

# InSIGHTS

On corrosion Prevention & Asset Integrity



His Excellency Suhail Mohammed Al-Mazrouei, Minister of Energy UAE (Center) along with Mr. Nadeem J Sait (Right) Group Chairman and Mr. Vaseem J Sait – Group MD | Appreciating the team for the efforts from BSS Tech in providing training to UAE nationals and bringing in latest technology to achieve the long term National Goals.

## Chairman's Message

I take this opportunity to thank our valued customers, whose continued patronage and confidence in our products, inspires us to extend the best of services and enables us to provide value for their money. We are focused at addressing the needs of our customers through rugged, efficient, reliable and cost effective solutions. Our products are in line with the world's best standard, maintaining continuous interaction with clients to assess their emerging requirement, so as to be ready when the needs arise. We are committed to total customer satisfaction in identifying their specific needs, translating them into quality products and providing dependable after-sales-services. This commitment is the corner stone of our Quality Policy and we strive to achieve it by putting into place a Quality System, which adheres to the ISO 9001 Quality Standard. We plan to achieve this goal through our strength - the Employees; and seek their continuous involvement in achieving the Company's objectives. Apart from Bringing in new Technology, we are also committed to and focused on providing the best Training to the industry graduates, helping the vision of Localization as a part of Giving Back to the Community (GBC). I therefore, seek continued patronage of our valued customers, cooperation of our employees and thank our well-wishers who have contributed to the growth of the organization.



Faris Sari A.E. Al Mazrouei,  
Chairman

BSS TECHNOLOGIES TO HAVE EXCLUSIVE SALES & DISTRIBUTION RIGHTS TO HIGH PERFORMANCE SPECIALITY MONOLITHIC ISOLATION JOINTS OF IGP GROUP FOR THEIR EXPORT MARKET.



Nadeem J Sait, (Left) Chairman, Sait Group exchanging Agreement with Lt. Gen (Retd) R K Swami, Director IGP Engineers Pvt. Ltd.

BSS TECHNOLOGIES SIGNS EXCLUSIVE AGREEMENT WITH MAGNETIC PUMPING SOLUTIONS UK FOR THE SALES & DISTRIBUTION.



Nadeem J Sait, (Left) Chairman, Sait Group exchanging exclusive Agreement with Cyriac Job, Director Magnetic Pumping Solutions in presence of Mr. Jamal & Mr. Y.M. Salim

## Managing Director's Message



Vaseem J Sait, MD

A commitment to act on responsibly, in doing the right thing, is integral to the business of our organization. BSS Tech's strategic priorities are grounded in a fundamental sense of responsibility that includes all stakeholders – CEV (customers, employees and vendors), Path is Same, but we have moved the mile stone little farther as we understand we have the fuel and energy to reach bigger targets. Confidence on the Shareholders, Vendors and Employees who have been recognized by the Customers is giving us the thought of concentrating and commitment for the future generation to concentrate on the ECP (Energy Conservation and Production). The stories showcased here, and the tangible metrics of responsibility that support them, speak to the values that guide every aspect of how we do our work and frame every decision we make for the future. True corporate responsibility entails far more than giving back. It's our dedication in providing products and services of the highest quality. We are committed to doing things better that starts with customer and ends with customer and to do it responsibly as a team.

# THE BRAINS BEHIND THE SUCCESS OF SAIT GROUP



By : Sajid Haroon, Editorial Column

BSS Tech, the company started by Nadeem J Sait & Vaseem J Sait, the SAIT brothers, in the year 1998 in Abu Dhabi, U.A.E., which has grown to become million dollar organization in less than five years with 12 offices in 8 countries with global leadership position in Cathodic Protection & Corrosion Control and other technology products.

BSS Tech has successfully diversified into manufacture Anodes, Transformer Rectifiers, Remote Monitoring System through state of the art, automated manufacturing plants in Dubai, Malaysia, and India.

BSS Tech, the organization describes the SAIT brothers in many ways. It is the personification of their capabilities, business acumen, vision, force and serendipity. Managing such a fast paced organization is a testimony to their management talent.

Nadeem emphasized the importance of not planning every single step of a business, but rather taking advantage of opportunities. Asked about the secrets of his success, Nadeem willingly launches into a spiel about process efficiency. The fact is BSS Tech was built on his ability to cater the planet with its Engineering and Engineered product capabilities than any other institution.

While Nadeem quoted " Me and my brother have gone through some difficult times like everyone else and perhaps our working together and respecting each other's abilities, in addition to that little thing called love, helped us strive." They viewed every hurdle as an opportunity to improve and revamp. Nadeem charged his employees to find their passion: "You have to love and enjoy your work because if it feels like a chore for you, then it won't be rewarding," he said.

"Sait group is a company with strong fundamentals. We have a worldwide network of business offices and warehouses, and our physical business is supported by a robust, cost-effective business platform consisting of innovative ideas and efficient process management model, which is 500 per cent more efficient than that of our competitors,"

" have gone through some difficult times like everyone else and perhaps our working together and respecting each other's abilities, in addition to that little thing called love, helped us strive"

According to Nadeem, the secret of success is: Have a "can do" attitude

- Be committed to your goals
- Promote creativity
- Treat people with respect
- Have fun



Major Hamad Falah Al-Hajri

### Thumps Up - can help you move forward.

Shake hands and Thumps Up – does a lot while moving forward.

Hosting a proven company like BSS Technologies in my mother country, Kuwait – I am honored.

One of the best thing I found in BSS Tech is their commitment to the said giving back to the community. Feel proud in shaking hands to a solid commitment towards the Best Engineering Standards followed along with quality products to the industry and a vision towards technology transfers by continuous training and getting trained on new technologies and keeping the environment, a safe and sound one for the future generation.

Partners also can encourage each other to be more daring simply because each partner figures the other will be there to pick up the pieces if the risk doesn't pan out. When Sir Edmund Hilary and Tenzing Norgay set out to climb Mt. Everest in 1953, relied on the other for keeping both of them safe despite the massive risks of climbing the world's tallest mountain. At one point, Hilary broke through soft snow and slid into a crevasse. But because he and Tenzing were roped together, Tenzing was able to stop Hilary's fall and pull him to safety.

### PUZZLE QUESTION



If in a cricket one day match, there were No Wide Balls, No Wide, No Extras and No overthrows. What is the maximum number of runs that a batsman can score in an ideal case scenario?



IGP Engineers is the flagship company of the IGP group. A pioneer in sealing technology, IGP is a leading manufacturer and exporter of all types of industrial gaskets including Spiral Wounds, Ring Joints, Camprofiles, Insulation gasket kits and Monolithic Insulation Joints. Established in the year 1955, have more than 55 years of experience in the industry and are continuously growing and evolving with the most sophisticated technology.

#### MONOLITHIC INSULATION JOINTS



Monolithic insulation joint is a boltless structure that provides electrical resistance between the pipeline sections and adjoining structures, thus improving the effectiveness of the Cathodic Protection System.



#### IGP ENGINEERS PVT LTD

[www.igp-group.com](http://www.igp-group.com)



[www.magneticpumpingsolutions.com](http://www.magneticpumpingsolutions.com)

Specialized in Pumping Solutions

Magnetic Pumping Solutions designs and manufactures permanent magnet motors and drives for completing and producing oil and gas wells. Three PMESP® systems and one PMPCP® system have now been successfully installed and commissioned.



[www.oxmos.com](http://www.oxmos.com)

Specialized in Remote Monitoring Solutions

Oxford Monitoring Solutions designs, manufactures and installs downhole, surface and remote monitoring solutions for the oilfield artificial lift industry. Our solutions are reliable, easy to understand and easy to implement in the field.

Simply  
Reliable Solutions

## Using Pipeline Coatings with Cathodic Protection

Oil and gas pipelines are generally protected from corrosion by a barrier coating and cathodic protection (CP) system, a combination that is mandated by governmental regulations in many countries. Coatings for pipelines, such as fusion-bonded epoxy (FBE) and three-layer polyethylene (3LPE), generally provide excellent corrosion protection. In the event that the coating is damaged or degraded and the bare steel substrate is exposed, the pipeline is still protected from corrosion by CP. According to NACE International member Dennis Wong, technology group manager—Research and Development with ShawCor, Ltd. and Vice Chair of NACE Task Groups (TGs) 470—Cathodic Disbondment Test for Coated Steel Structures Under Cathodic Protection and 520—Pipeline Coating Peel Strength Test, the most important factor for preventing corrosion-related oil and gas pipeline failures is the use of a coating with excellent barrier properties (to prevent the ingress of corroding species such as oxygen and water) and mechanical strength (to resist damage in the service environment).



During the service life of the pipeline, the coating has to maintain its integrity under operating environments and in the presence of CP. The coating also needs to be a good electrical/electrolytic insulator to isolate the metal substrate from direct contact with the electrolyte, and have excellent electrical resistance to prevent any electrochemical reactions on the metal surface of the pipeline. A damaged coating that exposes bare metal areas or an aging coating that has degraded and experienced a brittle fracture renders the pipe surface susceptible to the ingress of moisture, oxygen, and other corroding species, and a functional CP system capable of

meeting the current demand needed for corrosion protection will be required.

In his presentation, “Compatibility of Pipeline Coatings with Cathodic Protection,” given during the Protective Coating Technology Forum at CORROSION 2015 in Dallas, Texas, Wong discusses the basic principles of corrosion protection with coatings and CP, and the attributes of an effective pipeline coating. He notes that in the United States, the Code of Federal Regulations (CFR), specifically 49 CFR 192.455,1 states that each buried or submerged pipeline installed after July 31, 1971 must be protected against external corrosion with an external protective coating that meets the requirements of 49 CFR 192.461,2 and it must have a CP system designed to protect the pipeline installed and placed in operation within one year after completion of construction



### DEKOTEC - HIGH QUALITY AND FORWARD-THINKING

"Made in Germany" solutions.

For almost a century, this is the promise we have been making to our customers for all of our corrosion prevention products and innovative sealants for roads, railways, buildings, installations and pipelines.



**Technology  
for Pipelines  
Corrosion Prevention**



Passive corrosion prevention on metal pipelines.  
Corrosion prevention and sealing on above- and below-ground installations.  
Polyurethane-compounds for pipeline construction.  
Mechanical protection of welding seams of double wall plastics pipes

# Talking Images



I am not trying to give an image of a fairy-tale, perfect, everything else, I am just being myself



Take me as I am, or watch me as I go



It had long since come to the attention that people of accomplishment rarely sat back and let things happen to them. They went out and happened to things.

Barthauer Software GmbH  
**SOFTWARE FOR ASSET MANAGEMENT**

- BaSYS covers all aspects of supply or removal network lifecycle
- Powerful network planning and design functions
- Common GUI for all major CAD/GIS platforms (ArcGIS, ACAD, Bentley Micro station, Intergraph Geomedia)
- Asset registry
- Condition control and assessment
- Rehabilitation planning
- Asset evaluation, amortization
- Hydraulic masterplan
- Operation and Maintenance



# CATHODIC PROTECTION REMOTE MONITORING AND CONTROL



Cathodic Protection (CP) is an important method to prevent corrosion on buried metal pipelines and tanks. The collection and analysis of CP measurements (at transformer rectifiers and tests points) is labor-intensive, expensive and (still) reactive – problems can be undetected for long periods. The use of wireless remote monitoring and control technologies provide the ability to monitor "real-time" CP performances, reduce unnecessary costs and risks with travelling to remote locations and add the capability for instant notification thus increasing the lifetime of the structures being protected.

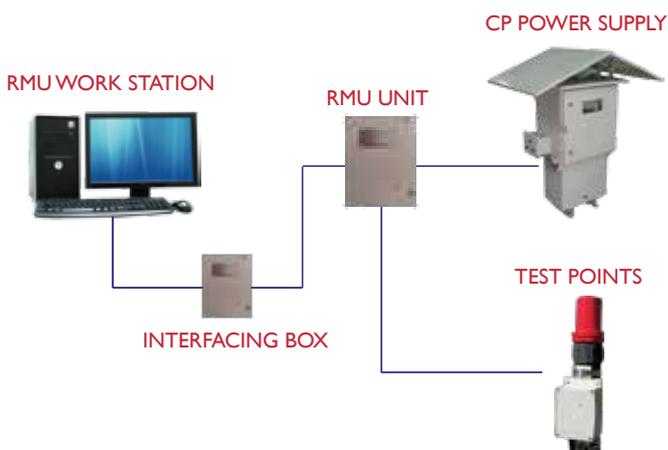
## Challenge

Collecting CP measurements for analysis is a time and resource consuming job; some installations are located in remote /difficult to access areas or under hazardous working environments. Additionally the incorrect monitoring and maintenance regime or operation of the CP systems can result in lack of protection and may even cause harm.

## Solution

The adoption of wireless smart sensor network technology will enable the automatic measurement, analysis, storage and transmission of real-time data. It is a proactive system – it supports the identification of potential problems wherever and whenever they occur and alerts the responsible entities immediately. BSS Tech solution includes smart units to collect field data and web-based software to monitor, control and report about the Cathodic Protection status of customer infrastructures. The software solution calculates the corrosion velocity of customer infrastructures, prevents potential accidents and indicates the critical points. It is an Automatic Control System for the Cathodic Protection.

## Architecture



## Architecture

Wireless communication (via GPRS/GSM) allows the corrosion monitoring parameter to be directly integrated in web-based software that stores, analyses and interprets the collected field parameters in an economical and easily way; providing enriched reports about the infrastructure health (Cathodic Protection level).

**CATS-EYE™**



*Your eyes to  
Cathodic Protection System*

## Benefits

Reduce data collection costs

- Reduce operator exposure to hazardous environments
- Access and integration of "real-time" corrosion monitoring parameters
- Improve data quality
- Generate automatic reports and alarms
- Increase efficiency of integrity teams to timely and targeted maintenance tasks
- Evaluate and increase infrastructures lifetime

## Conclusion

BSS Tech remote monitoring and control system for Cathodic Protection effectively improves the means of preventing corrosion on underground or underwater structures, pipelines and tanks. It is a proactive system that combines reliable hardware with powerful software to offer our customers a complete structure integrity monitoring solution.

**Answer to puzzle question is: 1653**

Explanation: For an ideal case, the batsman will hit a six on each ball. But if he hits six on the last ball of the over, the strike will change in the next over. Thus, the best he can do in the last ball is to score 3 runs so that he retains the strike in the next over. Thus the total runs that he can score in each over:  $6 * 5 + 3 = 33$ , But this will have to go like it only till the 49th over. In the last over, he can hit a six in the last ball as well as that will be the last ball of the match. Thus runs for the last over will be  $6 * 6 = 36$ . Hence the maximum runs =  $33 * 49 + 36 = 1653$

# CORPORATE ROUND UP



Life was meant for Best Friends and Good Adventures!



Always classy, never trashy, and a little bit sassy.



Beauty is power; a smile is its sword



At least this balloon is attracted to me!



Last day of class



Just hanging out with friends



If you are Mine, You are Mine. I don't like Sharing.



When I fell for you, I fell hard



A photoshoot will always make you Smile, especially when you don't want to...



With You, I forget all my problems. With You, Time Stands Still.

## MAJOR PROJECTS

CP System Activities for Investors  
Pipelines to Deepwater Berth at  
Hamriyah Free Zone

Recovery project in Liwa Additional  
Pipeline 10C

ASR Gas Facilities in BAB-  
Package "A" Project

Ruwais LNG Terminal Project

Burgan Cape Terminal Project

Umm Niqa EPF

BAB Habshan1 Development  
project

Causeway Gas Pipelines Project

Umm Lulu Full Field Development  
Project Package 1

Umm Al Houll Power

Early power plant project

CAFC-Oil Project

Cathodic Protection System for  
Sabic STC

BUTANE MOUNDED BULLET  
STORAGE SYSTEM – IOCL

Black Pearl Project

Habshan-Bab pipeline

Gas Train 5 at MAA Refinery

Tanks for HADIDA Diesel Station  
Project

Timimoun Gas Plant in Algeria

AL DABB'YA ASR GAS  
DEVELOPMENT PROJECT

## IGP GROUP REACHES AGREEMENT WITH BSS TECHNOLOGIES TO SELL ITS INSULATION JOINTS PRODUCTS FOR ITS EXPORT MARKET.

IGP Group announced that it has signed a definitive agreement to sell its Monolithic Insulation Joints in U.A.E & Middle East, which operates locally under IGP Brand, to BSS Technologies, a SAIT Group. BSS Tech will serve as a local distributor for IGP Insulation products and solutions, as well as IGP's specialized performance solutions for retail businesses.

### ABOUT IGP GROUP

IGP Engineers is the flagship company of the IGP group. A pioneer in sealing technology, IGP is a leading manufacturer and exporter of all types of industrial gaskets including Spiral Wounds, Ring Joints, Camprofiles, Insulation gasket kits and Monolithic Insulation Joints. Established in the year 1955, IGP Group has more than 55 years of experience in the industry and are continuously growing and evolving with the most sophisticated technology. Leading by example and not compromising on quality, IGP Engineers is the first Indian gasket company to get the ISO/API accreditation. The Corporate Headquarters, Engineering, Manufacturing and Marketing facilities are at Chennai, India. IGP has a global customer base and products are exported to 43 countries worldwide.

### ABOUT MONOLITHIC INSULATION JOINTS

- They are boltless, rigid pipeline components, factory welded and ready for use.
- Provides electrical resistance between the pipeline sections and adjoining structures, thus improving the effectiveness of the Cathodic Protection System (CP Pipeline).
- They are superior to Insulation Kit Gasket assemblies.
- Suitable for underground and above ground installations.
- Are of proven design and successfully installed worldwide as per pipeline specifications & requirements.
- Maintenance free – Fit & Forget



JPAC Technologies Pvt. Ltd. Along with its flagship solution "Pipeline Information System" has been serving the Oil and Gas Pipeline industry for the past 10 years. Versatile & supported Web-GIS base software solution are their forte. Delivering creative and affordable technology solutions for medium and large businesses and government organization. SOLUTIONS THAT DELIVER BEYOND EXPECTATIONS.

- 3D Visualization & DEM, DTM Modeling
- Geo Spatial Data warehousing
- Engineering and Scientific Computing Applications
- Engineering Data Visualization
- CAD to GIS Spatial Conversion and Digitization
- GPS Surveys, Mapping & Digitization
- GIS Application Development
- EDMS Solutions and Services
- GIS based demand Survey and mapping of Gas/Oil/Water/Power
- Web Based Pipe Line Information Management System
- Web Based Highways Information Management System
- Web Applications
- Consulting – Route Planning, Data Model, Terrain Modeling
- Conversion and Analysis of Well Log Data.
- Enterprise IT Applications like ERP / CRM / SCM / Business Intelligence



ELMED Dr. Ing. Mense GmbH  
Wellenburgstr. 39  
42579 Heiligenhaus, Germany  
Phone: +49 (0) 2056 / 93 29-0.  
Fax: +49 (0) 2056 / 93 29-33  
E-mail: info@elmedgmbh.de



ELMED is the manufacturer of high performance stroboscopes for nearly all industrial applications in R&D, production and quality assurance. Typical fields of HELIO-STROB stroboscope applications:

- Snap-shots of sequences which are not perceivable by the human eye due to their high speed
- Vibration analysis
- Revolution measurement of rotating objects without applying reflection pads

# CELEBRATION AT BSS TECHNOLOGIES



Life was meant for Best Friends and Good Adventures!



Good Times + Crazy Colleagues = Great Memories!



Never looked so good



We're screaming just to see who's louder



'Just fit in' is not my style. I am born to stand out.



Getting our pose on.



I love you all. That's all I know.



I don't know what's tighter, our jeans or our friendship



We come to friendship by not finding the perfect person but by learning to see imperfect person perfectly

## MAJOR CLIENTS



\* Answer for the page 12 puzzel

Ans: 44. | Sol.: (7×5) + 9 = 44.

# TRANSFORMER RECTIFIERS

**We make power supplies for:**

- Cathodic Protection
- Antifouling
- Electro Chlorinator
- Railways
- Anodising plants

**We make power supplies with:**

- Simple Manual Operations
- Automatic
- Computerized
- Remote Controlled

We make DC Power supplies meeting any rating and any specifications.

Manufacturing ATEX CERTIFICATE TR units is our major strength along with Remote Monitoring & Controlled

**NINAD KULLY**

*Man behind the transition of BSS TR units from Manual System to Computerized System... Normal to ATEX Certified*

[www.bsstechnologies.com](http://www.bsstechnologies.com)



[www.atmosi.com](http://www.atmosi.com)

**Leaders in pipeline technology**

Atmos International (Atmos) are dedicated to pipeline technology. Atmos provides pipeline leak and theft detection and simulation technology to the oil, gas, water, and associated industries. Headquartered in Manchester UK, the company was founded in 1995 to supply the statistical pipeline leak detection system. Atmos Pipe, now one of a suite of leak detection solutions from Atmos. These technologies are implemented on hundreds of pipelines in over 50 countries, including major oil and gas companies such as Shell, BP, ExxonMobil, and Total.



PIPELINE GUARDIAN



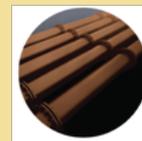
RUPTURE DETECTION



LEAK DETECTION



THEFT DETECTION



SIMULATION



OPERATION MANAGEMENT

## Safetrack Baavhammar AB



**Johan Baavhammar**  
CEO / VD

The leading manufacturer of electrical connection systems for Railways, Grounding and Cathodic Protection Industry. With systems such as Pin Brazing, SafePlug®, SafeBond® in assortment we can supply any of the modern cable application method to our clients. Safetrack provides the cathodic Protection, Ground Circuit and Railway Industry with modern technologies for connecting cables to steel structure.



...SAFELY CONNECTING THE WORLD®

[www.safetrack.se](http://www.safetrack.se) | [www.pinbrazing.eu](http://www.pinbrazing.eu)



## MAGNETIC PUMPING SOLUTION AND BSS TECHNOLOGIES SIGNS AN EXCLUSIVE AGREEMENT TO PROVIDE SALES & SERVICE TO U.A.E AND MIDDLE EAST MARKET

Magnetic Pumping Solutions, a UK based company, a leading solution provider in centrifugal pumps in Oil and Gas industries, and BSS Technologies, a SAIT Group, a leading Cathodic Protection & Corrosion Control company, announced that BSS Tech will Sales & Support to Magnetic pump solutions in UAE & Middle East Market. The agreement allows Magnetic Pumping Solution to expand its market base in the gulf region through the established customer breadth of BSS Technologies.

Magnetic Pumping Solutions is a privately owned US company that develops, manufactures, tests, installs and services permanent magnet motor driven artificial lift systems. All engineering and development work is carried out in the UK. The company has installed centrifugal pumps (ESP) running on permanent magnet motors, referred to as PMESP® and Progressive Cavity pumps referred to as PMPCP® for use in oilfield applications. Systems have been deployed and are presently operating in the USA, Europe, Middle East and Asia. Benefits of Magnetic Pump Solutions:

- High Efficiency compared to Induction Motors, In excess of 95%
- Green Technology with 20 to 75% power saving from existing technology
- Shorter and Cooler running systems that enhance Reliability and Run-Life
- Improved ESP and PCP performance in wells with High GOR or Slug Flow
- Advanced Gas handling capabilities with special automated algorithms
- Single section PM motors with no tandem connections
- Potentially one size smaller Cable and smaller transformer providing added cost saving and smaller footprint.



**OUR MAJOR ACTIVITIES**

- Cathodic Protection & Corrosion Engineering*
- Anti Fouling*
- AC Mitigation Study & Modelling*
- Coatings & Field Joints*
- Leak Detection System*
- Software for Geoinformatics and Water Management*
- Wireless Remote Monitoring Systems*
- Electrical Grounding Backfills*
- Holiday Detection Systems*
- TR Units & RMCS*
- Monolithic Isolation Joints*
- Gas Flow Measurement & Regulation*
- Pipeline Information Management System*
- Construction & Manufacturing*
- Marine Cathodic Protection*
- Aluminium & Zinc Casting*
- Calibration and Certification Services for Test and Measuring Instruments*
- Downhole Monitoring System*
- ESP Pumps of Permanent Magnet Motors*
- Well Head Remote Monitoring*

## Can you solve this mathematics puzzle?

Are you clever enough to solve this cool puzzle from the options given below -

For answer please write to [sajidharoon@bsstechnologies.com](mailto:sajidharoon@bsstechnologies.com)

**Sajid Haroon**  
 Editorial Chief, BSS Technologies  
 Email: [sajidharoon@bsstechnologies.com](mailto:sajidharoon@bsstechnologies.com)

بن ساري للتقنية المتخصصة  
 متخصصون في أعمال التحكم في الصدأ والتآكل والوقاية الكاثودية

**B.S.S. Technologies**  
 Specialized in Corrosion Control & Cathodic Protection  
 A SAIT GROUP COMPANY

[www.bsstechnologies.com](http://www.bsstechnologies.com)