



## 3C METAL FAST-TRACKS BURNER BOOM PROJECT FOR THE EXPRO GROUP

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



Welcome to the first edition of our newsletter for the year. We closed 2022 in a strong position, having gained traction in oil and gas projects as well as projects in solar power, nuclear power and marine work. As with 2022, the business environment for 2023 is likely to remain unpredictable due to ongoing economic and political issues that continue to impact energy costs and inflation. I want to thank our teams for working hard to ensure we maintain stable operations during these challenging times.

We have been fortunate to have been awarded multiple long-term projects ranging from one to three years, creating more stability for the Group. These include the steam generation system installation for the 100MW SEPCOIII Redstone concentrated solar power plant in South Africa, piping scopes for South Africa's Koeberg nuclear power station and - of course - the construction of the Polar POD in association with Piriou shipyards in France.

In the USA, the Middle East and Asia our activities in the oil and gas industry remain high. Project highlights for the USA include the Weatherford managed pressure drilling (MPD) system integration on the Noble Voyager. This is one of many projects the team has carried out recently for Noble Corporation and 3C Metal is

grateful for the enduring working relationship.

In the Middle East, our team in Dubai recently fast-tracked a project for the fabrication of a burner boom and king post for the Expro Group. The team made an impressive effort to carry out the design, fabrication, testing and assembly within eight weeks.

In Malaysia, our team is delivering the MPD system integration on Transocean's Deepwater Titan. The project award follows the team's successful delivery of the MPD system integration on Transocean's Deepwater Atlas. Both of these vessels are the only 8th generation drillships in the world and 3C Metal is pleased to offer our services to support their operations.

In an effort to continue delivering our services to new regions and new industries, our focus remains on diversification, reducing our carbon footprint, improving safety and investing in our teams. Through the concerted efforts of all our entities, I'm confident we are well-positioned for another successful year.

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

## A WORD FROM THE DIRECTOR OF 3C METAL BELMET



3C Metal Belmet is fortunate to have ended 2022 on a busy note and to have started 2023 with a strong order book and high level of activity across our areas of operation.

In Mozambique, we are still supporting our clients offshore on a regular basis while leveraging our regional supply chain and our local workforce of artisans in offshore work. Our base in Pemba is now fully set up and ready to support activity in the region. With the restart of activity, we are well-positioned to support our clients and to scale our current set-up (personnel and infrastructure) to support local requirements.

Jumping to the opposite side of the continent where we have our workshops in Walvis Bay, Namibia, we have seen an increase in activity with new projects in oil and gas and mining. Our fully-equipped workshop facility and associated yard caters for a wide range of services - from subsea equipment inspection, recertification, maintenance on equipment to offshore support and fabrication. We are currently busy with approximately 500 tons of steel fabrication for a local uranium mine while also supporting the reactivation of a drillship

in Walvis Bay - to name a few of the ongoing projects.

Our South African operations, which also provide support to both Namibia and Mozambique, are very active in the local energy sector with projects ongoing at Koeberg Nuclear power station, Redstone concentrated solar plant as well as the Ankerlig Power Station. We are also working hard along with our partners on the Polar POD and the engineering is progressing well.

In order to support our growing operations, we are heavily focused on training and upskilling of our personnel across all of our sites in Mozambique, Namibia and South Africa. In South Africa we have expanded our training center's scope. We have new processes to assess new prospective employees and to identify at what level we bring new joiners into the organization, where their skill sets will be best suited and to identify any training requirements.

**Jarcu Groenewald**  
Director of 3C Metal Belmet

# SUSTAINABLE HVAC UNITS INSTALLED AT THERMAL SPA FACILITY IN FRANCE

In early 2023, 3C Metal France completed the installation of sustainable heating, ventilation and air conditioning (HVAC) units for a medical and thermal spa facility, Les Thermes, located in Dax, South West France.



*Image source: lesthermesdax.fr*

Dax is a popular spa town in the Landes region of France, offering the country's largest amount of thermal spring water. The local spa facility commissioned 3C Metal to install sustainable HVAC units which are designed to collect energy losses from industrial production processes for reuse.

The thermal water in the area emerges from the ground

at 63 degrees Celsius (143 degrees Fahrenheit). The HVAC units cool the water to an ideal temperature for the thermal baths, collect the energy from this process and redistribute the energy to the baths and the building's heating systems.

This is one of several similar project's 3C Metal's entity in France has recently carried out in the region.

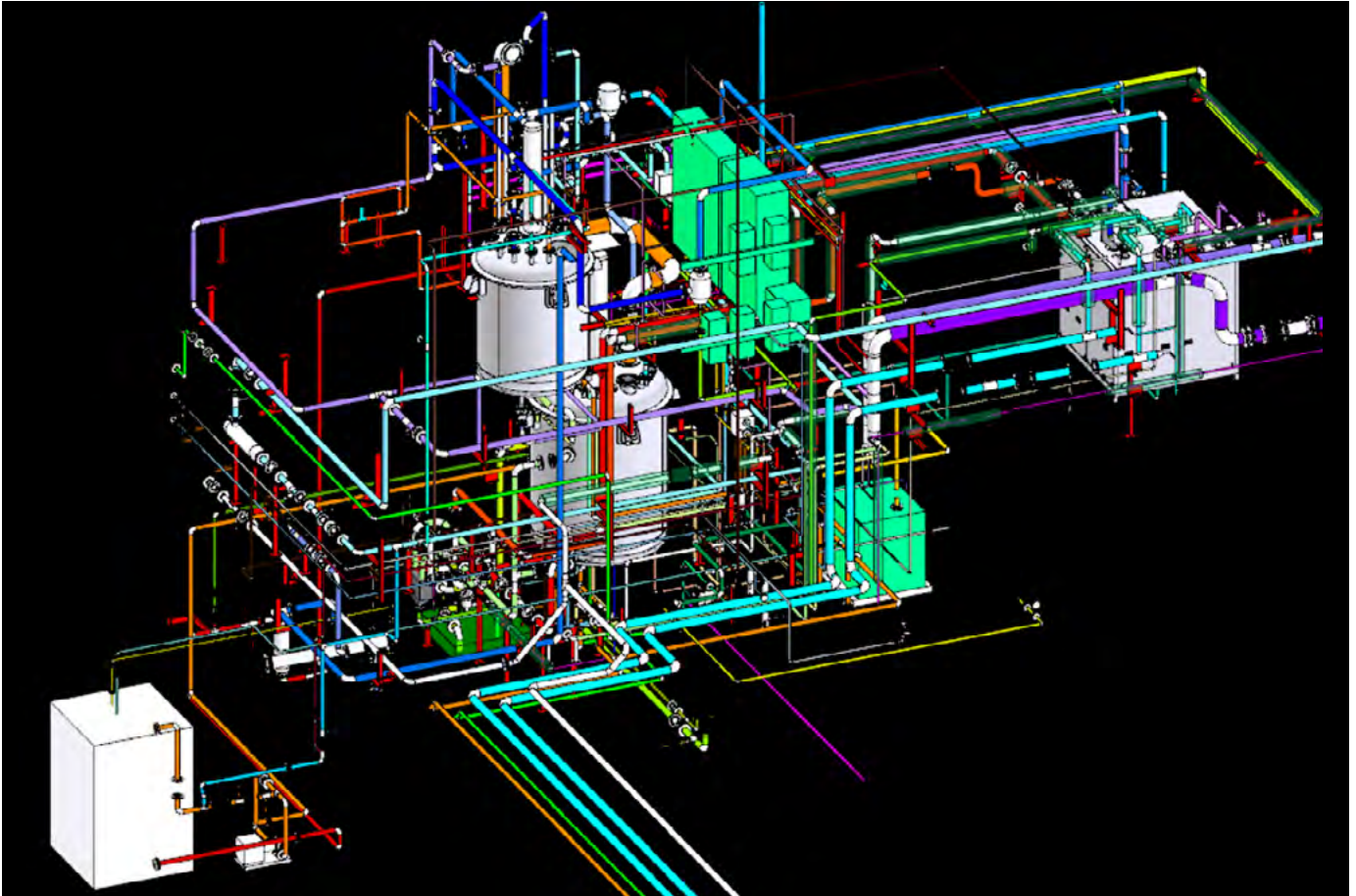


## 3C METAL DELIVERING PIPING NETWORK FOR L'ORÉAL GROUP SUBSIDIARY, NOVÉAL

L'Oréal Group subsidiary, Novéal, has commissioned 3C Metal to install a piping network for its green-chemistry production facility for cosmetic ingredients. The facility is located in Mourenx, South West France. This is a strategic project as it will enable Novéal to mass produce a key ingredient for L'Oréal; Pro-Xylane.

3C Metal is carrying out the design, fabrication and installation of the piping network, including taps and instrumentation. The work also includes civil engineering, framework, electricity and associated instrumentation.

The trials and commissioning of this new production line are planned for July and August 2023 with the start of production scheduled for September 2023.



**PRO-Xylane:** To reshape the structure of skin tissue affected by the aging process, L'Oréal researchers have endeavored to develop substances capable of stimulating the synthesis of glycosaminoglycans (GAGs). GAGs are the main components of the matrix extracellular skin that deteriorate with age. They help to restore the elasticity and tone of the skin which are reduced in aging skin. The result is Pro-Xylane, an active ingredient produced by Novéal in accordance with eco-responsible commitments. Biosourced, it is obtained from xylose, a natural sugar found in beech wood and used in the paper industry. A by-product of papermaking, xylose is extracted using an environmentally-friendly green-chemistry process. Today, Pro-Xylane is a key anti-aging ingredient in the field of cosmetics.

Image source: L'Oréal Group

## 3C METAL ASIA CARRYING OUT MPD SYSTEM INTEGRATION ON SECOND 8TH GENERATION DRILLSHIP

3C Metal Asia is carrying out the managed pressure drilling (MPD) system integration on another 8th generation ultra-deepwater drillship, Transocean's Deepwater Titan. The Deepwater Titan is one of only two 8th generation drillships in the world – the other is Transocean's Deepwater Atlas.

Following the successful completion of the MPD system integration on the Deepwater Atlas in Singapore, 3C Metal Asia was awarded a similar contract on the Deepwater Titan. The project is currently ongoing.

The work started onboard while the drillship was still in Sembcorp Marine shipyard, Singapore, and will continue during transit to the Gulf of Mexico. The project will be completed in the Gulf of Mexico upon arrival of the last of the MPD equipment. The high-specification drillship is designed to be capable of 20,000 Psi drilling and completion operations and to operate at 12,000 feet.

Due to the critical timeline of the project, the prefabrication of all spools was completed within a five-week period and delivered in batches to the shipyard, during which time the installation onboard started. 3C Metal Asia's workshop team also worked in collaboration with a third-party designer to ensure all spools were dimensionally validated in real-time and the 3D modeling updated.

The work progressed smoothly as the vessel moved from shipyard to transit and 3C Metal's team is now working hard to bring the project close to completion during the sailing time.

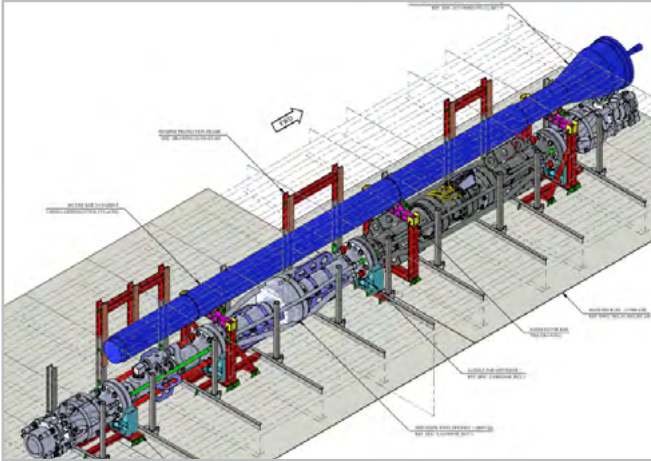


## 3C METAL PARTNERS WITH AUSTRALIAN COMPANY, WELDTECH, TO DELIVER PROJECT FOR MPD RISER JOINT STORAGE CRADLE

3C Metal's team in Malaysia was recently commissioned by Noble Corporation to design and install a managed pressure drilling (MPD) riser joint storage cradle on their semi-submersible rig, Noble Deliverer.

3C Metal designed the system to allow for a king size rathole to be stored on top of the riser joint. The design scopes were completed by 3C Metal. Installation was carried out while the rig was located offshore, Australia, and was done in

partnership with local Australian company, Weldtech. This was yet another successful collaboration between Weldtech and 3C Metal.



## IWOCS INSTALLATION ONBOARD NOBLE VIKING

3C Metal Asia recently carried out a project for an intervention workover control systems (IWOCS) installation for Noble Corporation on the Noble Viking drillship.

The scope of work also included a Christmas-tree skid and Expro reeler. The team completed the installation offshore, East Malaysia. The project was delivered safely and according to schedule.



# 3C METAL FAST-TRACKS BURNER BOOM PROJECT FOR THE EXPRO GROUP

3C Metal has carried out a project for a 90ft burner boom structure and associated king post for installation on the VALARIS DS-17 drillship.

3C Metal's Dubai-based entity was commissioned by the Expro Group to provide the engineering, supply and fabrication of the king post, boom structure and associated piping as well as the necessary elements required

for integration on the drillship. The Middle East team successfully delivered the design, fabrication, testing and painting within eight weeks.





## IWOCS MODIFICATIONS AND ELECTRO-HYDRAULIC PACKAGE INSTALLATION ONBOARD SAIPEM 12000

3C Metal has carried out modification work on the Saipem 12000 ultra-deepwater drillship as well as electro-hydraulic equipment installation while the rig was located offshore, Ivory Coast.

The scope of work consisted of the modification of the existing intervention workover control systems (IWOCS) skid in order to accommodate a new 50-ton reeler in the forward moonpool area. A new arrangement was designed to secure the skid with the existing rig structure with pins. The associated moonpool padeyes were also installed under the drill floor.

The installation scope also included the integration of the electro-hydraulic equipment on the pipe deck. For the electro-hydraulic reeler scope, the high-pressure hydraulic methanol line (10k Psi) was extended from the starboard drill line reel deck to the forward pipe deck with the assistance of 3C Metal's electrical partner ACTOM Energy and their hydraulic fitters.



## ACCESSWAYS FOR VALARIS DS-9 DRILLSHIP

3C Metal has recently completed a set of access walkways for the VALARIS DS-9 drillship. The walkways were installed between the pipe deck and the drill floor for improved safety. The team will soon carry out additional scopes for the installation of brine lines and mud sieving.



# CHOKE-AND-KILL HIGH PRESSURE LINE UPGRADES CARRIED OUT BY 3C METAL

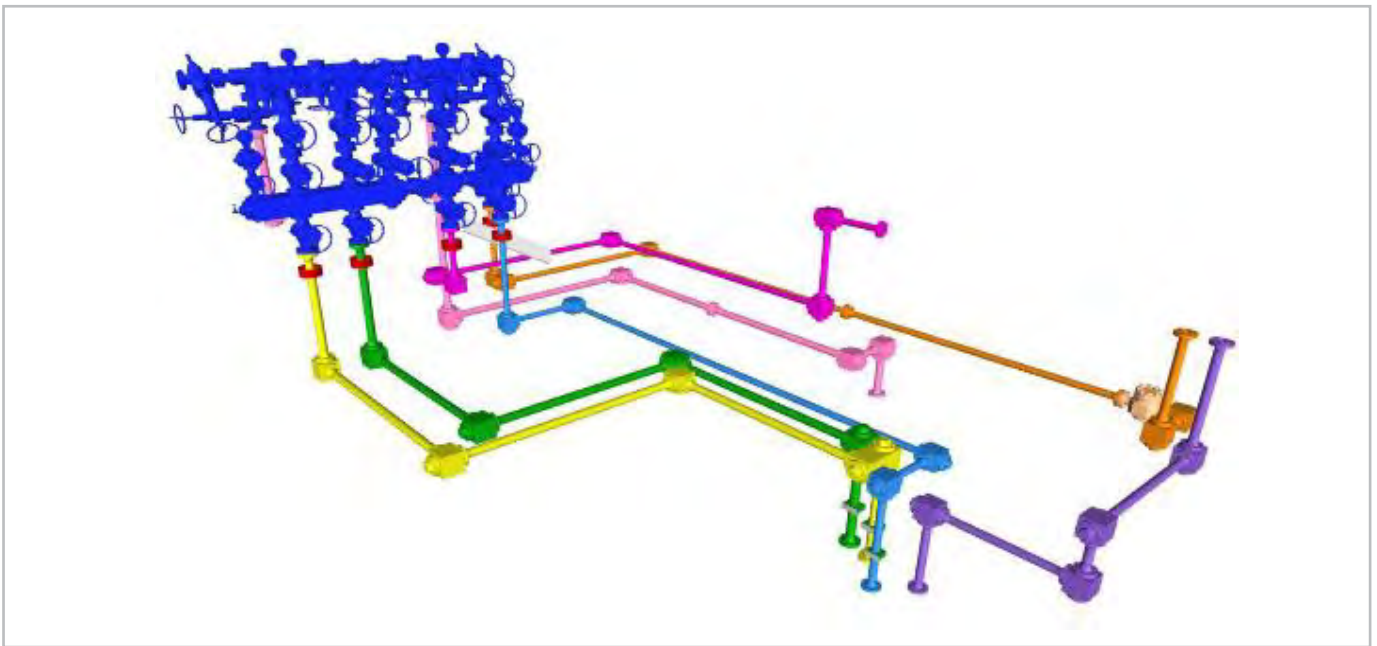
3C Metal recently completed several projects for ADES for the upgrade of choke-and-kill high-pressure lines onboard multiple rigs.

ADES has been increasing the number of active rigs in Saudi Arabia. 3C Metal was proud to provide ADES with its specialized services in engineering, supply, fabrication and installation of high-pressure piping for the upgrade of the choke-and-kill manifolds to prepare the rigs for their drilling activities. All work was carried out in accordance to the API 16C specification and Saudi Aramco Well Control Manual, 6th Edition.

The overall work consisted of running new high-pressure piping from the OEM supplied choke-and-kill manifolds to the required area of service onboard each of the ADES rigs. 3C Metal deployed surveyors to carry out the initial laser scanning survey onboard the rigs in Singapore, Dubai and

Bahrain. 3C Metal's experienced and proficient engineering and workshop teams in the Middle East were able to complete the design, supply and fabrication of the lines in-house, with 100% shop welds and API 16C specification conformance. The workshop team also fabricated and tested the API 16C spools for installation.

3C Metal's workshops in Malaysia and the Middle East carried out additional scopes for ADES including a well control upgrade, a choke-and-kill manifold frame, piping supports, flare lines and mud gas separator lines. The lines were sent to the rigs in batches to accelerate the installation. 3C Metal was able to successfully support ADES and ensure the deadlines of the projects were met.



## SCHLUMBERGER KATY TEST FACILITY UPGRADES BY 3C METAL USA

In Q1, 3C Metal USA carried out piping replacement at Schlumberger's onshore testing facility located in Katy (west of Houston, Texas). Supply and prefabrication were done at 3C Metal's Houston workshop with the final work completed on site.

The scope included engineering, prefabrication and installation to replace high-pressure (HP) and low-pressure (LP) piping. 3C Metal prepared a design to connect the second mud pump to the discharge HP line and to link the main LP suction line to allow both mud pumps to be used at any time.

3C Metal supplied all piping material and hardware for the replacement of the HP discharge line and the LP suction line. The team also supplied all the valves required for the

project. 3C Metal's Houston facility was able to complete 100% of the prefabrication as well as pressure testing of all spools. The team also carried out non-destructive testing (NDT) and protective coating.

The workshop team performed the entire on-site assembly and installation of prefabricated piping and installed all pipe supports. Installation began early in February 2023 and was successfully completed in early March.



## STAINLESS STEEL PIPING PROJECT FOR WATER PURIFICATION PLANT

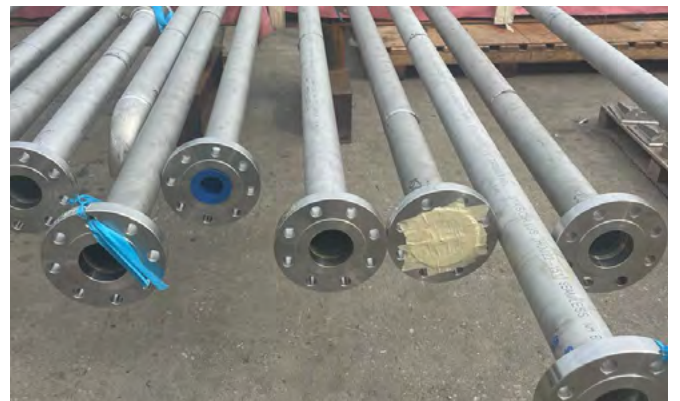
In March, 3C Metal USA completed a project for the supply and prefabrication of stainless-steel piping for a water purification plant in Texas. The work was carried out for McCarthy Building Companies' water services team.

The scope included the supply and prefabrication of three-inch diameter stainless steel piping to carry carbon dioxide as per the client's drawings. 3C Metal worked on the ISO drawings for fabrication as per the general arrangement drawings.

3C Metal supplied all piping material which used stainless steel 316 (a chromium-nickel based steel that has improved

corrosion resistance in certain environments). The 3C Metal team completed 100% prefabrication of the spools in-house, which also required fabrication of supports and non-destructive testing.

Fabrication started in mid-February 2023 and was completed in mid-March.



## NOBLE VOYAGER MPD SYSTEM INTEGRATION A SUCCESS

3C Metal was awarded a contract by Noble Corporation for the integration of a Weatherford managed pressure drilling (MPD) system onboard the Noble Voyager drillship.

The project was managed by 3C Metal's Houston-based entity and involved the design, fabrication, installation and ABS class approval of all structures and associated piping for the MPD system.

3C Metal performed the entire engineering package for this project. In the initial stages, 3C Metal deployed a team to carry out 3D laser scanning of the vessel to aid the 3D modeling for structures, pipe routing and to perform clash checks for the installation phase.

Prefabrication of all piping and structural material, as well as non-destructive testing and painting, was performed at 3C Metal's workshop in Houston. 3C Metal also supplied all the electrical material, hydraulic material and various valves that

were required for this project.

The structural components of the project included the MPD manifolds, 16 pipe routes connecting the MPD system to the rig lines, all electrical components for the Weatherford system, and hydraulic lines used to operate the Weatherford valves on the buffer manifold.

The work was carried out while the rig was offshore Mexico with zero disruptions to the rig's drilling operations. Installation began in late December 2022 and was completed towards the end of Q1 2023. The team have now demobilized after delivering the project successfully with no safety related incidents.



## 3C METAL BELMET COMPLETES CONSTRUCTION FOR NEW FACILITY IN PEMBA, MOZAMBIQUE

3C Metal Belmet, part of 3C Metal Group, is pleased to announce it has completed the construction of its new yard in Pemba, Mozambique. The new 1500 square meter (16,145 square foot) yard includes a fully-containerized mobile workshop and an eight-ton overhead crane.

3C Metal Belmet now has two facilities in Mozambique – an entity in Maputo and the new Pemba yard. With the addition of this facility, 3C Metal will be able to offer more support to

clients operating in the country, particularly in the north of Mozambique.



## WORK PROGRESSES ON PIPING SCOPES FOR KOEBERG NUCLEAR POWER STATION IN SOUTH AFRICA

As announced in Q2 2022, 3C Metal is undertaking piping scopes for the Koeberg nuclear power station in South Africa for US-based construction company, Jacobs.

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 for Unit 1 and 2 has been completed. The installation of Unit 1 is ongoing with Unit 2 planned for September 2023.



# CINCO ENGINEERING CONTINUES TO BOOST 3C METAL BELMET'S HEAVY FABRICATION SERVICES

Cinco Engineering was formed by South Africa's leading industrial service providers; 3C Metal Belmet, Nico's Engineering, Akram Consulting and MCM Blasting and Coatings. The companies came together to establish a Broad-Based Black Economic Empowerment (BBBEE) joint venture that aims to draw on the combined knowledge and resources of each company and to focus on local projects. Since its establishment, Cinco Engineering has aided the heavy steel fabrication scopes of many of 3C Metal Belmet's projects, including the Benguela Gem (AMV3) Treatment Plant SMPP project and some more recent examples below. Cinco Engineering's services will also be vital to the delivery of the upcoming fabrication work for the Polar POD (featured in the previous newsletter).

Cinco Engineering's specialized services include: fabrication and installation of steel structures as well as industrial high-pressure and hydraulic piping; site installation; ship repair; non-destructive testing; and corrosion protection.



*Cinco Engineering Workshop located at Cape Town Harbour, South Africa*

## RECENT PROJECTS AT CINCO ENGINEERING:

Dankocom – Ilanga 100MW Concentrated Solar Power (CSP) Plant piping



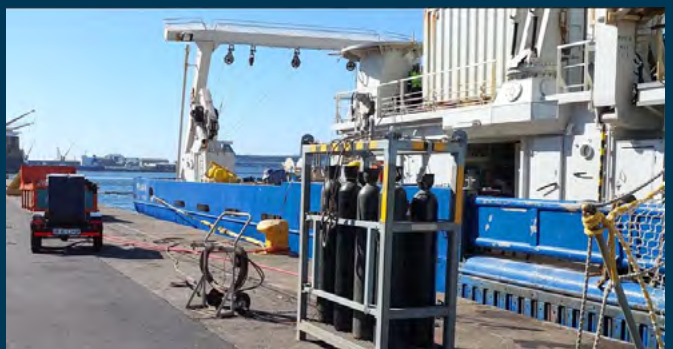
Sandile vessel rudder shaft repair work



Generic 3-year key site services contract for ASTRON Refinery (ongoing)



RV Pelagia vessel crane pedestal repairs



## NAMIBIAN TEAM CELEBRATES NATIONAL DAY AND SAFETY MILESTONE

On March 21, there was plenty to celebrate for 3C Metal Belmet Namibia. The small team in Walvis Bay surpassed 600,000 man-hours with zero lost time injuries (LTIs). It was also Namibia's national day so the team got together to celebrate their homeland and heritage as well as their impressive safety milestone.



## 3C METAL SPONSORS 25TH SAPC IADC GOLF TOURNAMENT IN DUBAI

3C Metal proudly sponsored the 2023 IADC SAPC Golf Tournament and gala dinner held from 16-17 March at Dubai's Emirates Golf Club. Marking the 25th anniversary of the annual tournament, the event and gala dinner attracted many delegates across the energy sector and provided a one-of-a-kind networking opportunity for those in attendance.



## GOODS DONATED FOR SYRIAN EARTHQUAKE RELIEF

Following the devastation caused by the February earthquake that impacted Turkey and Syria, 3C Metal's Dubai office decided to support a local organization that was accepting in-kind donations to help the victims.

Several large hampers containing blankets, winter clothes, non-perishable food, medical supplies and toys were donated by employees to Sahim Initiative.

to send more than 20 shipping containers full of donated goods to the earthquake victims in Syria.

Thanks to donations such as these, Sahim Initiative was able



## 3C METAL TO EXHIBIT AT THE 2023 OFFSHORE TECHNOLOGY CONFERENCE

3C Metal will take part in the Offshore Technology Conference (OTC), held at the NRG Park in Houston, USA, from 1 – 4 May.

The OTC is a flagship event that brings together energy professionals from around the world. For four days, industry delegates will come together to discuss the latest advancements in the offshore oil and gas industry and the important role industry is playing in the energy transition.

For the fifth year running, 3C Metal will have a promotional stand at the exhibition's French Pavilion located in Hall B, booth 3139. A team of dedicated 3C Metal employees will be on site every day to answer questions and promote 3C Metal's services.

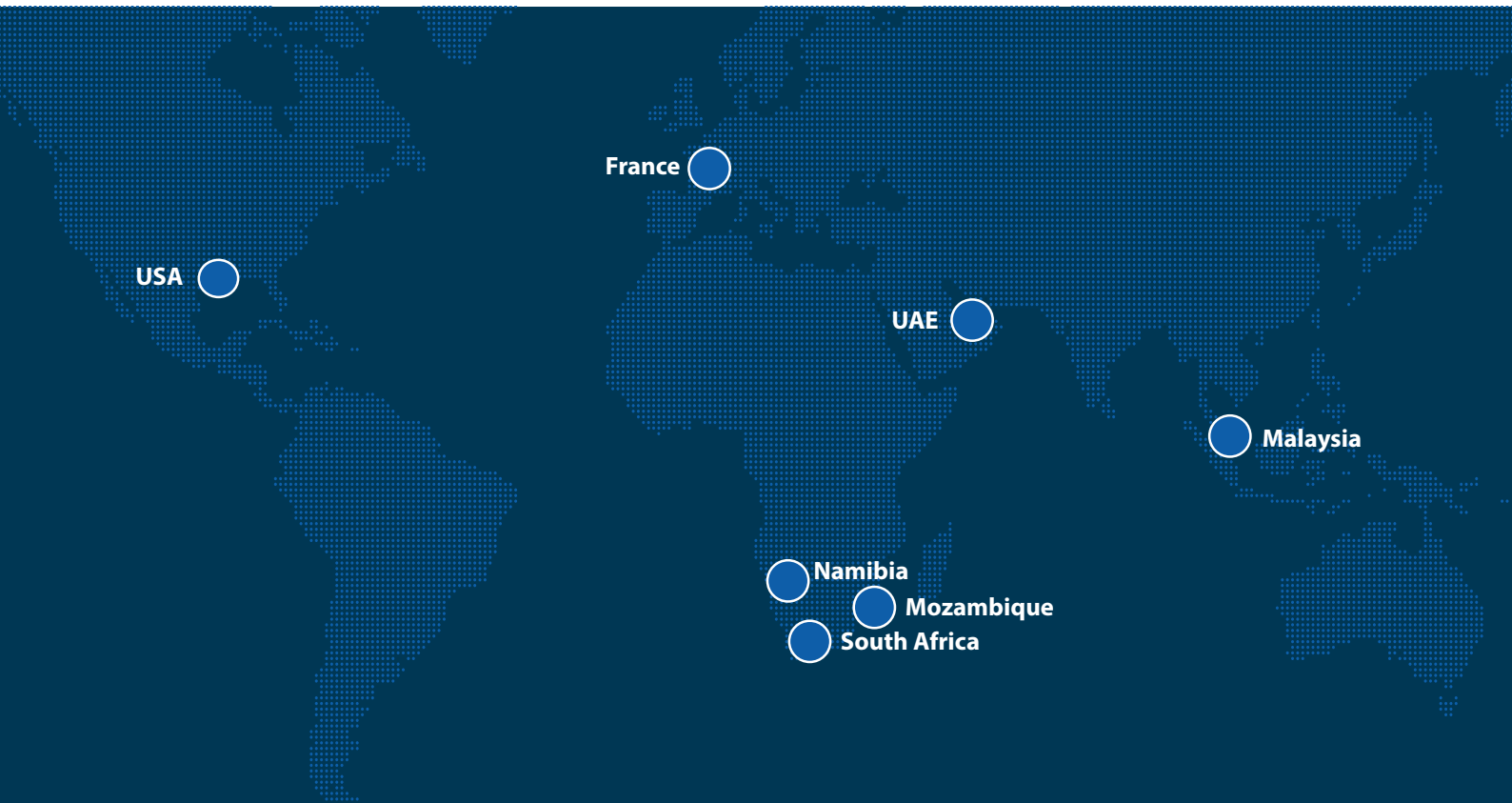




## 3C METAL MIDDLE EAST STRIKES LUCKY WITH TEAM BUILDING EVENT

In late January, 3C Metal Middle East got rolling with an afternoon of ten-pin bowling. Some aimed to strike lucky, while others hoped not to strike out. After the bowling and a bit of leisure time at the venue's gaming arcade, the team went for dinner on Dubai's iconic Bluewaters Island.





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