

GROUND ENGINEERING DEDIGN AND EXECUTION
Image: Comparison of the compariso







COMPANY INFORMATION STRONG PLANT COMPANY PROFILE

COMPANY HISTORY

The company was established in Sharjah in November 1983, as an independent division of STRONG PLANT GROUP OF COMPANIES, with the aim to provide Dewatering System and Equipment on hire to main contractors.

In September 1989, the dewatering Division centralized its U.A.E. operations by moving its main offices to Dubai. Revamped in 2001 under new management, Strong Plant is today among the most sought after Dewatering companies in the U.A.E. for most challenging projects, especially preferred for their special reliability in managing the new challenges by Semi-Governmental Private Communities for the rising and surfacing ground water table problems.

Under the group companies, they carry our Design, Planning, Execution of Dewatering, Piling & Shoring Projects including Sheet Piling, Infrastructure Facilities Management Projects apart from their rental and Trading activities in the field of Ground Engineering.

The Group's trading division is among the leading suppliers and stockist of dewatering & piling equipment, including accessories and tools and are widely supplying to most major leading infrastructure companies.

ABOUT US:

Ably guided by our Chairman with over 55years of Geo-Technical Experience, our Directors with our 25years experience and our hugely experienced Management and Operations Team, we have requisite experience to execute the most technically complex projects that have been a part of the unprecedented U.A.E. growth and world class infrastructure and architecture, all built in record time.

SP Group boasts of our in-house equipment and inventory to support our projects, supported by hugely experienced team, manpower and advanced machineries to undertake jobs as well as detailed engineering for the projects. Our motto and focus is on complete satisfaction to the client in regards to quality work, economy and well in time to meet to schedule of the client for his further work.

LOCATION

The Company facilities are Located in Al Quoz, Industrial Area 4 Al Quoz, Dubai and Mussafah in Abu Dhabi. The facilities in total include: Showroom, Warehouse, and Well Equipped Workshop for service, repair and fabrication, attached office, Large Open Yard, nearby Labour Camp/s. The Company has one of the best-equipped, self-contained and exhaustive workshop facilities in the U.A.E. ably supported by a strong PMV team and transport fleet.

STAFF

The Company currently employs over 125 qualified field personnel (excluding office and management staff) with over 20 years' experience in the design, installation and maintenance of dewatering systems and above listed activities.

EQUIPMENT

The dewatering equipment comprise of wide range of dewatering pumps, viz., High Pressure Centrifugal, Reciprocating, Electric Submersible; that cater for the most site conditions encountered in the U.A.E.. In addition, support equipment like drill rigs, generator sets, crawler cranes, vibratory hammers, piling rigs, JCB, Crane Mounted Pickup Fleet, and forklift are also part of in-house equipment.

Strong Plant trading unit stocks and sells among the highest volumes of specialized Dewatering Accessories in U.A.E. "Turbo-Z" Dewatering Pumps are the flagship products that ensure unlimited resources for their own projects as well.

TRANSPORTATION

The company transportation fleet includes 4x4 service trucks, crane mounted pickups, buses, and vehicles that cater remote sites operations, and company vehicles also carry out transport of hired equipment to site.

OPERATIONS

The company operation runs 24-hours Patrolling Teams & emergency telephone numbers are available in case of queries or breakdown.

Rental

Sales



PROFILE OF MR. ASHISH DESAI (OWNER & MANAGING DIRECTOR)

Ashish Desai is a 1973 born Engineer & MBA degree holder, Entrepreneur – belonging to the family of Leading Geo Technical Engineers in U.A.E. and started his business in 1996. In 2001, he bought over Strong Plant and never looked back and credits the company's growth to becoming the top Dewatering & Ground Water Management Solution Provider, to the positive economy and foresight of the U.A.E. leadership and Government for giving the opportunity to learn, take risks, grow and bid for and execute among the most unimaginable projects on the planet. The unprecedented development in U.A.E., and particularly Dubai, along with Strong Leadership at Strong Plant and an ever growing team of dedicated experts, catapulted the company to the heights that it is has reached today and is a default bidder, if not preferred, on all small and large projects in U.A.E..

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Ashish has always believed in backward and forward integration along with diversification, in the ground engineering field by identifying the gaps in service industry and as a result, started the company in India, KSA and also successfully developed the division for Large Volume, High Pressure & Long Distance Water Pumping, HDPE Pipe networks, Area-Wide Ground Water Lowering Solutions And Facilities Service Provider.

The ever-developing quality and safety regulations in U.A.E. required the growth of the team into a multi-activity, allround enabling works contractor, including high end technical design and execution.

Being a U.A.E. child, he has a strong grasp on the market and its fluctuations and always strives to strike a balance between client services, company growth and maintain healthy profitability by differentiating their services and diversification into new avenues.

As a part of his entrepreneurial pursuits, along with his friends, he has invested in diverse start-up companies related to e-Mobility, IT, Financial Services, Hospitality and is always open to new Ideas.

Challenges are what drive us – is his motto and he believes in the Dubai and U.A.E. story and is committed to add value to the society and industry for a long time to come.

Our team – the Human Capital is the most important ingredient of our Success.





SPECIFIC INFORMATION RELATING TO BUSINESS

SERVICES RENDERED BY THE COMPANY

Wellpoint System:

A WellPoint system is the oldest practical method of pre-drainage, and is still one of the most versatile methods, being effective most types of soil, whether pumping a few gallons per minute (GPM) in fine sandy silts or many thousands of gpm in coarse sands and gravels.

The basic components of a wellpoint system include: a wellpoint pump, header piping, and the wellpoints themselves.

The wellpoint pump consists of several components that serve three functions: 1) to pump air (*create vacuum*), 2) to pump water, and 3) to separate the air from the water. The wellpoint pump is tied into a level header manifold that is conveyed alongside the excavation. The header applies the vacuum to a series of individual wellpoints and conveys the water lifted from the wellpoints to the pump. The wellpoints are, in essence, well-like devices constructed with a screen intake and usually a filter pack, which draw the water from the ground by the suction generated at the pump.

Wellpoint systems are the most suitable in shallow aquifers where the water level need to be lowered no more than 5 to 6 m. Beyond that depth, multiple stages are required because of the suction lift limitation.





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DEEP WELL SYSTEM:

A deep well is a dewatering device equipped with its own submersible pump. Deep wells can vary from 3 to over 24 in (75 to 600mm) in diameter, and pump from fractions of gallons per minute (GPM) to thousands of gallons per minute. Because they do not act by suction methods, deep wells are not limited in effectiveness by depth like wellpoints. They can be installed from 20 ft(6m) deep to hundreds of feet deep.

Deep wells, each with an individual pump, are best suited to homogeneous aquifers that extend well below the bottom of the excavation. In such situations, the wells can be installed to greater depth, the volume pumped by each well is high, and the gradients between wells tend to be flat.

We provide effective and innovative turn-key solutions to groundwater control problems using Deep wells. We offer a comprehensive service from initial design, drilling, supply and installation of pumping equipment.



Sump/French Drain System:

Sump pumping is the most basic of dewatering methods. In essence it involves allowing groundwater to seep into the excavation, collecting it in sumps and then pumping it away for disposal.

Sumps are usually sited at the corners of excavations, below the general excavation level, and are made big enough to hold sufficient water for pumping and keep the excavation floor relatively dry. A pump is provided for each sump and connected to a discharge pipe.

Sump Pumping can be very effective and economic method to achieve modest drawdown's in well-graded coarse soils (such as gravelly sands, sandy gravels and coarse gravels or in hard fissured rock.





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Temporary Discharge Network:

a. Discharge by Conventional PVC Layfalt Hose Pipe

A conventional hose pipe, featuring a balanced polyester yarn spiral wrap and PVC, longitudinal strength member, and homogeneous PCV tube and cover, is used for general purpose water discharge applications. It can be laid straight with minimal elongation under pressure, and provides low friction loss.

Hose Pipes used in wide range of water projects e.g., dewatering, sprinkler and drip irrigation systems. It's available in different Size/Diameter (25, 75, 100, 150, 200 mm). it has a fast and easy deployment, and can discharge low and medium-volume in dewatering works, mining, and other industries.



b. Discharge by High-density Polyethylene Pipe (HDPE):

High-density polyethylene pipe (HDPE) pipe is more flexible and less brittle than PVC pipe and is useful when the piping must be relocated while being maintained in use or must withstand contact with construction equipment.

HDPE piping is an excellent piping material when the discharge piping must be installed within the excavation itself, and the piping must be relocated several times to permit the continued excavation. The pipe can be cold-bent to a radius of 20 to 40 times the pipe diameter, eliminating the need for fittings at slight bends. The ease of handling HDPE pipe allows it to be welded together and pulled in long lengths, thus making it a cost-effective material for long, straight pipe runs. HDPE pipe is also an excellent material for flexible, easily relocated, temporary water supply lines for drilling or jetting. The pipe can be easily cut and re-fused for repeated use.





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Open Lagoon Discharge System:

A lagoon system is an effective method of dewatering discharge treatment and is well suited for the areas where discharge points are not available or very far from the dewatering site. It consists of a one or more square body of water (reservoirs), and where the dewatering water is generally discharged directly through specific pipeline. The design of the lagoon system is based on the details of the dewatering plan, including the ground conditions, the site location, the seepage rate calculations and the water storage capacity. During dewatering operations the water will be continuously monitored in order to assure the system is operating properly and the discharge pipeline does not become dislodged.



Instrumentation and Monitoring:

We possess the fundamental tools and the latest technology instrumentation / devices necessary for the measuring other ground water levels, hydraulic conductivity, water temperatures, and other underground water parameters in situ.

Among of the Instrumentation, flow meters, pressure transducers combined with data loggers, probe sensors, ordinary standpipe piezometers, pore pressure piezometers, switch off system and all necessary software and accessories to be used in order to guarantee the monitoring process within 24/24 hours.







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Well Drilling and Rehabilitation:

We offer drilling well services at various depths and diameters, as per the client requirement. The drilling operation can be carried out by a rotary or cable percussion drill rig, or both method alternatively depending of the project purpose and the encountered underground condition. During the drilling operation we ensure that all of the well construction steps should be executed and achieved as per the technical norm and parameters sets including drilling, pre well testing, casing, developments and pumps installations.

The rehabilitation or development of drilled wells is a part of normal well drilling procedure after the completion of the well and before the final disinfection. It is necessary to maximize the yield of the well and to optimize the filter capacity of the gravel.





Rising Groundwater Control (Innovating services):

We provide engineering solutions to solve issues of rising groundwater table that affects to the integrity of underground utility infrastructure. The design of the groundwater control system is based on a large technical site investigation in order to generate the best efficient system (Hidden Shallow wells, French drain, etc.).



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Groundwater Modelilng:

Groundwater Models predict the ground and water by numerical simulation. Collective ground data and modelling are very useful tool to determine groundwater capacity. Field data are validated by transferring into one single framework to easily identify information's gaps, and predict the behavior of ground water flow system. The conceptual model provides the best possible cost effective and environmental friendly design using state-of-the-art design, engineering tools and techniques.

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Other Activities:







Shoring ('H' Beams)

Dubai Airport - 1998

Image: Comparison of the state of

Shoring (Diaphragm Wall) Equipment



STRONGPLANT

Few of our Clients::

Sr#	Name	Sr#	Name
1	Nakheel PJSC	31	Schuster Pechtold Consultant
2	Jumeirah Golf Estate	32	KEO International Consultants
3	Dubai investment Park	33	Shka. Mouza Bint Hilal Al Nahyan (M/s. Reef
			Real Estate Co)
4	DEYAAR Development (PSC)	34	Al Ajmi Consultants
5	Al Gurg Consultant	35	Swiss Tower Dubai L.L.C.
6	Parsons International Limited	36	Buset Contracting and General Transport Co.
7	MAF Investment L.L.C	37	Style Consultant Engineers
8	Khatib & Alami	38	J.T. METRO JV
9	Pioneer Engineering	39	AL Takkamul Al Handasi Consultant
10	Sheffield Investment	40	Khansaheb Civil Engineering L.L.C
11	Empire Holdings	41	Al Hashemi Consultant
12	Arkiplan international	42	QHC Consultant
13	Al Futtaim Carillion	43	Al Majid Contracting
14	Higgs & Hills	44	Saleh Construction
15	Pivot Engineering	45	Bu-Haleeba Contracting
16	S S Lootah Contracting	46	Al Arif Contracting
17	Nutek Engineering Consultant	47	Design and Architecture Bureau (DAR)
18	Plus Properties	48	Shinsung Engineering Construction Co. Ltd.
19	Al Aqaar Properties	49	Badri&Bensouda Engineers
20	WS Aitkins& Partners Overseas	50	Intermass Engineering and Contracting Co.
21	Teo A. Khing Design Consultants Sdn.		
	Bhd. (Dubai)	51	The WORLD ISLAND S- Heart of Europe
22	Gammon and Billimoria L.L.C.	52	Mammut Contracting Co. L.L.C.
23	Architectural & Engineering Consultant (ARENCO	53	Al RostamaniPegel L.L.C.
24	Al Basti & Muktha	54	AQLEH Consulting Engineers
25	Arab Experts Engineering Consultant	55	Al Amar Contracting
26	Engineering Contracting L.L.C	56	Al Sarh Contracting
27	National Engineering Bureau	57	Al Habtoor STFA Soil Group
28	Mouchelparkman Consultant	58	Larzen and Toubro (L & T)
29	Emirates Road Contracting Co. L.L.C.	59	EMCO Engineering Inc. Emirates LLC
30	National Engineering Bureau (NEB)	60	Al Habbai Contracting LLC
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WHY DUBAI AS AN INVESTMENT DESTINATION

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Dubai has earned its reputation as a pre-eminent commercial center with an innovative, dynamic and entrepreneurial business culture. Strategically located at the crossroads of trade and commerce between East and West, it is ideally positioned to service and access markets that span the Middle East, Africa, the Indian Subcontinent and the CIS countries. Moreover, it occupies a time zone that allows it to connect markets like the Far East and the US. To leverage this advantage, it is developing a world-class infrastructure, air and port facilities, making it the most well-connected hub in the region.

Politically stable, Dubai has a forward-looking, responsive government with a progressive, pro-business attitude and a strong commitment to the private sector. Business-friendly regulations and a favourable tax and customs framework have played a key role in attracting business investment from all over the world in almost every sphere of economic activity. Strong economic indicators and a relatively low cost work environment have contributed to its rapid development and prosperity. A modern, safe, multi-cultural place with state-of-the-art medical, education, entertainment, shopping and sports facilities that ensure a high quality of life, Fujairah is the location of choice for the modern professional and an ideal location for multinationals to establish a regional presence.

The Best Regulatory Environment

- No Corporate Tax (except on sectors such as hotels and banks)
- No Income Tax
- 100% ownership in Free Zones
- No foreign exchange controls, trade barriers or quotas
- No restrictions on capital repatriation
- Easy access to key decision makers
- Liberal labour laws.

Relatively Low Cost Work Environment

- Access to low cost regional talents
- Competitive energy costs
- Low land and real estate costs
- Competitive import duties (5% with many exemptions)
- Approx.30-35% advantage to investor's bottom line



HIGH PRESSURE, LARGE VOLUME, LONG DISTANCE GROUND WATER MANAGEMENT & PUMPING THROUGH HDPE PRESSURE PIPE NETWORK

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JUMEIRAH VILLAGE & DIP

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DISCHARGE PIPELINE







PUMPING STATION SERVICES.





JVC, JVT, DIP, AL FURJAN PUMPING STATION AND HDPE HIGH PRESSURE LINE TO THE SEA

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DESIGN AND BUILD VARIOUS SIZES OF HDPE PRESSUR EPIPELINES TO THE SEA : GROUND WATER MANAGEMENT

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LOWERING GROUND WATER SYSTEM

Provide Engineering solution to lower the surface rising water - (Innovating services)

We provide engineering solutions to solve issues of rising groundwater table that affects the integrity of underground utility infrastructure. The design of the groundwater control system is based on a large technical site investigation in order to generate the best efficient system (Hidden Shallow wells, French drain, etc.).

Our groundwater control design integrates system that cares for environment and cost effective. These are identified as follows:

S.I	Strategy	Advantage	
a)	Eliminating deep drawdown	Avoiding sea water intrusion and contamination on the mainland	
b)	Controlled pumping	Less power thus reducing CO2 emission	
c)	Cost control	Investment is reduced, e.g. pump capacity, well depth, disposal fee, etc.	
d)	Groundwater level automated control	System stop pumping at predetermined setting; I limit on affected areas only.	

Rising groundwater rising becoming a challenge to all developer due to the increase of maintenance cost. As the groundwater raises all ground infrastructure like underground utilities deteriorate fast these include road/asphalt/footpath pavement sinks, chambers and building settlement, road furniture, landscape, golf courses and the like to name a few degrade the aesthetic of the landscape.

To support the challenge Strong Plant and its team made thorough studies to address which becoming perennial problem to the development. To be effective on research & studies we have considered collected historical data since Strong Plant started the business operation.

Result gave us clear picture about the influence by time versus groundwater table performance, as such we have consider the most economical approach where groundwater aquifer is not to disturb or develop during pumping thus preventing opening of new water stream. A method of ground water modelling was established and converted into working model thru automated controller and radius of influence.

As a result of endeavor the research become successful and we should say that it will require political intervention and become practice the over groundwater exploitation thus assurance of fresh water is enhanced. Our technology become regular practice in the industry and being grasp by our potential client to name a few are Al Furjan, Jumeirah Village Triangle, Dubai Investment park, Jumeirah Golf estate. With a limited flow we are able to control the groundwater table

Our innovative system can be the ideal solution to phase out the rising ground water table. Examples of lowering system are provided below:







WATER LOWERING WORKS @JVT-DUBAI

Sales







WATER LOWERING WORKS @ JGE-DUBAI









Flow Control System at DIP

Rental

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Our foray into **facility management services** was a natural extension of our core expertise and people management resources.

Ideal partner for organizations, looking at complete facility management services for External MEP, Infrastructure and Internal building maintenance including all services, because of our core capabilities; human resources; and commitment to quality & environment



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Our Young And Dynamic Team Believes In Providing Highest Level Of

Customer Service And Satisfaction With Focus On Safety, Development,

Growth And Adapting To New Technology And Procuring Best Equipment

Available To Provide Better Customer Satisfaction Within The Framework And

Guidelines Of The Concerned Government Authorities.

<u>CERTIFIED:</u> ISO 9001-2015 (Quality Management Systems), ISO 14001-2015(Environmental Management Systems) and OHSAS 18001-2007 (Occupational Health and Safety Management Systems)



For STRONG PLANT FROUP Redefinign Service

ASHISH K. DESAI Managing Director