



The Horizon

TOSL's OFFICIAL NEWSLETTER

I S S U E 1 1



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Increasing Empathy and Compassion in the Workplace

Every day at the office we encounter a multitude of situations which requires some form of attention and action. Ninety-nine per cent of the time these circumstances involve dealing with people. So how do we respond? Is it that we rush to address the situation without actively listening due to our hectic schedules or do we take a moment to hold the conversation by giving our undivided attention?

As alluded to in the quotation by Leo Buscaglia, empathy is crucial to forming relationships, minimizing stress and most importantly demonstrating that we genuinely care about others. When we take the time to understand one's state of mind and put aside our tasks, problems and thoughts then our people will recognize that they can openly talk leading to a more positive environment.

Over the last six months, our Management and Leadership Teams completed the **“Developing and Implementing an Outward Mindset”** Workshop which allowed us to understand our mindsets (inward vs. outward) together with providing the tools to deal with challenges (both visible and not so visible) when interacting with others both professionally and personally. By developing an Outward Mindset, it drives us to become more curious which leads to sessions for us to listen and learn, offer guidance, involve others, give feedback, provide responsibilities, and acknowledge our mistakes. Thanks to this training, it has enabled us to intuitively understand that everyone has challenges with the need to see ~~people as people~~ and realize that others matter



Lisa Mohammed
Deputy Managing Director
TOSL Engineering Limited

like we matter. Empathy and compassion are often overlooked or unimportant. However, as the Leaders of TOSL, our task is to now take the teachings from the Outward Mindset to hone the tools learnt thereby improving relationships which shall achieve a highly effective, happy, and successful company.

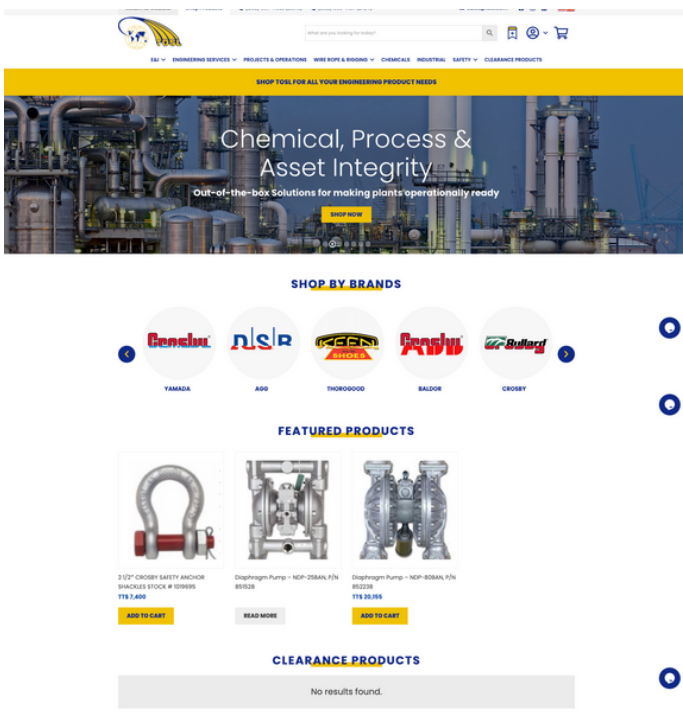
“Too often we underestimate the power of a touch, a smile, a kind word, a listening ear, an honest compliment, or the smallest act of caring, all of which have the potential to turn a life around.”
-Leo Buscaglia

Company News

Our Online Store is Live!

We've been tweaking everything to perfection for the past few months now and we are delighted to announce the launch of our online superstore. A one-stop shop to browse and buy a choice selection of our products from the top brands in the industry.

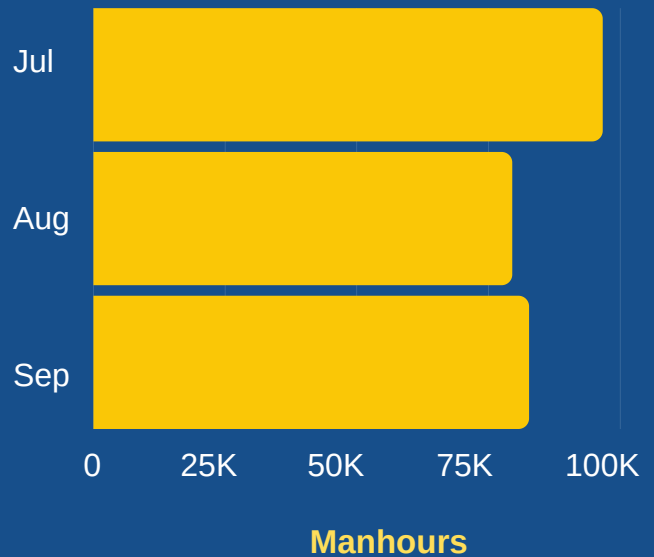
Visit us at shop.tosl.com. Please enjoy browsing through our new site, we hope you find something that suits your needs. Should you have any questions or concerns, we would love for you to reach out.



"Don't find customers for your products, find products for your customers".
-Seth Godin

HSSE STATS 2022 Q3:

- Lost Time incidents – 1
- OSHA Recordable – 2
- Medical Treatment Case - 1
- Manhours – 258,684



Report It!



If you have a concern about TOSL you can report it anonymously any time, 24/7 in the following ways:

Toll Free Hotline: +1 800 872-2281

OR

+1 877 RPT-LINE

OR

Report Online www.tosl.com

username: tosltd

Password: reportit

HSSE Lessons Learnt

HSSE

1

FACTS

- During a training session at an external provider's facility, an employee was in the process of lowering a 20-foot scaffold pipe to the ground, when the pipe slipped out of his hand. In an attempt to catch the pipe, he sustained an injury to his left shoulder.

2

IMMEDIATE ACTIONS

- IP was assessed by the training provider and was told to monitor the injury.
- TOSL was informed the following day and arrangements were immediately made for the IP to be assessed by a medical provider.

3

CONSEQUENCES

- Employee sustained a dislocated shoulder and radial nerve injury/ wrist drop.
- Lost Time Incident

4

LESSONS LEARNT

- To reiterate the importance of immediate reporting to ensure that the IP receives the best possible medical care in a timely manner.
- To ensure all hazards and control measures are communicated and understood by all.
- To ensure that the proper operational practice for lowering scaffold pipes is understood by all employees.
- To ensure that all Service Providers are clear on all HSSE protocols for TOSL.

5

COMMUNICATIONS

- Communicate incident to all TOSL's work crew on different sites during toolbox meetings.
- Review of TOSL's immediate incident reporting protocol with employees.
- Communicate TOSL's HSSE protocols with all Service Providers.

Quality Lessons Learnt



1 WHAT HAPPENED

- It was identified through audit that employees were not fully trained to perform their assigned tasks.
- Training Plans were not developed for these employees in the organization.

2 IMMEDIATE ACTIONS

- Department Managers completed outstanding performance assessments and training plans for their employees.
- Included approved training in budget.

3 CONSEQUENCES

- Inadequate training resulted in substandard performance
- Inefficiency in performing assigned tasks.
- Ineffective staff management

4 LESSONS LEARNT

- Ensure staff is trained to complete their job functions.
- Employees perform at their best when they are trained and competent to do so.
- Training identified as necessary should be included in annual budget.
- The implementation of a competence, training and awareness procedure should be a priority for our business.

5 COMMUNICATIONS

- Human Resource communicated with Managers to complete performance assessments and training plans for employees.
- Roll out the Training Procedure with the Management Team.

Product & Service Spotlight



SOLAR, WIND & HYBRID SYSTEMS

Clean, **Cost-effective Energy Efficiency and Renewable** Energy Initiatives

PRODUCTS

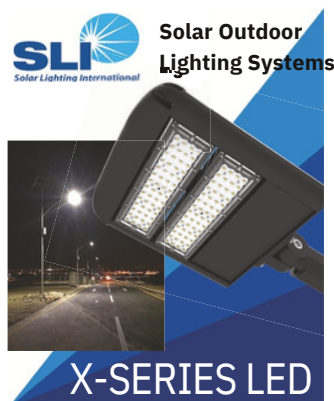
- > Photovoltaic (PV) Panels
- > Inverters & Battery Storage
- > Electric Vehicle (EV) Charging Stations
- > Solar Street Lighting
- > Building Management Systems
- > Power Management (SIEMENS)
- > Wind Turbines
- > Solar Charging Stations

SERVICES

- > Procurement
- > Installation
- > Operations and Maintenance
- > Take Out Maintenance
- > Troubleshooting
- > Integration
- > Wind/Solar Hybrid Installation

APPLICATIONS

- > Solar Water Heating
- > Solar Heating of buildings
- > Solar Distillation
- > Solar Pumping
- > Solar Furnaces
- > Solar Electric Power Generation
- > Solar Thermal Power Production
- > Rural Areas



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Product & Service Spotlight

About Axess Corrosion Inc



Axess Corrosion Inc provides the best-in-class monitoring solutions for integrity management projects within the Oil & Gas sector, by combining practical experience with technical knowledge. On-time, reliable, Corrosion & Erosion Monitoring and Chemical Injection & Sampling Solutions are designed for effective monitoring and chemical optimization. Axess provides their clients with the highest quality products and sensors which have been manufactured to meet industry standards such as NACE MR0175, ASME B31.3, EN10204-3.1 as standard, and ISO:9001:2015.

SERVICES

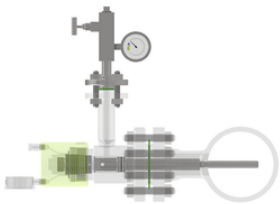
- > Online retrieval of corrosion coupons and monitoring probes
- > Site surveys and equipment audits of corrosion, erosion, and chemical injection systems
- > Coupon analysis and Probe data reporting
- > Corrosion and Erosion control well testing services
- > Hot-tapping of new access systems

PRODUCTS

- > Probes
- > Coupons
- > Transmitters
- > Sensors & Data Collection Units
- > Non Intrusive Monitoring Systems

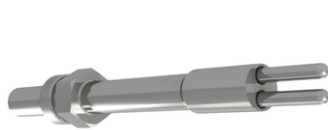
Transmitters – High Resolution Wired

The high-resolution, 20-bit measurement provides a fast response, obtaining corrosion rates in hours instead of days. Multi-function and can read all types of Electrical Resistance (ER), Linear Polarization Resistance (LPR) and Galvanic probes.



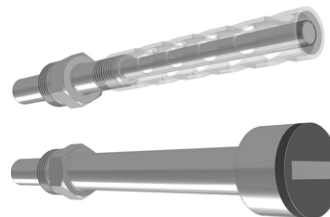
Kamikaze™ Sand Erosion Probe

The Kamikaze™ sand erosion probe is designed to monitor erosion in flowlines. Impingement effects of sand or other abrasive materials on interior surfaces can lead to rapid and severe internal pipe wall metal loss. Pipe bends or reduced diameter sections are most prone to erosion effects.



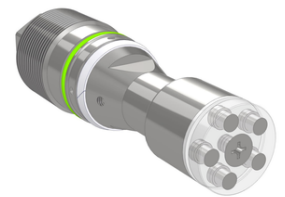
Linear Polarisation Resistance (LPR) Probes

The LPR technique allows the calculation of corrosion rate between anodic and cathodic half-cells where the connecting medium (the solution) is conductive. Measurements are made by applying a small voltage to a corroding metal electrode and measuring the resulting current flow.



Electrical Resistance (ER) Corrosion & Erosion Probes

Early detection of changes in corrosion is key to implementing and optimizing a robust corrosion control program. The Axess range of ER probes and instrumentation provides a highly sensitive method of detecting corrosion and erosion events.



AXBIO Bio-Film Coupon

Axess-Corrosion offers a range of bio probes for monitoring of Microbiologically Influenced Corrosion (MIC) in high and low pressure systems. MIC often goes undetected but ignored as microorganisms, including bacteria, algae, and fungi can accelerate corrosion by up to 1000 times.

Corporate Social Responsibility

TOSL - Where Community Comes First

At TOSL, we were able to see the power of our employees during a recent emergency operation where three of our neighbours on Second Avenue Marabella experienced flooding in their homes as a result of torrential rainfall on Friday 23rd September.

Staff quickly mobilised to provide the necessary assistance to secure property and life. Our staff assisted those in most dire need by helping to secure property and ensure all residents were safe. The division's pumps were used to control and remove excess water from the houses and surrounding areas. Staff began cleaning up once the water subsided and continued into the following day.

It was inspiring to see that in difficult times, our employees volunteered their time and skills to help those around them. We would like to recognise Marsha Noor, David Gang, Premchand Gajadhar, Wayne Gunness, Rondell Dookie, Pradeep Moon, Daryn Hosein, Brian Dyer, Jessie Mohammed, Ian Brown, Anslym Halls, Brandon Logan, Keshav Manorath, Anisha Mohammed, Ian Ramkalawan, and all other members of the management team and staff that came out to show support.

We are very proud of what you did! Thank you!



“Only a life lived for others is a life worthwhile.”
-Albert Einstein



Case Study - More with Less

A customer requested TOSL conduct a study to increase their compression facility's gas processing capability. The facility had two compressor packages, each with a Waukesha L7044GSI S4 (Series4) natural gas engine paired with an Ariel JGK4 compressor. It was found that the Ariel JGK4 compressor rated at 2540BHP, was not operating at its full capacity since the Waukesha L7044 GSI S4 engine was rated at 1680BHP. Various options for increasing the power to the compressor were investigated by TOSL.

The most feasible option found was to replace the existing engines with Waukesha L7044GSI S5 (Series 5) engines. The Series 5 engine was selected as a replacement since it had the exact physical and electrical footprint when compared to the Series 4 engine, but with a rated power of 1900BHP. It was determined that the extra 220BHP per engine can allow each compressor to process an extra 1.1 MMSFD of natural gas.

The L7044GSI S5 engine provides more power, better fuel flexibility, improved performance at higher ambient temperatures, lower fuel consumption and lifecycle costs, and longer service intervals than previous models. A common ESM2 control system and service parts across Series 5 simplify operation, maintenance, and troubleshooting. These power increases and performance improvements come without raising temperatures or pressures beyond other VHP models, illustrating why Series 5 engines are working smarter, not harder.

Improvements to the ignition system allow for 4,000-hour spark plug intervals with low-cost, non-precious metal spark plugs. This interval matched the 4,000-hour oil change intervals, hence reducing operating costs and scheduled shutdowns.

The performance analysis confirms the following:

	Series 4	Series 5
CONTINUOUS ENGINE POWER (BHP)	1680	1900
FUEL FLOW (SCFM)	230	235
CO ₂ e EXHAUST EMISSIONS (tonne/hr)	0.907	0.857
MINIMUM ENGINE MAINTENANCE PERIOD (Hours)	720	4000
GAS THROUGHPUT (MSCFD)	7.5	8.6

The summary of the engine performance data indicates that by using 2% more fuel, the L7044 GSI S5 can allow for an extra 15% natural gas to be processed with 6% fewer emissions. There was also a 67% lower number of planned shutdowns for services per engine when compared to the L7044 GSI S4 engine. Indeed, more power, more gas processed with fewer emissions, and less downtime for service are possible.


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THANK YOU

THE HORIZON IS THE OFFICIAL
QUARTERLY NEWSLETTER OF TOSL
ENGINEERING LIMITED. IF YOU HAVE
ANY QUESTIONS OR COMMENTS
PLEASE FEEL FREE TO CONTACT US

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Report Online www.tosl.com

username: tosltd

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