

## SMOOTH SAILING FOR BOAT LOCK PROJECT IN BAHRAIN



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# A WORD FROM 3C METAL'S PRESIDENT AND CEO

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As we pass the midway mark of 2022, 3C Metal's momentum with being awarded new and interesting projects remains strong. One of the most exciting awards we have received recently is for the construction of the prestigious oceanographic vessel, the Polar Pod. Led by French doctor and explorer, Jean-Louis Etienne, the Polar Pod expedition will launch in 2024 and will study the Antarctic Ocean. 3C Metal, in joint venture with French shipyard Piriou, has been awarded a contract by IFREMER to deliver the complete engineering and construction of the vessel. The project is in its early stages and more details will be shared in the near future. 3C Metal is proud to be involved in such an iconic project and we look forward to working with all the stakeholders to ensure its success.

The Polar Pod award is the perfect illustration of 3C Metal's diversification efforts. Due to our endeavors to expand our services and tap into new industries, our portfolio of projects outside of the upstream oil and gas industry continues to grow. Some recent examples featured in this newsletter include piping scopes for the Koeberg nuclear power station in South Africa, the construction project for steel boat lock gates in Bahrain and several projects for ballast water treatment system retrofits.

Since the beginning of 2022, we have maintained a high level of activity across the Group, both in our diversification activities and also for rig intake and rig reactivation projects. With the current volume of projects, recruitment and employee development remain a high priority. We want to ensure that we remain at the top of our game in terms of resources. This means hiring the best talent and ensuring our teams receive the best technical training so we can offer our clients the very best.

At a time when the world is facing political and economic uncertainties, I would like to thank our clients for their continued confidence in 3C Metal. It has been pleasing to receive not just repeat business but also multiple long-term contracts. As our clients respond to the changes in global energy demand, 3C Metal remains at the ready to deliver your projects with the same level of expertise, quality and efficiency that you've come to know and trust.

**Philippe Boy**  
President and CEO of 3C Metal



## 3C METAL UNDERTAKING FIRST MAJOR PROJECT FOR A NUCLEAR POWER PLANT

3C Metal has been commissioned by the US-based construction company, Jacobs, to undertake piping scopes for the Koeberg nuclear power station in South Africa.

Koeberg nuclear power station is owned and operated by Eskom. Located outside of Cape Town, Koeberg is currently the only nuclear power station on the entire African continent.

3C Metal's ongoing work is part of the overall \$1.2 billion (USD) program that Jacobs is carrying out to extend the plant's operating life. 3C Metal's scope involves steam generator replacement (SGR) piping upgrades in the turbine

hall for the plant's Unit 1 and Unit 2.

Prefabrication of the Unit 2 piping is nearing completion with majority of piping already delivered to Koeberg. Prefabrication for Unit 1 is scheduled for Q3 this year and will be followed by onsite work.

3C Metal is excited to be involved in this project and to lend its services to new areas of the energy sector.



## MOZAMBIQUE ENTITY AWARDED FIRST PROJECT WITH TECHNIP ENERGIES FOR FABRICATION OF SIX OFFSHORE ESDV SPOOLS

3C Metal Group's Maputo-based entity, 3C Metal Belmet Mozambique, has been awarded its first project with Technip Energies for the fabrication of six offshore emergency shut down valve (ESDV) spools.

The fabrication project is being conducted by 3C Metal's local team of artisans in Mozambique who recently completed a range of skill development training sessions at our specialist center in Cape Town, South Africa. The training sessions aimed to enhance their skills in welding and fitting as well as offshore safety training.





## SMOOTH SAILING FOR BOAT LOCK PROJECT IN BAHRAIN

In Q1, 3C Metal started a project to deliver a boat lock for a private villa community in Bahrain.



The project involves engineering, supply, prefabrication and installation of four steel boat lock gates (two with a weight of nine tons each and two with a weight of seven tons each). Additional items for fabrication have included walkways on the gates, grouted seal plates (duplex stainless steel), stoplogs for maintenance of the lock gates, water retainers for testing and floating pontoons in aluminum and composite decking. 3C Metal is also delivering the full hydraulic system and a full electrical and instrumentation system (including PLC).

Engineering and fabrication for the project are now complete and the installation phase is underway. The four gates have been placed in position and the next phase will include the installation of walkways, floating pontoons, a hydraulic system to actuate the gates (HPU, tanks, cylinders and tubing, emergency HPU) and the fully-automated boat lock control system. Testing and commissioning will take place during Q3.



## 3C METAL DELIVERING THREE BALLAST WATER TREATMENT SYSTEM CONTRACTS FOR STENA DRILLING

3C Metal has been commissioned by Stena Drilling to carry out three detailed engineering packages for the full ballast water treatment system (BWTS) retrofits for three of their vessels; Stena DrillMAX, Stena Carron and Stena Forth; as well as the supply and prefabrication for Stena DrillMAX and Stena Carron.

The engineering phases are now complete and fabrication is underway at 3C Metal Belmet's facility in Cape Town, South Africa. The Stena DrillMAX piping and structures are 99% complete, followed closely by the Stena Carron piping and structures which are 80% complete. The piping for the work ranges from 4-inches to 28-inches in diameter. The foundations for the BWTS filters and UV reactors are being fully fabricated along with supports for large diameter piping.

Part of the material is planned to be sent to Guyana for installation while the vessels are in transit from Guyana to Las Palmas, Spain. The piping installation, which requires isolating and draining the ballast system, is planned to

be carried out in 2023. All the pipe spools will be properly packed and preserved ready for shipment and storage.

The electrical scopes have also been awarded to 3C Metal which include the supply of cables, cable trays, consumables and mounting the hydraulic actuators on valves.

3C Metal would like to thank Stena Drilling for their repeat business for projects relating to BWTS retrofits. 3C Metal takes pride in offering our clients a variety of installation options aimed at reducing vessel off-hire as much as possible.



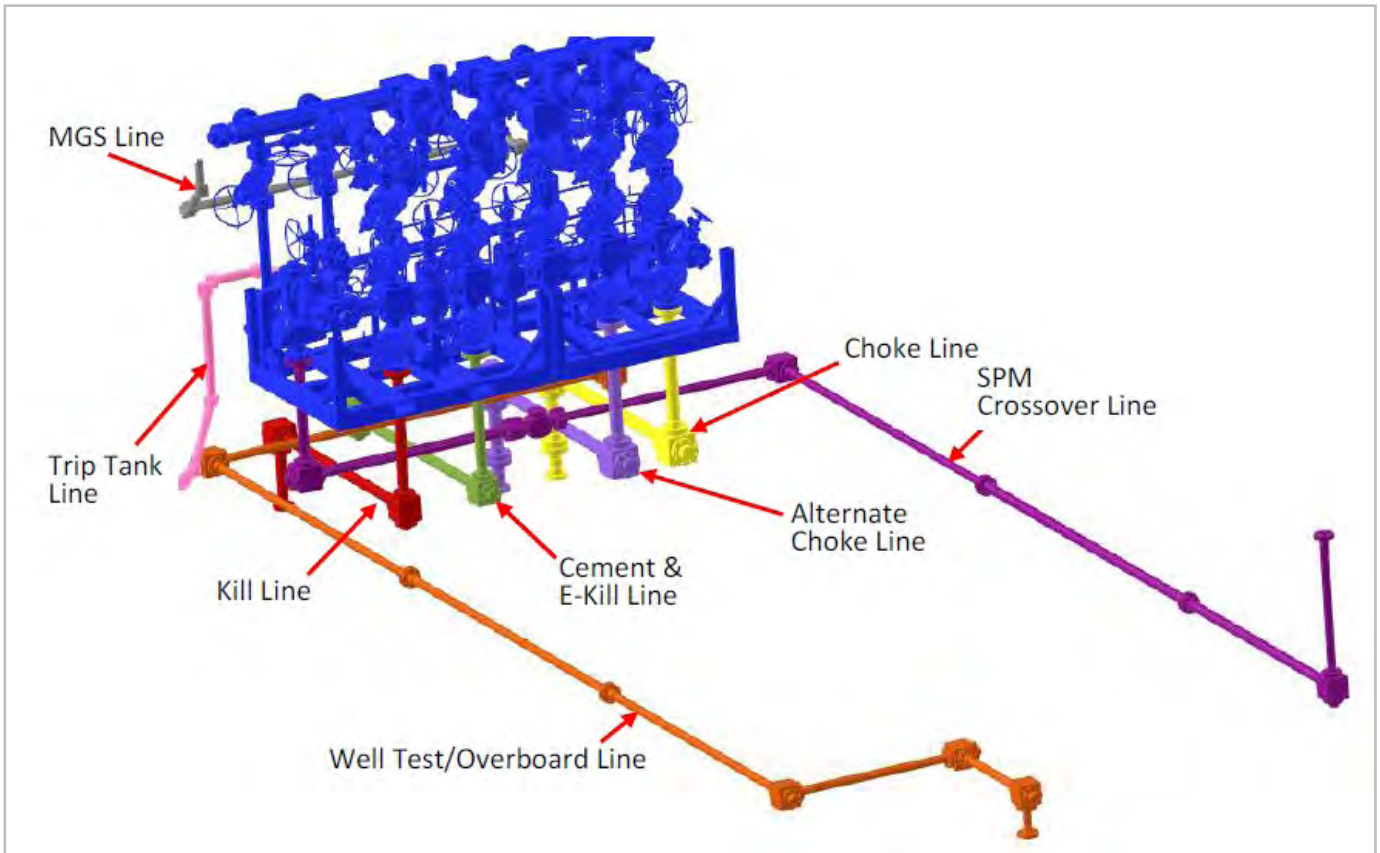
## SIX PIPING UPGRADE PROJECTS UNDERWAY WITH SRI ENERGY

3C Metal has been awarded six projects by SRI Energy for choke-and-kill piping upgrades for several drilling contractors in the Middle East.

The choke-and-kill manifold (4-1/16" 15K PSI) has been supplied by SRI Energy. 3C Metal is working closely with SRI Energy to design and fabricate the high-pressure (HP) piping system.

The scopes require compliance with API specification 16C. 3C Metal's facility in the Middle East holds the API 16C license for the design and supply of rigid choke-and-kill lines and also maintains stock of API 16C compliant piping.

Thanks to extensive 3D laser scanning and piping design experience, 3C Metal is able to deliver fully fabricated spool and block assemblies requiring no welding onsite. A site survey has been conducted on each drilling rig to detect potential clashes and ensure the manifold and piping system are designed to integrate seamlessly. The projects are underway and on track to be delivered within the timeline.





## UPGRADE AND REPAIR SCOPES FOR ULTRA-DEEPWATER DRILLSHIP

3C Metal was contracted to carry out upgrade and repair scopes on an ultra-deepwater drillship in preparation for an upcoming contract in Brazil.



In total 13 scopes were awarded to 3C Metal. The main scopes included the rig mud gas separator (MGS) U-tube piping, integration of a second MGS with buffer tank, managed pressure drilling (MPD) piping and structural upgrades, and upgrades to flare boom piping.

Two of 3C Metal's workshops were utilized for the procurement and prefabrication phase. The piping and structural steel were supplied from the workshop in France, with the valves and machined API components supplied by the workshop in Dubai. In total the work required 95 tons

of steel to be installed during the integration, including approximately 850 meters of low-pressure (LP) and high-pressure (HP) pipework.

The upgrade work took place along quayside in Las Palmas, Spain, and during the vessel's transit to Brazil. The 3C Metal team carried out the integration work onboard, over a period of nearly four months with the team reaching a peak of 72 personnel.

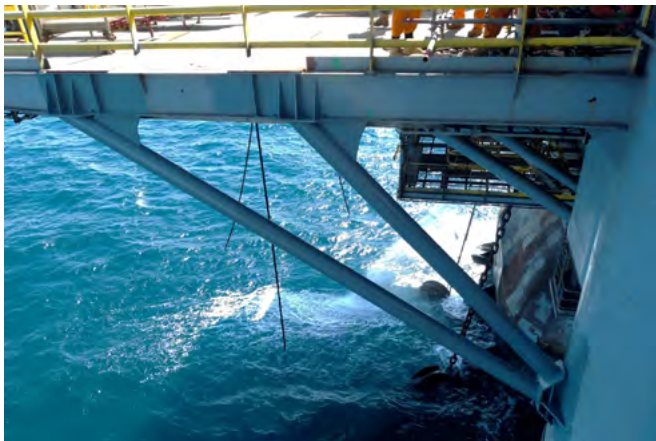


# RMR SYSTEM INSTALLATION FOR SEMI-SUBMERSIBLE DRILLING RIG CARRIED OUT IN AUSTRALIA

3C Metal Asia was commissioned to design, fabricate and install a platform for a riserless mud recovery (RMR) system onboard a semi-submersible drilling rig, located offshore Western Australia.

The scope of work included the design of the RMR platform reinforcement, the integration of the launch and recovery system (LARS) on the deck, the supply of piping material to the rig and the class review (ABS) of all supplied material and fabrication work. Prefabrication of the foundation and reinforcements was conducted in 3C Metal's workshop in Johor, Malaysia.

3C Metal partnered with a local Australian company, Weldtech, to provide tools and manpower for the installation. The installation was managed by 3C Metal and carried out entirely by Weldtech's local Australian personnel. The collaboration resulted in a successful project that was delivered safely and according to the schedule.





## 3C METAL DEPLOYS INSTALLATION TEAM TO ASSIST WITH UPGRADE SCOPES ONBOARD ULTRA-DEEPWATER DRILLSHIP

3C Metal were recently contracted to assist with mobilizing personnel onboard an ultra-deepwater drillship to carry out several upgrade scopes ahead of an upcoming drilling contract.

A small team of personnel were mobilized for a month to carry out installation work onboard the vessel. This included the installation of a 5000-psi reverse-out line from the drill floor of the shaker house; modification and installation of hatches on the brine line; and installation of third-party equipment. The third-party equipment included a ROV workover control system (RWOCS) and auxiliary equipment on the panel deck; a coiled tubing lift frame (CTLF) on the raised deck; and Halliburton and Expro equipment on the raised deck and compliant tower platform. All material for installation was supplied by the client.

3C Metal was also awarded an additional scope to deliver a 15,000-psi high-pressure (HP) line for cement testing. The line requires a valve installation, compliance with API 6A and an operating temperature range of -20°F(-29°C) to 350°F(177°C).



## USA TEAM INSTALLING TWO BALLAST WATER TREATMENT SYSTEMS ONBOARD NOBLE GLOBETROTTER 1 DRILLSHIP

3C Metal is installing two ballast water treatment systems (BWTS) for Noble Corporation onboard the Noble Globetrotter 1 drillship, located offshore Louisiana, the USA.

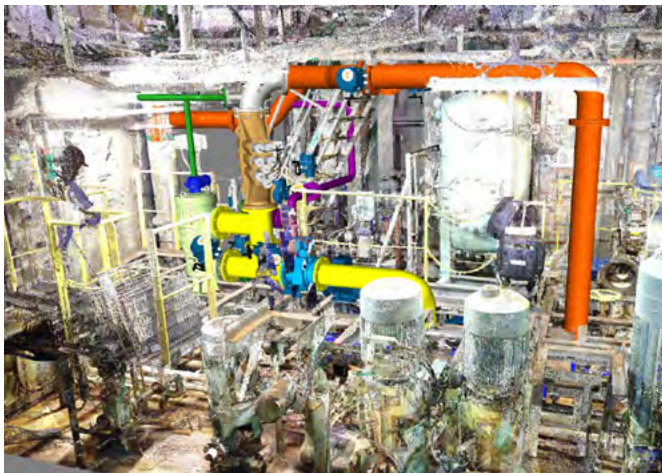
The systems have a flow capacity of 300 cubic meters per hour and use UV light treatment to remove microorganisms from the water during ballasting and deballasting. The systems will be installed for the drillship's aft and forward ballast pumps.

As part of the installation, the UV light treatment system requires new piping tie-ins, hydraulic and piping lines,

controlling valves, additional equipment foundation and power.

Structures and piping have been prefabricated at 3C Metal's facility in Houston to reduce time onboard and allow installation to take place without disrupting operations.

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The 3C Metal team is working with General Electric to integrate part of the BWTS into the drillship's user interface.

3C Metal's experience with BWTS installations has allowed

the team to provide valuable support to Noble Corporation for the revision of the drillship's ballast water management plan. As a result of this project, Noble Globetrotter 1 will gain ABS BWT+ notation and retain IMO compliance.



## FOUR BRIDGES FABRICATED FOR THE NOBLE FAYE KOZACK DRILLSHIP

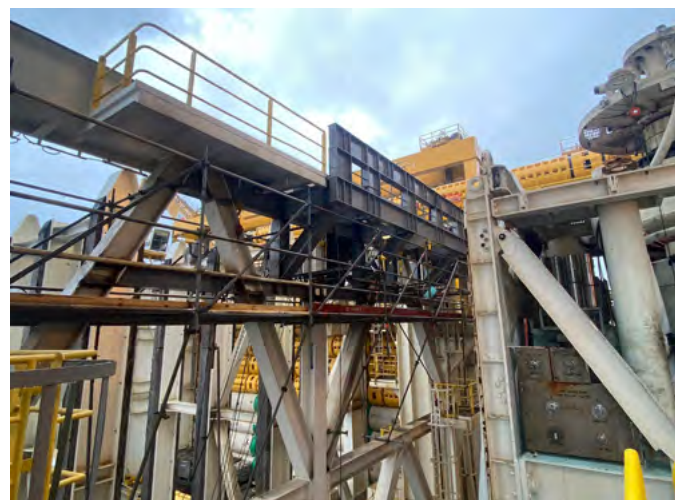
3C Metal USA has fabricated and delivered four seven-ton bridges for Noble Corporation for installation on the Noble Faye Kozack drillship.

The fabrication was carried out over a period of eight weeks at 3C Metal's workshop in Houston. The bridges will be installed against the vessel's drill floor to provide additional storage space.

The total capacity of the bridges is 80 tons with a surface area of 80 square meters. The bridges were designed to support a 45-ton reeler. 3C Metal will reinforce the existing structure on the drillship and install a receptacle to support the bridges and their load.

Installation started offshore Louisiana, USA, with a day shift and night shift to reduce the estimated time onboard to two weeks. Once the receptacle is installed the new bridges can later be landed and used by the client without 3C Metal's assistance. All four bridges can be lifted and stacked as soon as the rig BOP needs to be moved for operation.

All structures are ABS approved and are rated for conditions of -10 degrees Celsius allowing the rig to continue operations in other parts of the world.





## 3C METAL CITBA JV COMMENCES WORK ON THE SECURLUG PROJECT IN FRANCE

3C Metal, in joint venture with CITBA, are currently undertaking a major EPC contract for Teréga (France's operator responsible for the gas transmission network in the southwest region) as part of their SECURLUG project.

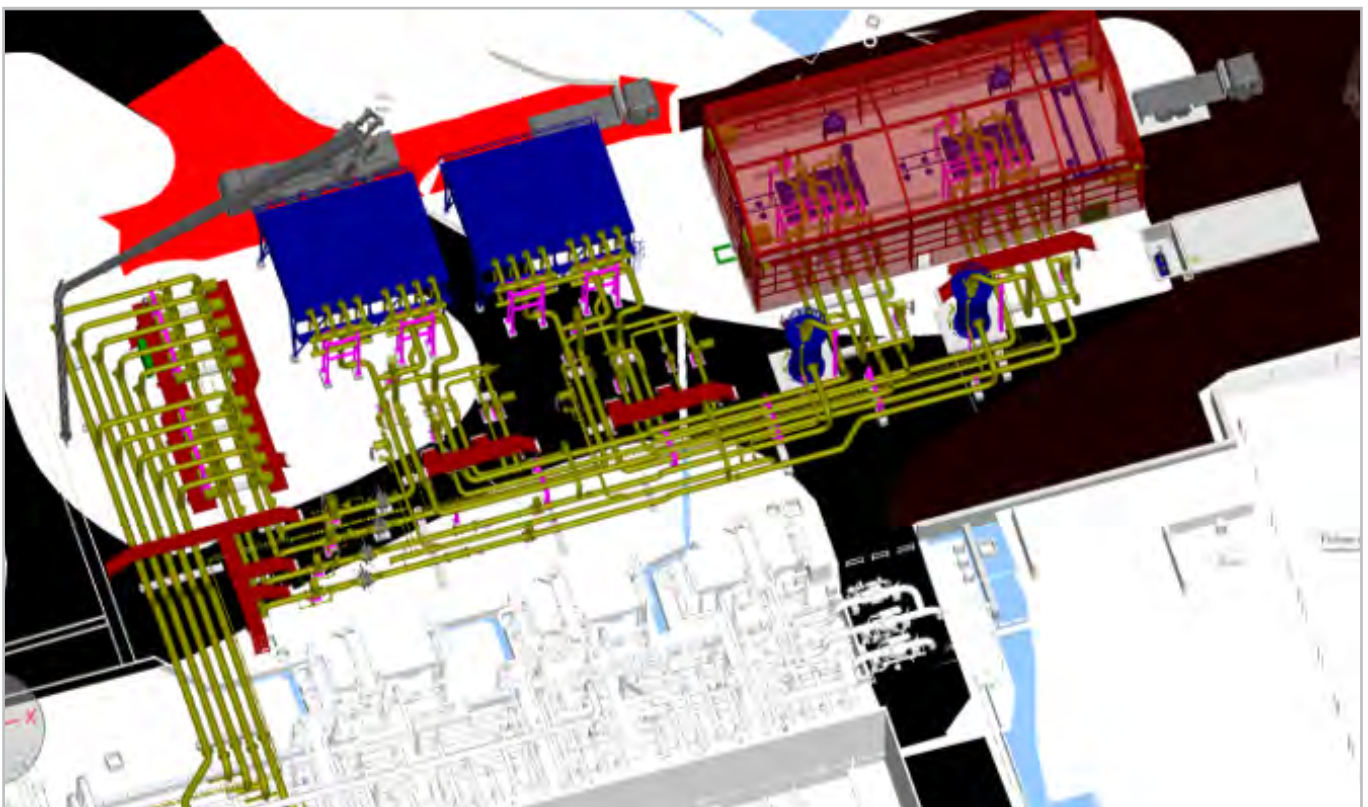


The project involves replacing some of the facilities at Teréga's storage center based in Lussagnet, south-west France. The project recently commenced and will continue until early 2024.

The storage center comprises of different surface facilities which are used to safely transport and store the gas at Teréga's two storage sites of Izaute and Lussagnet. Recent inspections have shown some of the facilities need to be replaced. The SECURLUG project will therefore secure the

gas injection and withdrawal flows of Teréga's various reservoirs.

3C Metal will undertake the construction and installation of two new 7-megawatt electro-compressors (replacing three compressors), creation of a new electric building to power the new compressors and installation of a new decompression vent.





# 3C METAL EXHIBIT AT THE 2022 OFFSHORE TECHNOLOGY CONFERENCE IN HOUSTON

From 2 to 5 May, 3C Metal took part in the Offshore Technology Conference (OTC), held at the NRG Park in Houston.

For four days, energy professionals from around the world came together to discuss the latest advancements in the offshore oil and gas industry and the important role the industry is playing in the energy transition. OTC 2022 welcomed approximately 24,000 attendees, more than double the previous year which was impacted by Covid-19 restrictions.

For the fourth year running, 3C Metal had a promotional stand at the exhibition's French Pavilion by Evolen. The event

provided a unique opportunity for 3C Metal to showcase its brand to the energy industry's delegates.

During the conference, 3C Metal was also the primary sponsor of the Oilfield Nextgen networking event held at Armadillo Palace on the evening of 4 May. Proceeds from the event went to Oilfield Nextgen - an organization that facilitates training and mentorship for students looking to pursue a career in the energy sector.





## SIX YEARS WITH ZERO LTIS FOR FRANCE, THE UAE AND NAMIBIA

3C Metal’s entities in France, the UAE and Namibia have each achieved an excellent safety milestone - zero lost time injuries (LTIs) in at least six years.

This is a direct reflection of 3C Metal’s commitment to the highest standards of safe work practices. 3C Metal’s teams remain dedicated to keeping safety as the number one priority.

Overall, 3C Metal Group is making headway to achieve its goal of zero LTIs for 2022. As of June 2022, 3C Metal Group has achieved 1 million man-hours with zero LTIs.



## SAFETY WEEK IN FRANCE

3C Metal’s team in France held safety workshops to mark “Quality of Life at Work” week from 20 June to 24 June. The aim of the week was to highlight the best practices for employees to lead a healthy life at work, at home and in their general routine.

The Sauvelade-based team took part in three workshops which were themed “safety is everyone’s business”.

The next workshop focused on the importance of maintaining a healthy, balanced diet which should consist of a daily intake of five portions of fruit and vegetables.

For one of the workshops, local osteopath and consultant, Alain Sakwa, gave a presentation onsite to discuss biomechanical functions, musculoskeletal disorders and the importance of daily physical activity. Workshop and office staff were given demonstrations for warm-ups, stretches and correct postures for daily activities.

The week ended with a reminder of all key health check-ups to schedule at certain stages of life for early-detection of potential illnesses.



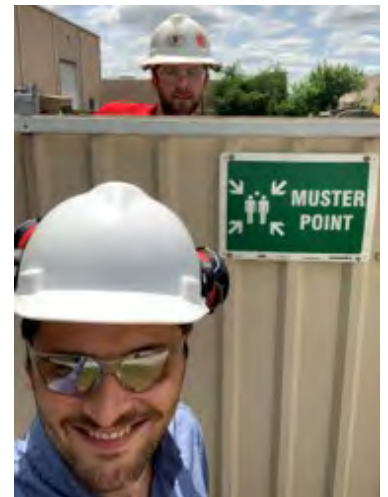


## SELFIES FOR SAFETY SCAVENGER HUNT

To mark World Day for Safety and Health at Work, 3C Metal USA organized a safety-themed scavenger hunt. World Day for Safety and Health at Work is held on 28 April to promote the prevention of occupational accidents and diseases globally.

The scavenger hunt required staff to work in pairs and find important safety locations and equipment around the office and workshop. These included the emergency muster point, a fire extinguisher, the eye wash station, an exit point, a first

aid kit, a drink-water station and PPE for the workshop. Once the pairs had located each item on the scavenger hunt list, they had to take a selfie as proof.





# 3C METAL TEAM BUILDING

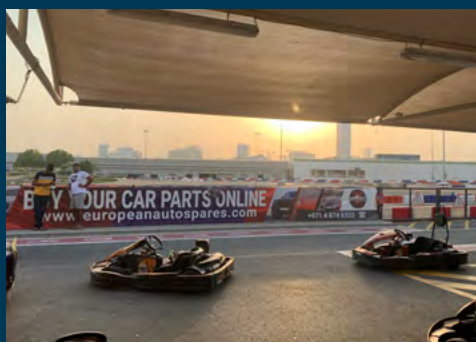
## X-treme Team Building for Malaysia

3C Metal Asia recently held a team building day at a new adventure park, X PARK, in Johor, Malaysia. The team spent the day paint balling, zipping on the flying fox, go-karting and touring on the all-terrain vehicles. It was definitely a straight-shooting, high-flying and trail-blazing experience.



## Dubai Project Department Rev up the Action for Team Building

There was no jump start needed for the Dubai project team's event, they were firing on all cylinders at Dubai Autodrome outdoor kart track.





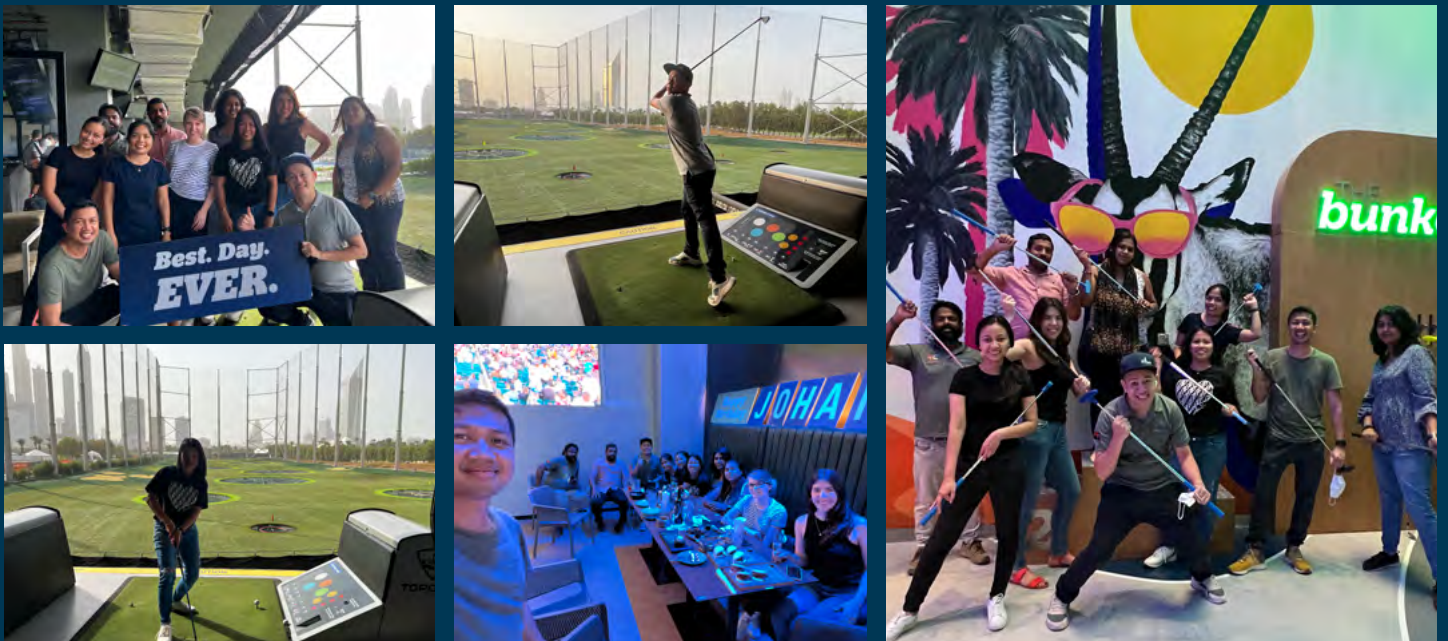
## Engineering Department Rein it in for the “Mane” Team Building Event

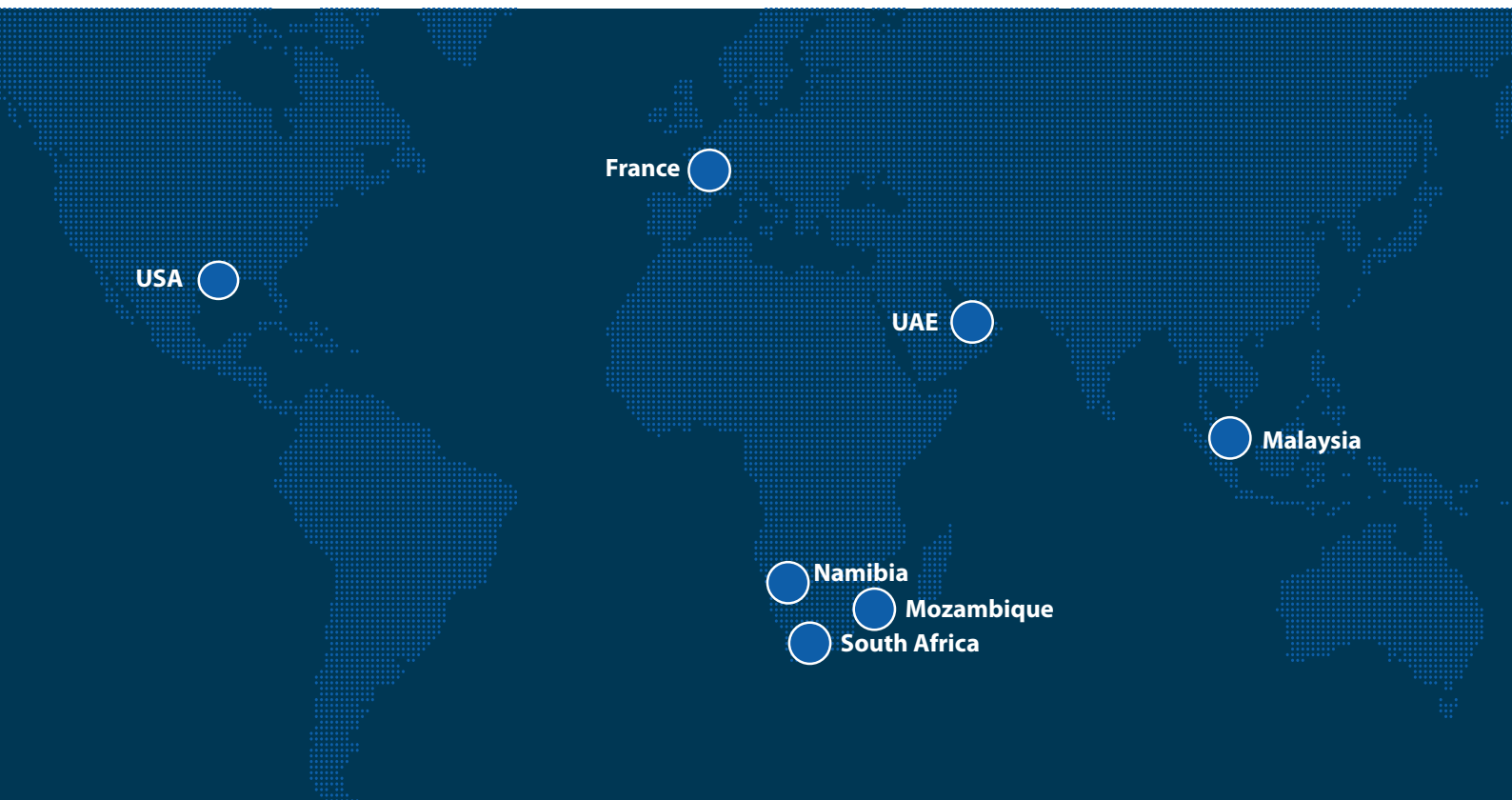
There was plenty of horsing around for the Dubai engineering department as they saddled up for a leisurely horse ride in the desert, organized by Al Jiyab Stables. Following the ride, the team went for an Iftar meal at Bab Al Shams desert resort.



## “Tee-riffic” day at Top Golf Dubai

The Dubai admin and accounts teams were ready to swing into action at the local Top Golf driving range. The team took part in the classic Top Golf challenge as well as some indoor mini golf. Everyone had a ball and the event was definitely on par with the other departments’ team building activities.





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