



On corrosion Prevention & Asset Integrity



OCTOBER – DECEMBER 2015



I'm honored to lead such an impressive enterprise



Director Faris Sari A.E. Al Mazrouei

It's a rare opportunity came along for a person like me to lead a company as extraordinary as BSS Tech. BSS Tech is an incredible brand supported by terrific people and I'm honored to lead such an impressive enterprise. We grew stronger than ever and are poised for our next chapter. One of the questions I am most commonly asked since I started is, "what is going to change next?" The fact is BSS Tech is a company operating in a dynamic global economy. There are economic, competitive, developmental and operational influences pushing and pulling us constantly. As we have done over the past years, in order to continue to succeed, BSS Tech will need to adjust and adapt to the external influences. First, we need to grow. We will do so as we work together to focus on higher growth end-markets in the global economy. We will need to find more of these markets and capitalize on them, like the opportunities we see in our targeted end-markets and the General Industrial market segment. Our efforts to grow organically will be complemented by our efforts to locate strategic opportunities to acquire other businesses that fill adjacencies in our product lines or broaden our regional presence. Second, the innovation BSS Tech is known for will fuel our efforts to grow. We will continue to translate our engineering acumen and technological

innovation capabilities into real-world product solutions that drive revenue generation and delight our customer base. Third, I am 100% committed to operational excellence at BSS Tech, not just on the engineering and factory floor, but in every area of the company. Our unified focus on making better products with innovation & efficiency is the recipe for success we'll follow. Operational excellence also includes an unwavering commitment to safety – making sure every BSS Tech employee can come to work and expect to be safe in whatever role they fill. I'm delighted to be at BSS and working alongside each of you to achieve these goals and take the BSS enterprise to the next level.



Bin Sari Specialized Technologies – Success Story

Since its founding in 1998, BSS Technologies has become the leading solution providers in MENA and Far East Asia. Over the last 18 years BSS Technologies has developed a highly resourced, responsive global company with strategically positioned offices and facilities in Abu Dhabi, Dubai, Saudi Arabia, Kuwait, India, Malaysia etc. The company expanded its operations in Far East Asia by positioning few of its manufacturing units in Malaysia & India. BSS Technologies provides right engineering and engineered solution in Corrosion Control & Cathodic Protection industry. With over 300 employees worldwide, we are committed to customer satisfaction through continuous training,

Research & development and improvement of our qualified trained technical and nontechnical staff. Our manufacturing facility in Techno park, Dubai with 150,000 sq.ft. Have a full-fledged manufacturing unit.

I am proud to dedicate our Training Center to the nation which will provide training & skill development to the local Emiratis.

I would also like to highlight few of our strengths which make us special:

We are the only ATEX certified CP Transformer Rectifier manufacturer in this region.

SAIT™ software developed to support the operating companies to maintain their Cathodic Protection Assets.

Totally automated antifouling system with auto control flow & fouling resistance.

I thank you all for the support and we assure, we will be able to give more to the industry and to the community



EX- RATED TRANSFORMER RECTIFIER

BSS TECH- CULTURAL ACTIVITY



At the touch of love everyone becomes a poet



UAE – The people who model to welcome any colour / cast - humans and festives



When I stare at the sky, I see you. When I stare out into the ocean, I see you. When I'm looking at the moon, I see you... "I Take care of you... You go take care of the rest"

“The Ramadan Experience at BSS

BSS Technologies organizes Iftar Party for its employees and clients. It is a month when the faithful fast between sunrise and sunset — is also a time for reflection, spiritual renewal and peace. It is a time to seek Allah’s forgiveness and share his blessings with family and friends. Ramadan is a time for renewing faith and purifying heart and soul for the millions who share in the Muslim faith around the world.



Iftar - Is it time now or more to wait !!!

FAST FACTS

The number of companies reporting on their corporate Responsibility activities has shot up in recent years, which at least demonstrates its growth in popularity as a PR tool.

42 %



ONAM SADHYA (Lunch) – Lets have the Food together....

“BSS Tech Celebrates Onam”

Onam is the most popular festival in the state of Kerala. This ancient festival is being celebrated since ages. This festival is celebrated in the loving memory of King Mahabali. King Mahabali is known for his generosity and bringing prosperity. It is believed that King Mahabali will come on this day to bless the people with happiness and prosperity. It is also a harvest festival. It generally falls in the month of August or September. The 10 days of Onam festival is celebrated with great pomp and enthusiasm. Entire Kerala seem to be involved in festive activities. The first and the tenth day of the Onam Festival are most important. The rich culture of Kerala is widely reflected in BSS Technologies Onam celebration. Folk dances, games, songs, delicious foods were organized which is a part of the great festival.



Inhouse, un-known artists behind such a cute floral art - Onam celebration in the traditional outfit

SUBJECT FOR DEBATE - Above Ground Storage Tanks

One of the biggest concerns with above-ground storage tanks is groundwater protection. This is because the vast majority of these tanks contain petroleum products. When corrosion or some other force compromises the exterior structural integrity of the tank, those petroleum products can contaminate freshwater groundwater supplies, which are already dwindling to problematic levels in some areas of the world. What has been done to prevent corrosion in these tanks in the past will be what guides us toward corrosion prevention techniques of the future. The concrete and aluminum materials used in constructing storage tanks are a perfect example of where the industry is heading. It is a great lesson in where today's techniques are leading us as the industry adapts to new and emerging anti-corrosion technologies. The most important lesson the old techniques have taught us is that they are temporary. Corrosion might be caught, halted and fixed in above-ground storage tanks, but it will eventually come back. Replacing the tank isn't enough, because it will be susceptible to the same problems as the old tank. Today's companies want tanks that will last for as long as the company lasts. They don't want to have to keep buying new tanks every time one seems like corrosion has damaged it too much to fix it again. Good corrosion protection means keeping the tank corrosion-free under the harshest of conditions for decades to come. It is what our customers expect, and what we must give them if we are to remain relevant as an industry in the future. We must keep up with the times.



Where the future is leading us -

SAIT™ - CPDM

SOFTWARE FOR ASSET INTEGRITY TECHNIQUES
- CP DATA MANAGER

The application named – “SAIT™- CPDM” is GEI enabled CP infrastructure life cycle monitoring is database application software developed with Java Virtual machine, Data Server and Application server. The primary aspect of this software is to collect, store, safeguard the cathodic protection data and its asset details and provide custom made reports to evaluate the protection of various assets. The software provides unique facility to customize and store the entire cathodic protection components and structures. The software is compatible with all Windows platform. The Software is available as ‘Single User’, ‘Server Based’ and ‘Web Based’ - which makes ‘SAIT-CPDM’ the most flexible CP Data management software catering the needs of various industries from an individual user to multiple users in big operating industry. The key feature of this software is the GIS Viewer, which allows the user to view the respective locations of all their installation and CP Components.

We can expect more frequent corrosion testing of above-ground tanks going forward. This will head off potential problems with the tanks before they become so big a tank replacement is necessary. New materials will be developed and used for building these tanks; focus will be placed on mold- and mildew-resistant materials, as well as rust-resistant materials. Higher-grade protective coatings for the interiors of the tanks will be developed and used to keep corrosion at bay. Soil testing will be done before installing a tank to make sure the soil does not contain highly corrosive materials; if it does, tanks will be built on platforms that will allow them to avoid contact with the ground. These techniques are already starting to be used in government projects, particularly the testing of soil before installing a tank. Does this help, Prevent, under the Tank Bottom Plate issues?

BARTHAUER

Barthauer Software GmbH
Software for geoinformatics and water 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 Microstation, Intergraph Geomedia)
- Asset registry
- Condition control and assessment
- Rehabilitation planning
- Asset evaluation, amortization
- Hydraulic masterplan
- Operation and maintenance

Barthauer Software GmbH is a medium-sized company that has been operating in the German-speaking regions of Europe for over 25 years. More than 1,000 customers are now using “Barthauer software”. About 40 employees are dedicated to the maintenance, development and support of the company's leading product, the database-driven pipeline management system BaSYS.

SAFETRACK®

...SAFELY CONNECTING THE WORLD®

Safetrack provides the cathodic Protection, Ground Circuit and Railway Industry with modern technologies for connecting cables to steel structure. The Pin brazing method were improved dramatically by Safetrack when the patented electronic were invented. The Pin brazing method is the perfect method to use in Cathodic protection system. Later the Highly appreciated new S4 Automatic brazing gun were developed and fast become the only

BSS TECH - EVENTS



“Together we are”- Mr. Vaseem J Sait & Mr. Saleem with guests



Sharing is Caring – Share your knowledge and listen to others too ...

Nadeem Sait – NACE CP Level IV, 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 on the planet. "Once we clearly understand of the client requirement and site conditions with the engineering expertise and over the years work experience with a thrive to deliver right thing at the first itself without a trial and error mind, right solution will flow automatically, says Nadeem. "We grew as the lead engineering company in the Corrosion and Cathodic Protection Industry. So extending the hands to new countries, identifying the right partners shall only accelerate the growth momentum". Today, BSS Technologies is not only a business that spans many offices in various countries, hold fully-owned manufacturing facilities in Dubai, Saudi Arabia, Malaysia, India etc. but also have positioned educated, knowledgeable and experienced staff to operate and run the engine, share the knowledge and work with Ethics & Principles.



“No Horses, No Jockies” – Team India with Mr. Ninad



We give time, we conceive then we deliver



“A world Leader in pipeline leak detection and simulation”

Leak detection

Atmos International (Atmos) provides pipelin leak detection and simulation technology to the oil, gas, water, and associated industries, including aviation. The company was founded in 1995 in the UK by the inventor of the statistical pipeline leak detection system – Atmos Pipe, now one of a suite of leak detection solutions from Atmos. These technologies are now implemented on over 700 pipelines in 55 countries, for clients including Shell, BP, ExxonMobil, Total, and Sydney Airport. With associated offices in the USA, China, Russia, Singapore, and Costa Rica, and local agents in 28 countries, the multi-cultural and multilingual team can provide effective support all over the world.

WE UNDERSTAND THE DIVERSE CONDITIONS UNDER WHICH ANTI-FOULING SYSTEM NEED TO PERFORM

Seawater handling systems require antifouling system to reduce or nullify the fouling effect due to the seawater containing several marine organisms which enter the equipment along with the seawater and deposit and flourish on the parts of the equipment. These macro and micro marine organisms such as sea worm, molluscs barnacles, algae, hard shells like acorn barnacles etc stick to the surface of the inlet of the equipment and flourish over there, resulting in marine growth.

An effective anti-fouling system enhances the efficiency of marine vessels and offshore structures by preventing bio fouling. Different time of system includes-

1. Conventional Grid Anti Fouling System
2. Strainer System
3. Skid Mounted Anti Fouling System



Skid Mounted Anti-Fouling System

The cathode is formed with an insulated steel frame containing copper and aluminium anodes making use of impressed current system basics. The anode/cathode unit is suspended / placed at the pump inlet so that all the water entering the pump must pass through the electrode unit. Dosage levels of copper ions are extremely small and measured in micrograms per litre of seawater. Therefore, relatively small quantities of copper are required to provide protection dependent upon the flow rate and life required. Anti fouling system consists of two parts "the electrode unit and the control panel. The electrode assembly contains mainly copper anodes. Aluminium Anodes are used in combination with copper in some applications. The actual number and size of the anodes is calculated to suit each installation and available space for mounting the electrode unit. The anodes are connected to the constant current rectifier located within a safe area.

Benefits of Anti Fouling System –

- Reduction in power requirements
- Low maintenance system
- No handling or storage of chemicals required
- Environmentally acceptable

For variable pump flow, an intelligent logic is utilized in power and flow supply to provide right dosage of ions. Anti fouling systems can be prepared with logics to control automatically the production of ions and dispatch of ions depending on the variation in flow rate. The system is intelligent enough to decide the production from minimum to the maximum designed while the flow is zero to the maximum for the pump.



FAST FACTS

More employees call out sick on Friday than any other day of the week.

69 %



ELMED Dr. Ing. Mense GmbH
Weilenburgstr. 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



JPAC Technologies Pvt. Ltd.

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
- ✓ 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
- ✓ Enterprise IT Applications like ERP / CRM / SCM / Business Intelligence



Images talks *OUR* Success story



PYRAMID ANODE - Hei Cable Come Sit Beside Me, I have room for you...

INSIDE FACTORY



They break our hearts – always they keep us separate !!!!



You are right – our body doesn't sweat – but our brains do !!!!



I can change your shape – you were Square and I made you round !



Your smile is our strength



Inside Laboratory



Our Heart and Mind Melt the Solid Metal ..



**Technology
for Pipelines
Corrosion Prevention**

www.dekotec.net

We preserve values

**Tradition
Competence
Innovation**

**Quality
"Made in Germany"**



DEKOTEC – FIELD ACTIVITY

- 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



Giving Back to the community – not only a social responsibility, a social commitment too.....

At Bin Sari Specialized Technologies. (BSS Tech) the CSR initiatives are focused on empowering communities by educating and giving them means of livelihood and feeling of self-respect. Our initiatives and outreach activities are aligned to the BSS Tech way of doing things for the community. What comes from the people goes back to the people many times over. An important component of BSS Tech's outreach program is training and providing employment opportunities for the differently-abled and supporting educational needs reaching out to the underprivileged segments of society and using our core capabilities wherever possible. BSS Tech's CSR activities are based on three broad indicators of development namely:

- **Human Capital** - This refers to the individual's innate abilities, talents, knowledge, skills and experience that make them economically productive and applies to our employees as well as the communities we work with.
- **Social Capital** - This indicator focuses on creating social wealth for the communities that we partner with.
- **Economic Capital** - There is a huge focus on creation of livelihood opportunities for the people which is directly related to the economic development of the country. BSS Tech undertakes initiatives and projects which are geared towards livelihood creation, employability and entrepreneurship to empower communities.

Projects under these three core areas focus on education geared towards employability, employee volunteering and employment generation.



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



Remote Monitoring & Control System



Transformer Rectifier



We make DC Powersupplies meeting any rating and any Specification







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*
- Wireless Data Acquisition and Visualization System*
- Electrical Grounding Backfills*
- Holiday Detection Systems*
- TR Units & RMCS*
- Scada & Telecom*
- Gas Flow Measurement & Regulation*
- Pipeline Information Management System*
- Construction & Manufacturing*
- Marine Cathodic Protection*
- Calibration and Certification Services for Test and Measuring Instruments*

Can you solve this puzzle?

Study the first row of numbers, find the pattern and apply this on the other rows. Are you clever enough to solve this cool puzzle?

		5	3	3			
		8	6	2	4	2	
4		1	6		5	8	10
		8	2		5	9	
		9			11		

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

ABU DHABI : P.O. Box : 33464, Tel: +971 2 446 0700, Fax: +971 2 446 0800

DUBAI : P.O. Box : 52455, Tel: +971 4 886 7015, Fax: +971 4 886 7013

bsstech@bsstechnologies.com, www.bsstechnologies.com, www.corrosion.ae

Sajid Haroon

Editorial Chief, BSS Technologies

Email: sajidharoon@bsstechnologies.com

Printed at:

Pen Printing Press, Ajman

Tel: +971 6 749 9250

Fax: +971 6 743 9260

Email: penprinting@gmail.com