Industrial Cleaning Services**

in

the territory of:

**Kingdom Of Saudi Arabia**

Bogdan Fatu

Managing Director



Date : 23 June 2016

### High Pressure & Ultra High Pressure Pumps & Accessories

***We provide complete packages including...***

- ⇒ *Engineering Design*
- ⇒ *Manufacturing of skids*
- ⇒ *Testing and Commissioning*
- ⇒ *Custom made to end-user requirements*
- ⇒ *Min 100 -500 bar pressure*
- ⇒ *Electrical or Diesel driven*
- ⇒ *Driven by belt or direct coupling equipped with various accessories such as high pressure lance , nozzle, hoses*
- ⇒ *Complete manual and warranty*



### WATERJETTING (HYDROJETTING) TECHNOLOGY

#### High Pressure (HP) and Ultra High Pressure Pump (UHP) Units

Terra technology products are developed and manufactured based on our specific needs of our customers. Our UHP and HP are manufactured using German technology using pumps from Kamat Pumpen GmbH and Speck Triplex pumps. The High Pressure and Ultra High Pressure Pump Units, are manufactured according to API 674, catering to the following specific requirements:

- 🔥 **Surface preparation on ship hulls or tanks (removing rust and paint)**
- 🔥 **Heat exchanger tube cleaning**
- 🔥 **Tank cleaning application**
- 🔥 **De-scaling of steel**
- 🔥 **Concrete removal Demarking of roads**
- 🔥 **Water injection as per API 674**

#### Advantages of using UHP & HP units

- 🔥 **Provide best engineering and technical design as per customer requirements**
- 🔥 **Safety and working Manual and after services**
- 🔥 **Units are easy to operate and they are provided with a safety working manual**
- 🔥 **Availability of Spare parts in a timely manner**
- 🔥 **Pumps are suitable for installation in hazardous Zone 1 and Zone 2 areas .**
- 🔥 **Compliance with electrical & mechanical international standards like ATEX, API 674**





## Pump Systems

### Centrifugal and Submersible pumps – API 610 Reciprocating pumps skids

*Our range of centrifugal pumps serves different sectors such as construction sector, marine field and Petroleum industry. They are used for dewatering in the construction and marine field, for product transfer in the Oil & Gas industry, to name a few.*

*Our pump units are engineered and designed to customer specifications. For example, we assemble the pumps in accordance with the API 610 standard for Oil & Gas Industry.*

*Customized pumping solution using centrifugal pumps are provided for the following applications...*

#### Centrifugal and Submersible Pumps

The centrifugal and submersible pumps has different applications starting from dewatering in construction industry, in civil and residential areas, to the marine industry and Oil & Gas industry of transferring the water and oil.

#### Our range of Centrifugal pumps

- Horizontal Pumps
- Vertical Pumps
- Multistage Pumps
- Self-Priming Pumps
- Submersible Deep Well Pumps
- Twin Impeller centrifugal Pumps
- Drainage and Dirt Water Pumps

#### Applications for centrifugal pumps

- Water transfer
- Irrigation
- Crude oil transfer
- Firefighting pumps, etc

**Centrifugal & Submersible Pumps** C-4e  
Pumps for Water, Sewage and many more...

Our Centrifugal Pump Units are from renowned European Manufacturers suitable for the customer's needs and climate conditions encountered in the Middle East.

Our Pump Units can be supplied with Diesel Engine or Electrical Motor, on a skid.

Our Submersible Electric Pumps are manufactured in Europe and are designed for worst conditions being extremely robust and easy to operate and maintain.



**Typical applications for our pumps:**

- Dewatering
- Water Transfer
- Sewage pumps (Water treatment)
- Fire Fighting Pumps
- Deep well pumps

Or Centrifugal and Submersible Pumps can be with closed and open impeller, self or non self priming, multistage or single stage pumps.

The variety is very large so don't hesitate to contact us to serve your needs.

Tel: +971 6 557 1641  
Fax: +971 6 557 1642  
E-Mail: [info@terra-t.com](mailto:info@terra-t.com)  
[terra-t.com](http://terra-t.com)

**Centrifugal Pumps – API 610 series** C-3e  
Pumps for Water, Sewage and Oil Transfer (API 610 latest edition)

Our Centrifugal Pump Units are from renowned European and American Manufacturers suitable for the customer's needs and climate conditions encountered in the Middle East.

Our Pump Units can be supplied with Diesel Engine or Electrical Motor, on a skid.

**Design:**  
Horizontal single stage end suction volute casing pump according standard API 610



**Typical applications for our pumps:**

- Dewatering
- Water Transfer
- Sewage pumps (Water treatment)
- Fire Fighting Pumps
- Deep well pumps

**API 610 pumps:**

- Oil Transfer
- Fuel injection pumps
- Gas oilfield pumps

**Operating data:**

Q up 800 m<sup>3</sup>/h  
H up 240 m  
t -70 °C to +300 °C  
p up to 35 bar



TERRA Technology FZE  
SAIF Zone  
PO Box: 8818, Sharjah, U.A.E.

Tel: +971 6 557 1641  
Fax: +971 6 557 1642  
E-Mail: [info@terra-t.com](mailto:info@terra-t.com)  
[www.terra-t.com](http://www.terra-t.com)

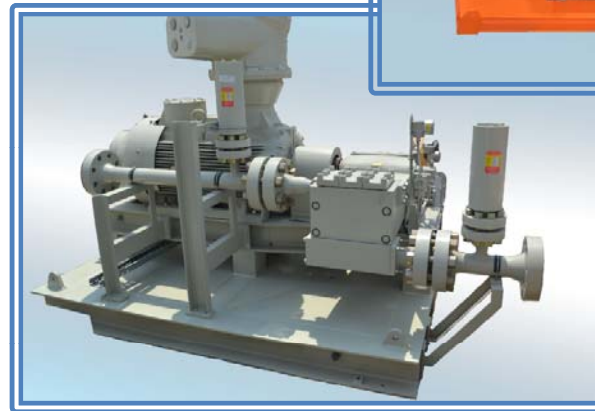
### API 675 – Chemical injection packages (skids)

***We provide complete package including...***

- ⇒ *Design Engineering drawings in 2D & 3D*
- ⇒ *Structural analysis – Static and Vibration*
- ⇒ *Manufacturing of skids*
- ⇒ *Testing and Commissioning*
- ⇒ *Complete Documentation*

***Documentation : Certificates & Reports includes...***

- ⇒ *MTC of all items*
- ⇒ *String test*
- ⇒ *FAT reports*
- ⇒ *NDT reports*
- ⇒ *Welding reports*
- ⇒ *Manufacturing data record book*
- ⇒ *Piping hydro-test certificates*
- ⇒ *Record of factory acceptance and run test*
- ⇒ *Third party inspection*



# Hydraulic power packs and Flushing units

## POWER TRANSFER & FLUSHING

### Hydraulic Power Packs and Hydraulic Flushing Units

According to the customer specification we are designing, assembling and supplying Hydraulic Power Packs for all industrial applications.

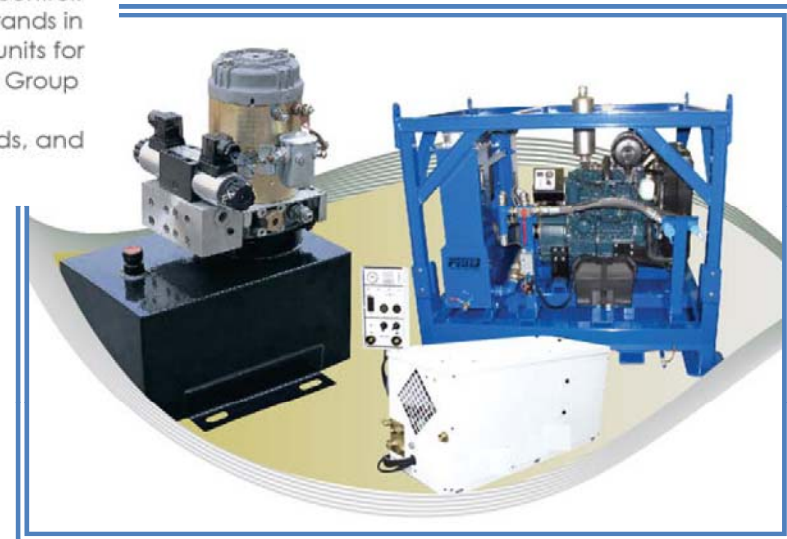
Typical applications include plant trailers, scissor lifts, tipping trucks, access control and security equipment as well as a variety of industrial machinery.

A modular hydraulic power unit forms the basis for a wide range of mobile and industrial systems.

We are designing and assembling also Hydraulic Flushing Units.

We specialize in manufacturing a wide range of hydraulic power units for various applications. We can offer both diesel power units as well as electrical power units, which will meet the industries highest standards through every step of design, manufacture and quality control. We take special attention in selecting components from the best of recognized brands in the world to manufacture the power units. We also construct electrical power units for hazardous locations using electric components that meet NFPA Division 1, Class 1, Group D explosion proof requirements.

Custom design and configuration is available to meet the client's specific needs, and we'll be glad to make recommendations on the client's requirements





## Pump Systems

### Filtration system and units

Terra Technology designs high flow filtration units for oil fields, marine industry or other industrial purposes. The filtration units can be built to customer's specification.

#### Applications for our high quality filtration units are:

- ⇒ Filtration of oil/gasoline/diesel
- ⇒ Water filtration
- ⇒ Chemical filtration
- ⇒ Flushing of pipes (Hydraulic flushing unit)

### Water and Waster water treatment plants

Terra Technology is liaising with reputed European companies to provide the best water and waste-water treatment plants. The Sewage Treatment Plants (STP) are for municipalities, villages, small remote areas like farms or Oil & Gas Rigs.

Besides this, we can supply STP plants for marine purposes as well. The products are available in different sizes and dimensions.

**Waste Water Treatment Plants – Marine**

**Sewage Cleaning Units for Marine Industry**  
Hydraulic capacity: up to 15,000 liter/ 8 hours

Our TERRA - Biocon systems are in compliance with the new IMO resolutions. One filter unit per equipment with two filter housings will accomplish the task. Once one filter is clogged then the system turns to the other one for uninterrupted operation. The used bag after one day is dry enough to either reject it to garbage or just empty it and reuse it. No odor, or wet sludge, just inert powder to be thrown away at ship's waste. An economic solution which is simple and comprehensive.

It allows very reliable effluent characteristics while it gives you also the flexibility to by-pass the filters in case discharge conditions permit it. The filter unit can be installed at the discharge line of the Biocon treatment plant at any place convenient regarding space and easy bag removal.

**SYSTEM Advantages:**

- BIOCON systems are functioning completely automatically with PLC, without any person's supervision; any malfunction is indicated and signaled accordingly. (Treatment and holding tank overflow, circuit breaker fault)
- They are designed for continuous operation under minimal wear as they are constructed totally from SS 316 (treatment tank, piping).
- Reduced maintenance requirements and costs.
- They are equipped with specially designed macerator-homogenizer, fully manufactured from SS 316. (The whole body and moving impellers)
- Driven by a high degree of automated sequence PLC, can be optionally equipped with touch screen for operation monitoring and controlling from the ships control rooms.
- Video terminal screen on the panel permits the visualization and adjustment of important parameters according to every ships particular arrangement.
- All parts come from the best in their field.
- World renowned suppliers
- Their weight and dimensions are small enough to be transferred through openings and installed in restricted spaces of new and already existed ships. For this purpose they can be easily divided for mounting purpose.

Tel: +971 6 557 1641  
Fax: +971 6 557 1642  
E-Mail: info@terra-t.com

| MODEL         | HYDRAULIC CAPACITY<br>liters/8 hours | ORGANIC LOAD<br>Kg BOD5/<br>8hours | DIMENSIONS<br>(mm)<br>L x W x H |
|---------------|--------------------------------------|------------------------------------|---------------------------------|
| MINI-BIOTERRA | 847                                  | 0,44                               | 660x550x660                     |
| BIOTERRA I    | 2616                                 | 1,35                               | 940x425x1030                    |
| BIOTERRA II   | 8073                                 | 4,15                               | 1360x580x1160                   |
| BIOTERRA III  | 14618                                | 7,52                               | 1610x700x1300                   |



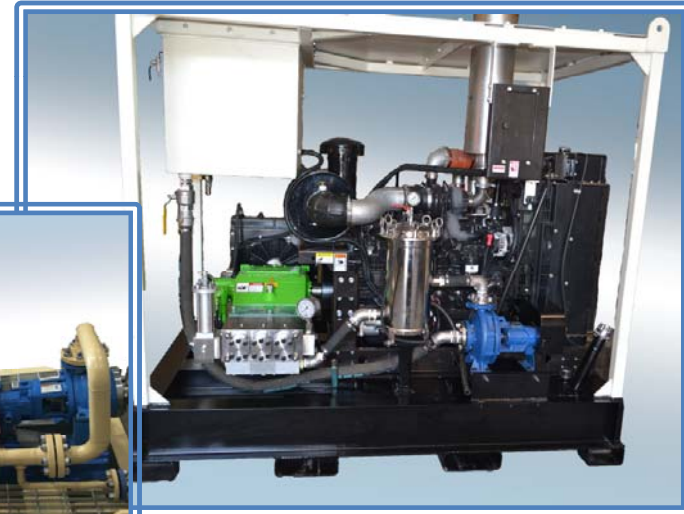
### API 674 – Pumps reciprocating - plunger



*KAMAT Pumpen GmbH, the German manufacturer, is the market leader in manufacturing of triplex pumps, for water-jetting applications and for the process industry. The pump can be manufactured and delivered according to the API 674 standard for the Oil & Gas Industry. These pumps are suitable for installation in hazardous Zone 1 and Zone 2 areas.*

*We develop customized pumping systems for the specific needs of our clients. We can supply High Pressure and Ultra High Pressure Pump Units, manufactured to API 674, catering to the following specific requirements:*

- ⇒ *Surface preparation on ship hulls or tanks (removing rust and paint)*
- ⇒ *Heat exchanger tube cleaning*
- ⇒ *Tank cleaning application*
- ⇒ *De-scaling of steel*
- ⇒ *Concrete removal Demarking of roads*
- ⇒ *Water injection as per API 674*



## Advantages of...

### API 676 – Gear pumps (for high viscose & difficult to pump media)

*With our range of high performance special pumps, we are able to serve all your needs and respond to any challenge. Our Gear Pumps are robust, self-priming, rotary displacement pumps with dry running capabilities. They are manufactured to handle:*

- ⇒ Pressures: up to 120 bar
- ⇒ Suction heights: up to 8 meters
- ⇒ Performance: 0.05 to 25,000 lpm
- ⇒ Viscosity: 0.6 to 26,000 mPas
- ⇒ Temperatures: -60° C to 320° C

#### **Features:**

- ⇒ Pumps out all possible materials
- ⇒ Long life through high-end bearings and special coatings
- ⇒ Low energy consumption and high efficiency up to  $\eta=92\%$  through: - lowest manufacturing tolerance; - special design
- ⇒ With interchangeable thrust segments (axial bearings)
- ⇒ Dry running capability
- ⇒ Nearly pulsation free at most different viscosities
- ⇒ Higher displacement/revolution: - lower rotation speed; - gentle pumping
- ⇒ Adapted revolution speed

### API 676 – Rotary piston pumps

*Our large range of high performance special Rotary Piston Pumps are able to serve all your needs for high density and high viscosity products. The Rotary Piston Pumps can pump mediums with solid particles up to 90% such as:*

*shear sensitive materials (like fruits), polymerized or coagulated mediums, or mediums with crystals or fibres.*

#### **Our rotary piston pumps are specially designed for:**

- ⇒ Complex and difficult challenges
- ⇒ Dosing (repeat accuracy > 99%)
- ⇒ Pressure up to 64 bar
- ⇒ Suction heights up to 8 m
- ⇒ Performance from 0,01 to 36.000 l/min.
- ⇒ Viscosity from 0,3 to 1,4 million mPas
- ⇒ Temperature from -60 C to 450 C
- ⇒ Explosive and toxic substance

#### **Features:**

- ⇒ Pumps out all possible materials
- ⇒ Long life through high-end bearings and special coatings
- ⇒ Low energy consumption and high efficiency up to  $\eta=92\%$  through: - lowest manufacturing tolerance; - special design



## Advantages of...

### API 676 – Gear pumps (*for high viscose & difficult to pump media*)

**Features:**

- ⇒ Pumps in both direction of rotation
- ⇒ Reduced noise level
- ⇒ No valves

*These pumps are custom-made. With the flexibility of this tradition-rich German company, we can adapt to nearly every specification.*

### API 676 – Rotary piston pumps

**Features:**

- ⇒ With interchangeable thrust segments (axial bearings)
- ⇒ Dry running capability
- ⇒ Nearly pulsation free (multi-lobes piston pumps)
- ⇒ Higher displacement/revolution: - lower rotation speed; - gentle pumping
- ⇒ Non destructive pumping (cutting under 5%)
- ⇒ Adapted revolution speed
- ⇒ Pumps in both direction of rotation
- ⇒ Reduced noise level
- ⇒ No valves

## Industrial Cleaning Services

*Our Core service division provides state of the art services for the oil and gas and maritime industry.*

*Our core services include providing complete services of grit and hydro blasting as well painting of steel structures .*

*Our areas of operations extend onshore and offshore sites including internal and external surface preparation.*



*We are an ISO 9001:2008, ISO 14001:2004 and BS OHSAS 18001:2007 TUV certified company. By complying with international standards and incorporating quality management systems, our dedicated workforce is able to maintain a high level of safety and productivity.*

### Industrial cleaning services...

*Terra Pumps Rental offers complete services in industrial clearing with the latest technology. Our efficiency is increased by using several lancing systems and a semi automatic pipe cleaning machine for tubes up to 1500 mm. Our cleaning system is very efficient using pressures up to 16 000 PSI (1100 bar) by cleaning straight pipes from deposits of cement, bauxite, plastics, coke and other residues.*

**Cleaning of:** Heat exchangers; Pipes cleaning; Pressure vessel; Boilers; Tanks de-slugging and cleaning

### Hydro blasting (Hydro jetting) services

*Our team is providing hydro jetting services with the quality standards of WJ2, WJ3 and spot blasting. Terra Pumps Rental has a capacity over 15 hydro jetting lines with pressure up to 40,000 PSI (3000 Bar) and over 40 qualified employees.*

***We provide quality services for hydro blasting of:***

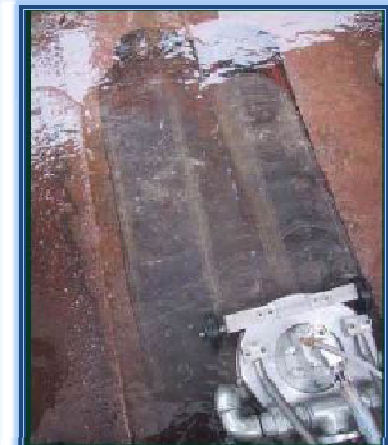
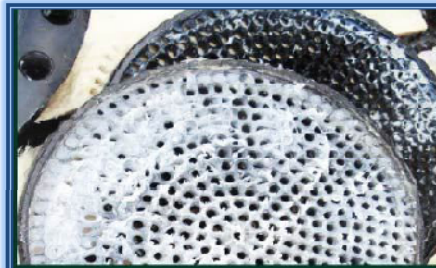
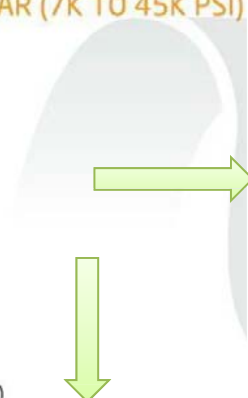
- ⇒ New ship structures
- ⇒ Ships hull/tanks
- ⇒ Demarking of roads
- ⇒ Concrete removal

## Industrial Cleaning Services

### Hydro blasting (Hydro jetting) and Industrial cleaning services...

WATERJETTING APPLICATIONS  
CAN BE APPROACHED IN THE  
FOLLOWING AREAS WITH PRESSURES  
FROM 500 BAR TO 3200 BAR (7K TO 45K PSI)

Oil & Gas Industry  
Marine Industry  
Petrochemical Industry  
Chemical Industry  
Steel Industry  
Power Plants  
Paper and Cellulose Industry  
Construction Industry  
Mining Industry  
Food Industry (and many more)



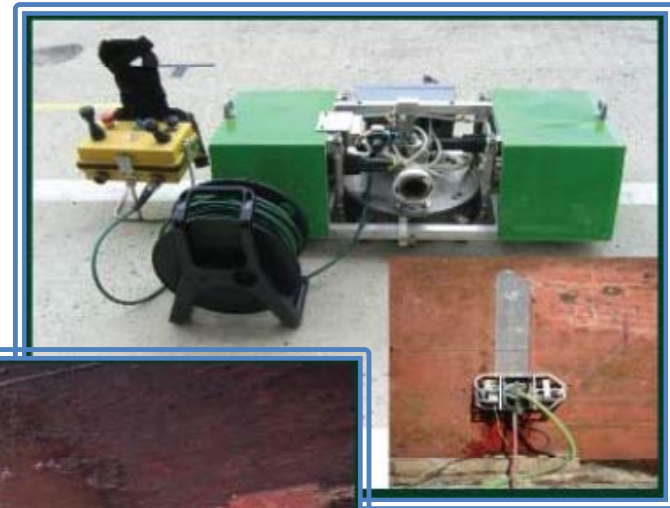


## Industrial Cleaning Services

Hydro blasting (Hydro jetting) services...



*Surface preparation*



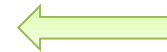
## Industrial Cleaning Services

Hydro blasting (Hydro jetting) services...



## Industrial Cleaning Services

### Hydro blasting (Hydro jetting) services...



*Concrete renovation/ removal*



*Demarking of roads*



## Industrial Cleaning Services

### High pressure wash

*Terra Pumps Rental offers complete industrial solution for high pressure wash of structural tanks, naval cargo halls, steel structures, cargo hulls, pipes, pontoons and various domestic applications.*

*Our team is offering German technology equipment with a feel of 10 washing lines.*

### Painting services

*Our company is offering services of spray painting by qualified painters. We have experience in caring our painting of ships, barges, pontoons, various steel structures, tanks, etc.*



### Equipment rental

*Our equipment is made with German engineering and Technology. We are offer state of the art equipment with high reliability and economy.*

#### Hydro jetting:

- ⇒ 40,000 PSI (2750 bar) @ 25 LPM
- ⇒ UHP Pump – KAMAT, Germany
- ⇒ Engine driven - 150 KW
- ⇒ Diesel Tank 400 l
- ⇒ Water Tank 250l
- ⇒ Control Panel
- ⇒ Suitable for 2 guns operations

- ⇒ 15,000 PSI (1000 bar) @ 75 LPM
- ⇒ UHP Pump – KAMAT, Germany
- ⇒ Engine driven - 150 KW
- ⇒ Diesel Tank 400 l
- ⇒ Water Tank 250l
- ⇒ Control Panel

#### HP Machines – 10 lines

- ⇒ 300 bar
- ⇒ HP Pump - SPECK Germany
- ⇒ Engine - Perkins
- ⇒ Diesel Tank
- ⇒ Water Tank
- ⇒ Control Panel



## Plant operation and maintenance services...



*Jubail Sources possess the essential expertise and qualified resources to cater plant operation and maintenance services including preventive maintenance, overhauling and shutdown works.*

*This can be approached on resources supply basis and/ or LSTK basis.*

*With strong project management and planning skills “Jubail Sources” can help operations companies reduce equipment downtime for T&I activities.*

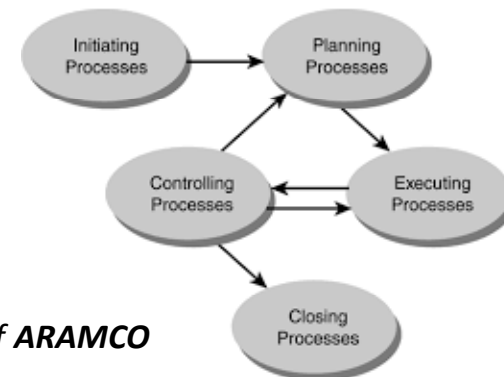
*With strong built-in local infrastructure “Jubail Sources” can handle multiple work loads at a time and to ultimate customers satisfaction.*

*Agility to adapt and accommodate changing demands and requirements from customers is one of “Jubail Sources” strengths.*

*“Jubail Sources” adhere to PMI (Project Management Institute) code of ethics and procedures to manage and execute projects.*

*With dedicated and certified project management team, project management/ scheduling tool being used to manage and execute projects is Primavera P6 and MS Project.*

*“Jubail Sources” offers best of industrial coating and painting services by means of **ARAMCO** approved paint materials and skilled trades men.*



## Certification



**D&B D-U-N-S number:  
557848982**

*Being an ISO certified organization (ISO 9001: 2008), Jubail Sources devotes great efforts and resources to maintain the excellence that is deemed essential by the best industrial standards.*



### *Certificate of Registration*

This is to certify that the  
Quality Management System  
of

**Jubail Sources Est. for General  
Contracting**

P O Box 11207, Al Jubail 35514, Kingdom of Saudi Arabia

Has been independently assessed and is  
compliant with the requirements of:

**ISO 9001: 2008**

For the following scope of activities:

Provision of Services Project related Contracting (Civil, Electrical,  
Mechanical & Shutdown Services), Trading of Industrial material,  
Rental Heavy equipment & Technical Manpower Services for  
Petrochemical Industries.

Certificate Number: 169688A

|  |                                 |
|--|---------------------------------|
| Date of initial registration   | 25 <sup>th</sup> June 2016      |
| Date of this certificate   | 25 <sup>th</sup> June 2016      |
| Certificate expiry (subject to the company<br>maintaining its system to the required standard) | 14 <sup>th</sup> September 2018 |

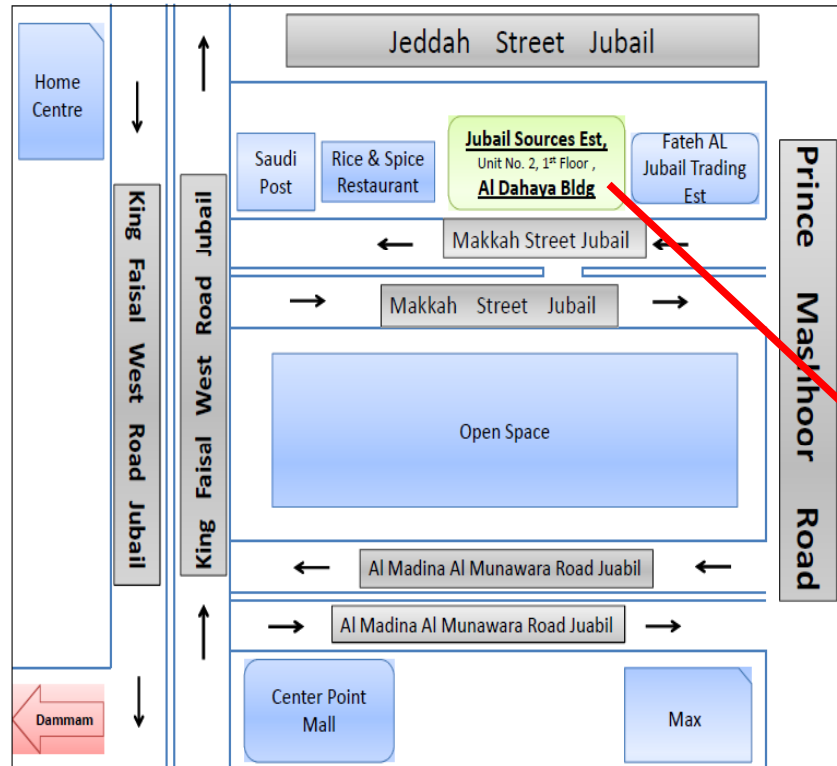
  
Authorised Signatory



This certificate is the property of ACM Limited and shall be returned immediately on request.  
ACM Limited, 4 Navigation Court, Harris Business Park, Hanbury Road, Stoke Prior, Bromsgrove, B60 4BP  
+44 (0)1527 877462 info@acmcert.com



## Location map and contact



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