SFL Connect

A Seal For Life Industries Publication

ONE COMPANY, INNOVATIVE
TECHNOLOGIES, ULTIMATE PROTECTION

ULTIMATE CORROSTON
PROTECTION
WITH A GROWING GROUP OF BRAI
SFL IS READY TO PROTECT THE FL
AND INCREASE ASSET LIFETIME





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A NOTE FROM THE EDITOR

The past two years have slipped by and yet at the same time, so much has happened.

Businesses set out with their 2020 plans; shows were marked on calendars, meetings set, travel planned. Product developments initiated, research panels prepared, testing booked.

And here we are in 2022 with a slight feeling that it was just 2020.

Well Seal For Life is one business you might just be thinking, "when did they get so big?". In December 2019 we were home to 5 fantastic brands, we then became 10 in January 2020, rounding out that year as home to 12. 2021 saw us grow to 14 and that is how you meet us today.

One Coating Company, Protecting the Future.

Extending asset lifetime through asset protection remains our focus and we have not just a wealth of experience, but a fantastic round up of products to help industry achieve that. Creating a world for our children to be proud of is vital, one that they will treasure for years to come.

Whether it's infrastructure protection or renewable energies, pipeline protection for oil, gas or water, thermal insulation or offshore platforms, the chances are we have a solution to meet your need. Our people are great, they are experienced and they can help. So pull up a chair and sit awhile, let them help you to provide the vital protection your assets need; let us help you protect the future.



Green Energy



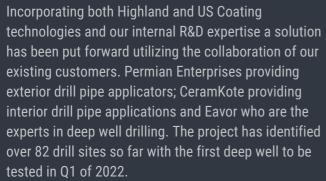
Never one to shy away from a challenge, Team Highland/SFL have been hard at work this past year, coming up with an exterior and interior coating solution for deep well drilling, for thermal wells with Eavor.

Geothermal energy is like an Earth driven radiator, no harsh chemicals, just using the Earth's heat to provide energy. To do so, you have to drill deep, but to drill this deep you need to provide insulation protection to the drill pipe/ equipment, as well as extreme temperature, abrasion and pressure challenges to both the internal and external coatings.



Established in 1989, Highland specializes in high temperature, solvent-borne dry-fall "spray safe", chemically resistant, CUI, OEM, and special function coating technologies. They pride themselves on their research and development, exploring new concepts and materials and working with clients to find the best solutions.

Highland's diverse portfolio is backed by NACE and SSPC certified sales staff and technicians, offering customized systems and support for a wide array of industries; OEM, Oil & Gas, Petro-chemical, Hot Mix Asphalt & Aggregate, Power Generation, Feed & Grain, Tanks & Terminals and Pipeline to name a few.



Products heading out to the first well being drilled in Q1 include Highland 74-INS-AR, Novolac Liner technology for the internal pipe joints with added abrasion resistance and Highland 6521-INS, 100% solids Novolac technology with insulation package for the external of the pipe joints offering insulation and abrasion resistance (this is a combination of Highland and US Coatings technologies).









Project Win

CANUSA SCARGUARD PROVIDING PIPELINE PROTECTION IN NORTH CAROLINA

A 2400-foot section of a 30-inch OD gas pipeline was to be installed under the Rocky River in North Carolina by Horizontal Directional Drilling (HDD).

The rocky geology under the river created tough drilling conditions, with several months required for drilling and reaming the borehole to size for pipeline pullback.

The high risk of damage to the pipeline anti-corrosion coatings during HDD pullback in rocky terrain, and the time and costs associated with rework, re-drilling, or pipe replacement if the coatings become damaged, necessitated a high-performance Abrasion Resistant Overcoat (ARO) for protection of both the mainline and field joint coatings.

To protect the **Powercrete® DD** mainline coating and Canusa-CPS *HBE-95* field joint coating during the tough HDD pull, Canusa-CPS offered ScarGuard®, a fiberreinforced composite mechanical protection system.

Typically applied as a 2-layer system, a 4-layer system was selected for this project due to the rocky terrain, tough drilling conditions, size of the pipe, and tight construction window. The 4-layer ScarGuard® system can be applied just as easily as a 2-layer system by simply switching the spiral wrapping overlap from 50% to 75%.

SFL Technical Support and distributor, Consolidated Pipe and Supply, worked with the contractor to train and certify all the applicators.

The **ScarGuard**® coated pipe was successfully installed underneath the Rocky River and passed both the visual inspection and coating conductance testing.

The owner and contractor were happy with the technical support provided and the performance of **ScarGuard**® during the difficult HDD installation.





HOW MUCH CAN YOU SAVE

if you protect your pipeline with Polyken Protective Tape Coatings?

MORE-PROBABLY A LOT MORE THAN YOU THINK.

We wouldn't want you to assume that Polyken P tive Tape Coatings are priced lower than all coatings. They aren't, and may sometimes even little more applied than lower quality coatings.

ns why we can promise a sub-

- 2. Uniform thickness and quality;
- 3. Rugged, long-lasting protection from corr
- Application right from the roll—no heat, thinne or solvents, no drying or clean-up time required;
- High speed, low-labor power taping for "big inch" as well as "littlest inch" installations;



PROTECTIVE COATINGS

ARCHITECTURAL RECORD FEBRUARY 1956 32

POLYKEN ADVERT FROM 1956







POLYKEN

PROVIDING PROTECTION FOR MORE THAN 60 YEARS

For more than 60 years, Polyken Tapes have provided protection to pipelines. With manufacturing now in 3 plants: US, Mexico and India, Polyken has a global reach with well established distributors.

Easily applied, Polyken coating systems consist of polyethylene films laminated with butyl-elastomeric adhesives with in-service performance from -20°C to 120°C (-5°F to 250°F). There are field-joint systems, YG-III and Synergy plant-applied systems, high temperature products and pipeline rehabilitation coatings.

Polyken products continue to have a strong global business because of the millions of miles of coated pipe performing today.

In the US and South America, Polyken Synergy and YG-III systems have been supplied to major pipe coaters for over 40 years. A major benefit to the YG-III system is that it gives engineers the ability to select from more than one system thickness for project compatibility.

Polyken continues to be used for major pipeline projects:

- 80 miles of 108" water pipeline from Riverside, California to San Diego, California - through canyons to city streets.
- 40 miles of 108" pipeline from Lake Mead to West Vegas with 1" of cement added on top.
- 12 years in to a project in Utah travelling through the mountains protecting anywhere from 48" to 66" pipelines.
- In Argentina our customer TGS has been utilising Polyken 980/955 and 1027 liquid adhesive for rehab/recoating of their natural gas transportation network sine the early 1990's. So far they have recoated more than 220KM of 30" and 36" diameter pipeline with a further 50-60Km planned each year for the next five years.
- In India, YG-III was used on a total of 105KM of brand new water pipeline in the state of Rajasthan. For this major pipeline project, Polyken was selected as the perfect protection solution.





































Protecting Renewable Energy Infrastructure

The offshore wind energy industry has seen enormous growth in recent years, and it doesn't look to be slowing down anytime soon. Those in the industry will know the stats: the offshore wind energy market is forecast to reach \$42 billion by 2025, with a projected compound annual growth rate of 13.6% from 2020 to 2025.

Evidence of the increased focus on achieving clean, renewable energy can be seen worldwide. A skim through renewable news sites reveals new projects being commissioned on an almost weekly basis. In January 2021, U.S. President Joe Biden signed an Executive Order that includes doubling offshore wind power generation in U.S federal waters by 2030, and his recent infrastructure plans include considerable attention to green energy sources.

In 2021 the United Kingdom government—already home to the largest offshore wind market in the world - has invested over £900 million in British offshore

wind manufacturing plants, the highest on record since the industry arrived in the UK in 2000. The UK offshore wind industry committed to creating tens of thousands of jobs with 26,000 already working in the sector and this set to increase to 69,000 in the next five years.

Vietnam has big plans to increase its proportion of power from wind and solar from 10% in 2019 to 42% of the national grid by 2045. Although most current locations are onshore, the country is already making great strides to achieve that goal ahead of schedule, with the next big push in offshore wind off its southern coast.

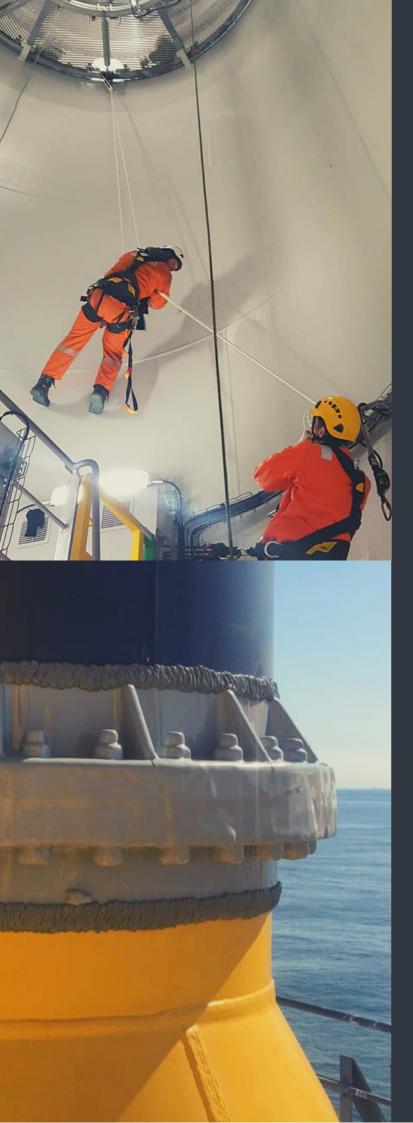
With that progress, of course, comes the need for preventative maintenance and protection.

This push for increased offshore wind energy takes advantage of the power of the wind produced at sea,









moving at a much higher and more consistent speed thanks to the open space and absence of structures. What is a benefit to production, however, poses a logistical disadvantage to construction and maintenance along with an aggressive corrosive environment.

While many offshore installations are currently situated near the shore in predominantly shallow waters, the next few years will see a move to deep water installations further away from the coast, as space becomes an issue. These developments will see stronger winds and bigger waves, adding pressure to not just the installation phase, but ongoing operation and maintenance.

On an offshore wind turbine, corrosion can creep into many different areas—monopiles, ladders, walkways, boat landings, guard rails and rotor heads—and compromise the overall integrity of the structure. Protective coatings that can be applied to prevent corrosion from developing, or halt its progression, are essential to providing long term asset protection.

A major area of consideration is surface preparation. The need for aggressive blasting to apply protective coatings is a burden in these confined and hostile environments, let alone the contamination to surroundings. Preventative coatings that can mitigate this issue are a major step forward, combine that with ease of application and minimal manpower and offering benefits to time, longterm protection, costs and production.

ENTER EASY-QOTE AND OXIFREE TM198

Easy-Qote is a polymeric coating born of the idea that a corrosion solution could be applied simply as a sticker rather than painting or spraying. The product Is 100% safe for both user and the environment and simple to apply.



Self Adhering Coating Solutions



The design life for EasyQote is a minimum 30 years in preventing corrosion, but it comes with the added value in doing the job once and in the safest possible way. All it takes is a wire brush, a piece of the Coating Repair Patch that is already pre coated as to the substrate and the job is done. Its as simply as applying a structural band aid.

There are many situations that require the ability to remove the existing protective coating for maintenance, such as addition of new structural bolting, welding or steel repairs or simply moving parts of the structure (such as a hydraulic fitting).

With minimal surface preparation, Oxifree TM198 is applied in a fluid state and quickly conforms to the asset shape, protecting these critical areas from corrosion spread.

Additionally, the coating can be applied in-service at elevated surface temperatures, allowing equipment to remain operational during application.

Both innovative coating technologies afford operators the change to protect their assets for the long term, making the move to renewable energy that much more sustainable for the future.

You can learn more about both brands at www.sealforlife.com



Solar Energy Infrastructure Protection

The growth in renewable energy doesn't just stop with Wind, the global Solar energy market was valued at \$52.5 billion in 2018 and is projected to reach \$223.3 billion by 2026.

What issues are the Solar industry facing?

Where solar farms are using piling, they are seeing corrosion issues due to corrosive soil conditions and soil composition such as rocky, wet conditions. The issue then becomes the piling needs replacing early into the lifetime of the structure. Any replacement of structure will incur labour and material costs, alongside disruption to energy production.

The ideal solution is to provide protection to the piling prior to installation.

Galvanized steel, whilst an option, typically doesn't perform well in corrosive soils or mixed soil conditions. Epoxy protection has long cure times and requires multiple coats. Cathodic protection installation is an option but carries with it expense.

The ideal solution is to pre-coat the piling with a polyurethane coating which has fast cure times, can withstand mixed soil conditions, has outstanding abrasion qualities and carries a long service life in situ. It's extensive use in the water pipeline industry demonstrates its longevity with many applications into their 50+ year of service life.

This image below shows LifeLast DuraShield 110 applied to Solar H piling, the type of piling used in a large amount of solar farms in North America.







One coating company protecting the future

With a growing portfolio of high performance products, Seal For Life offers innovative corrosion prevention and thermal insulation technologies for infrastructure protection.

A track record of more than 60 years, always pushing the boundaries to develop new solutions for the challenges of tomorrow.

sealforlife.com

















Brand Highlights

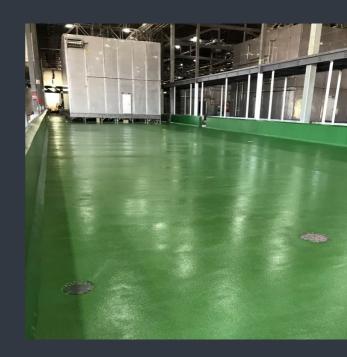
VERDIA - PROVIDER OF FLOORING SOLUTIONS

John Soules Foods was established in 1975 and is the nation's leading manufacturer of ready-to-cook and full cooked beef and chicken products, as well as fully cooked breaded chicken. Based in Tyler, TX, they have production facilities in both Texas and Georgia, and one new facility being constructed in Alabama.

Flooring contractor, T.W. Hicks from Corinth Texas secured the job to provide Verdia's High Performance VerdeFloor SF Flooring System to their new facility in Valley, AL.

This new site will allow JSF to product 200 million lbs. of fully cooked chicken products annually.

The total square footage of the VerdeFloor SF installed was approximately 180,000 square feet. The colors were a mix of Green, Blue and Gray depending on the different areas of the plant. In total the project took a crew of 24 about 2 months to install.





DHATEC END CAP PROTECTION







Dura-Bond Industries, Inc recently partnered with Seal For Life's, Dhatec product personnel to come up with a solution for protecting the flared ends on their 20" pipe.

End caps are used on pipelines to prevent damage to the ends of pipe and, if the pipe is coated, to protect coatings around the pin ends to prevent damage during transportation and handling. The cost of a nonstandard bevel is significantly higher than that of a standard bevel, not using the right protective solution can lead to costly rework or even disposal of the pipe. Dhatec is one of the few solutions on the market that could address this issue.

Dhatec FPL 10.75 Flared End Pipe Type Cable were recommended. The end caps needed to be strapped to the end of the pipe and an additional cover was recommended to be strapped around the end cap to hold in place. A thick rope was then wrapped around the strap to protect the flare ends from any further damage.

A Dura-Bond site visit after transportation proved the end caps stayed in place and the coated pipe was successfully transported with no damage to the coating or flared ends.

OXIFREE TM198

Oxifree recently provided TM198 anti-corrosion coating for the protection of 3 x 28" pipe clamp assemblies at the NAM Zuiderpolder Knooppunt gas site in The Netherlands.

TM198 was applied over the complete clamp assembly/pipe support, stopping above the concrete beam. Using this protective coating will allow for movement of the pipe on the support, whilst providing total protection from the ingress of atmospheric contaminants.





STOPAQ TOTAL SOLUTIONS

In 2021 we completed a year long gas pipeline project in Croatia utilising a number of SFL products to provide a total protection solution.

The work was conducted on the new connecting main gas pipeline Zlobin - Omišalj DN800/100 for the LNG Terminal Krk.

At the crossing under the railway near Zlobin and the crossing with state road D102 (Island Krk), the DN800 pipe runs inside DN1200 casings. The end user Plinacro d.o.o. wanted to secure the pipeline by filling the casings with Stopaq® Casing Filler which showed to be a more effective and reliable solution for corrosion protection compared to conventional methods.





There were various challenges for application due to the difficult approach to the filling station, but they were overcome thanks to remarkable collaboration between SFL's personnel and the contractor.

The project also included field joints, bends, flanges and risers throughout.

In addition to Casing Filler being used, Stopaq Wrappingband and Outerwrap were utilised and, due to the rocky areas, we also added Outerglass Shield at field joints and SFL RockShield for the main pipeline that runs underground, subsea and above the ground.



Welcome to Mascoat

In December 2021 Seal For Life was pleased to announce the acquisition of Mascoat.

Mascoat, based out of Houston, TX, has been a leading manufacturer of thermal insulation coatings, anticondensation, and sound damping coatings since 1995.

The company serves a wide variety of industries with its coatings such as industrial, marine, commercial, and automotive applications.

Mascoat has helped to develop new ways to solve corrosion under insulation with its insulation coatings and pioneered the use of its sound damping and anticondensation coatings to the commercial and yacht sectors. The company has locations in The Netherlands and China, in addition to its base in Houston.

George More, President, CEO, and Founder of Mascoat, said, "We are delighted to become part of the Seal For Life platform.

The combination of Mascoat's industry-leading insulation and protective coatings with Seal For Life's extensive coatings portfolio and global footprint will allow us to reach additional markets and customers, and will provide customers even more high-performance solutions to protect their critical infrastructure assets."

Jeff Oravitz, CEO of Seal For Life, remarked, "We are very pleased to welcome Mascoat to the Seal For Life family, and look forward to working with them to accomplish our vision of being the leading global provider of protective coating and sealing solutions for infrastructure markets.

The incorporation of Mascoat's highly specialized industrial coatings companies into the Seal For Life platform increases our global scale and the ability to meet the needs of our many global customers."









Brand Highlights

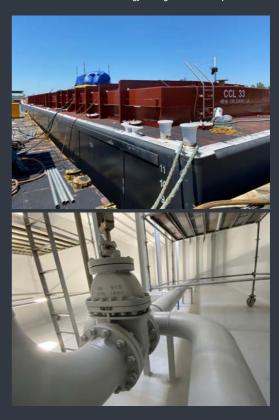
US COATINGS - TECHNOLOGY FOR LONG TERM CORROSION PROTECTION

US Coatings GripLine 6700-HB Novolac Liner has been applied to fleet of tank barges by distributor CSS Coating Systems and Supply in Baton Rouge, LA.

These tank barges provide long and short term charters along inland waterways and undergo higher heat when transporting as the material must be heated by internal coils for easier offloading. These heat coils have been known to burn off standard epoxies as well as other competitor novolacs, but GripLine 6700-HB meets the needs with as it can withstand caustic cargos as well as higher heat exposures up to 350F.

This 80% solids formulation is one of its kind in that it allows for a higher film build (20mils) applied in one coat using standard spray equipment. A simple and highly effective solution.





WASTEWATER PIPELINE PROTECTION







LifeLast 210-61 lining/coating and 210-61 /310-61 jars and cartridges have been used to provide protection for wastewater pipelines supplied by Northwest Pipe Company for the North Vancouver Wastewater Treatment Plant update.

This ongoing project has been initiated to provide better protection to the environment. The design Treatment Plant has been updated to provide a tertiary treatment which is a filtration system that removes additional substances from treated wastewater making it much cleaner before it is released into the marine environment.

LifeLast DuraShield 210 is a USDA certified 48% biobased product and meets AWWA C222 standards for steel water pipes and fittings, making it an ideal solution to provide this vital protection to the pipeline, whilst protecting the environment.

This project is ongoing, with a further 2 years until completion.

Brand Highlights

ANODEFLEX 1500 - LINEAR ANODE TECHNOLOGY EXPLAINED

Anodeflex 1500 is a long-line, impressed-current flexible anode for cathodic protection of buried pipelines, in-plant piping and of on-grade or buried storage tanks.

The conductive polymer flexible anode uses a long line of successive secondary anode and conductive polymer as its basic material.

The conductive-polymer coated copper conductor allows current to flow long distances down the center conductor while allowing sufficient cathodic protection current to continuously pass through the conductive polymer, along the length of the anode.

The assembly consists of a central copper conductor coated with a conductive polymer compound, which forms the anode and seals the copper conductor from chemical attack.





FLAME CONTROL

Since 1974, Flame Control has been providing innovative fire-retardant coatings to meet strict building and fire codes. Featuring paints, varnishes and mastics, these thin-film coatings provide rated protection while still maintaining the aesthetics of traditional architectural coatings.

Flame Control also offer heat resistant paints and primers under the TemperKote brand; coatings designed for harsh service environments with high temperatures up to 1500'F such as furnaces, tanks, heat exchangers and stacks.







AMPP Corrosion

AMPP Corrosion Conference was live this year and it was good to be back!

A long standing event, this show is solely focused on preventing and mitigating corrosion. It was the first time we have been able to showcase all 15 brands in the group, in one booth, and it was great to see our broad range of solutions on show.

Our teams thoroughly enjoyed meeting with new and existing clients and contacts after such a long period of time. We look forward to next year!







AN INTERVIEW WITH OUR CEO, **JEFF ORAVITZ**

What is your background?

My entire career has been in the coatings industry (37yrs) starting in the R&D lab at PPG in Pittsburgh as a formulating chemist. For 20 years I worked my way up through general management there before leaving in 2005 to lead a coatings services business, MetoKote. MetoKote, a large customer of PPG coatings, coated and delivered parts for many customers. I became CEO of MetoKote in 2011 and ultimately sold the business to PPG in 2016.

In 2019 I retired from PPG, but six months later got a call from Arsenal Capital and here we are today - over 2 years into leading Seal For Life. It's a great business with great people; we have been very fortunate bringing together 9 acquisitions since July 2019.

What are you excited about for the future of SFL?

Well first off I want to reflect on what we have achieved in an incredibly tough couple of years. We have built a fantastic business with outstanding leadership and management team during a pandemic. I am most proud of how we have integrated a cohesive and growing platform in this time, it hasn't been easy, but huge credit goes to everyone involved for coming together during these difficult circumstances.

But what that does mean is we have a collection of brands creating a very unique platform to protect critical infrastructure assets, from insulation coatings to viscoelastic adhesives.

I don't see any other company with the breadth of technology that we can provide at Seal For Life. It gives us tremendous capability to work with customers, providing solutions they need to protect their critical infrastructure assets.

Where do you see the biggest challenges and opportunities happening?

We see the push to renewable energy and how this is accelerating rapidly across the globe, and SFL is primed to provide the critical sealant, corrosion prevention and protection that renewable energy infrastructure needs. We are already doing it through our brands Stopag, Easy-Qote, Oxifree and LifeLast, along with Canusa and Covalence in the District Heating and Cooling market, and see this as an opportunity to grow the work SFL is doing in this space.

If you look at our portfolio you will also see a highly sustainable set of products. LifeLast was one of the first 500 companies in the US to earn the right to display the USDA Certified Bio-Based Product label on its' DuraShield products. Verdia also has USDA Certification for its' Bio-Based polyurethane floorings.

I see SFL as a leading company of sustainable product lines. Our product portfolio has tremendous sustainable characteristics, including many 100% solids and 0 VOC materials, and they provide critical protection solutions for assets.

That is unique to SFL.

What are your priorities for the business right now?

We have executed numerous acquisitions in a short period, integrating a wide variety of global brands under the SFL banner.

Now its time to leverage the opportunities this brings, providing a suite of products to our customers, especially those customers with multi-technology needs.

We are already seeing evidence of this (very successfully) in India, Asia, UAE and the Americas, protecting critical infrastructure assets for our customers as a total solutions provider.



What is one word you would use to sum up SFL?

Diversity – but it is more than the typical definition.

For a company of our size, I have not seen this much diversity in any other business. It's not just in our people, but our geography, our markets. We offer coatings and sealants for a wide range of assets, from refineries to plants, high temperature to CUI, above ground, below ground, under water. The list goes on and the end use of our products is all over the world, across all markets. We are seeing increasing growth in protection needs for freshwater infrastructure in emerging markets and countries, where water desalination pipeline and assets are being implemented.

Add to that district heating and cooling growth along with renewable energy - our growing product platform diversity is unique to SFL. Our products range from liquid to multi-layer tape to visco-elastic.

We have an incredibly diverse set of platforms and technologies, in addition to our highly diverse team across many cultures and countries.

When you are at shows, meeting with investors, presenting to potential acquisitions – what is one thing you find yourself referring to most?

It comes back to our tagline – One Company, Innovative Technologies, Ultimate Protection.

And the key word is Innovation, it is the hallmark of our company. I have found it present in every part of our business and relevant to all life stages of our products. Our technical capabilities are marvellous, regardless of region or product line. It is at the heart of our business.

JEFF ORAVITZ

Take 5

IT'S TIME TO GRAB A CUP OF COFFEE AND TAKE 5 WITH OUR SFL WORDSEACH

OEN Y U R В Ε N R S Ι F Ε К 0 \times 5 V G Α Ν D K 0 Ι В 0 Н Т S Ι Ö Ι 5 Ö Т Ε Ε Т J Т Ε Т \times J Z \subset Α Ι D Ε W Ö Ι V Τ J 5 S Z D Т × Υ Ι O J G Ί Р 0 N Т Υ E Н \subset X Т Ö Н I J Ö т Ε Т G G Z G S T × Z Т W W \times w \subset Ε 5 G \subset В J J Q Q Z L В E E W CHANICALPROTEC

Can you find the 12 hidden words?

Atmospheric

Corrosion

Innovation

Pipelines

Cathodic Protection

Field Joints

Mechanical Protection

Rehabilitation

Coatings

Infrastructure

Offshore

Renewable Energy



One Company. Innovative Technologies. Ultimate Protection



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