



## NEXT PHASE OF AMV3 PROJECT SET TO BEGIN

### INSIDE THIS ISSUE

ISSUE 23 | Q3 2021

#### GREEN TECHNOLOGIES DIVISION CONDUCTS PIPING REPLACEMENT FOR BAWAT BWTS

3C Metal's Green Technologies division recently completed a project for the replacement of the piping system onboard a container ship for a Bawat ballast water treatment system.

#### RECOMP PROJECT IN FRANCE COMPLETED FOLLOWING INSTALLATION OF TWO NEW COMPRESSORS

3C Metal successfully delivered a major EPC contract which consisted of the integration of two new gas compressors in an underground natural gas storage facility.

#### SPUDCAN REPAIR FOR VANTAGE'S AQUAMARINE DRILLER

3C Metal's Malaysian team has carried out meticulous repair work to the spudcans on Vantage's Aquamarine Driller jack-up rig.

# CONTENTS

- 03** A MESSAGE FROM THE PRESIDENT AND CEO OF 3C METAL
- 04** 3C METAL'S GREEN TECHNOLOGIES DIVISION CONDUCTS COMPLETE PIPING REPLACEMENT FOR BAWAT BALLAST WATER TREATMENT SYSTEM
- 05** NEXT PHASE OF AMV3 PROJECT SET TO BEGIN
- 06** RECOMP PROJECT IN FRANCE NEARING COMPLETION FOLLOWING INSTALLATION OF TWO NEW COMPRESSORS  
FRANCE TEAM COMPLETES CONNECTIONS FOR A NEW ARKEMA TRAIN STATION FACILITY
- 07** 20 KILOMETER PIPELINE PROJECT UNDERWAY IN FRANCE
- 08** 3C METAL'S NEW USA WORKSHOP BUSY WITH FABRICATION PROJECTS
- 09** SPUDCAN REPAIR FOR VANTAGE'S AQUAMARINE DRILLER  
DESIGN AND FABRICATION OF DRAIN TANK
- 10** TEXAS DECK MODIFICATIONS FOR VELESTO JACK-UP RIG  
ONGOING FABRICATION FOR VELESTO NAGA 8 DECK MODIFICATIONS
- 11** BRINE FILTRATION UNIT PLATFORMS FOR DP3 DRILLSHIP  
3C METAL MIDDLE EAST RENEWS JSRS CERTIFICATION FOR OMAN
- 12** 3C METAL MIDDLE EAST GRANTED API 4F LICENSE
- 13** 3C METAL BELMET NAMIBIA REACHES 400,000 MAN-HOURS LTI-FREE  
3C METAL EXHIBIT AT THE 2021 OFFSHORE TECHNOLOGY CONFERENCE IN HOUSTON
- 14** HIGH CALIBER TEAM BUILDING EVENT FOR USA STAFF  
FRANCE GREEN WEEK
- 15** 2021 TOUR PÉDESTRE DU BÉARN RELAY RACE
- 16** CONTACT US



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



*Thierry Vauzour [right] pictured at his retirement celebration with Philippe Boy.*

With many economies beginning to recover from the pandemic-driven downturn, energy demand has risen sharply. Globally, the drive for sustainable energy remains steadfast but there is still an immediate need for traditional energy to satiate current demands. During this time, 3C Metal is well-positioned to assist clients operating on both fronts.

We have been successful in securing new work in green technology - an area of our business that continues to gain momentum, particularly in the execution of projects relating to ballast water treatment systems (BWTS). We recently completed the piping system for a BWTS for Bawat and we have been awarded new projects by Noble Corporation, Vantage Drilling and Stena Drilling as part of the BWTS retrofits on five other vessels.

We remain focused on sustainability and seizing further opportunities arising from the global energy transition. Many of our clients have set the target to become carbon-neutral in the coming decades. It is vital that we adapt our services to help facilitate this ambition for clients operating both in and outside of the oil and gas industry. This is why, as announced in the previous newsletter, we have launched an in-house training program for our project teams. The training will ensure our teams have transferable skills that can be applied across all areas of our

operations, whether it be in oil and gas, renewables, green technology, mining or other industries.

Moving away from strategy and our commercial developments, I would like to take a moment to recognise the services of a man who has been an integral part of 3C Metal's success over the past two decades. As planned, our Group EPC Project Director and partner, Thierry Vauzour, took an early retirement last month. Thierry has been preparing for his retirement for the past few years and has been working with management to ensure a smooth transition following his departure. In his time with 3C Metal, Thierry helped secure major EPC contracts for our entity in France and fostered strong client relationships that led to repeat business. He also played a key role in supporting the development of our activities in Mozambique. Thierry is part of 3C Metal's history and I would like to personally thank him for his major contributions to the Group.

In closing, I would like to also thank our teams for their continued efforts to win new work and keep 3C Metal's performance strong this year. It has been no easy feat, and I would like to ensure you that your efforts are appreciated.

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

## 3C METAL'S GREEN TECHNOLOGIES DIVISION CONDUCTS COMPLETE PIPING REPLACEMENT FOR BAWAT BALLAST WATER TREATMENT SYSTEM

3C Metal's Green Technologies division recently completed a project for the replacement of the piping system onboard a container ship for a Bawat ballast water treatment system (BWTS). The Bawat BWTS engages a one-pass system which uses pasteurization to eliminate all living organisms. The original piping system - made of polyethylene and polypropylene homopolymer piping - was replaced with glass-reinforced epoxy (GRE) pipe spools.

CEO of Bawat, Marcus Hummer, said, "We have enjoyed the collaboration with 3C Metal on this project and once again proved that a Bawat ballast water management system can easily be installed without taking the vessel out of its normal commercial schedule - zero downtime or disruption during the vessel's service. We look forward to working closely with 3C Metal once again in the future to develop more joint projects relating to ballast water management systems."

3C Metal Project Manager, Neil Gulrajani said, "It's been a great experience working with Bawat on the installation of their BWTS which is based on pasteurization technology. The project was successfully integrated in-service while the vessel was operating on its usual trading routes. We very much look forward to collaborating with Bawat on future projects."

The scope of the project involved, design and engineering,

flexibility studies and pipe stress analysis coupled with fabrication and installation of GRE pipe spools (ranging from 6 inches to 16 inches in diameter). The project also involved fabrication and installation of a stainless steel expansion tank and associated stainless steel tubing.

An onboard survey, including a laser scan, was conducted to aid the engineering and design. Fabrication was carried out in 3C Metal's UAE workshop and the entire installation was carried out on the container ship while it was in-service, sailing from the UAE, around India, Sri Lanka, South Africa and up to Nigeria. 3C Metal was able to complete the project with no disruptions to the vessel's operations.

This project is yet another example of the cost-effective and flexible solutions 3C Metal offers to ensure vessels are fully-compliant with new IMO regulations.





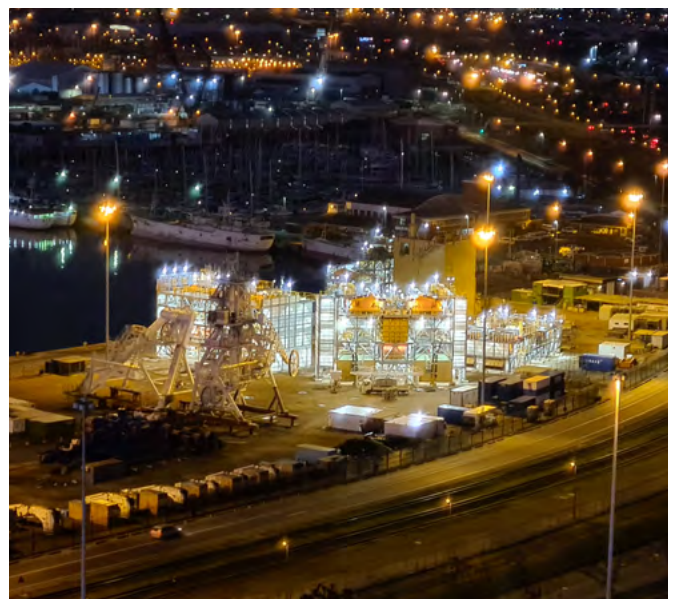
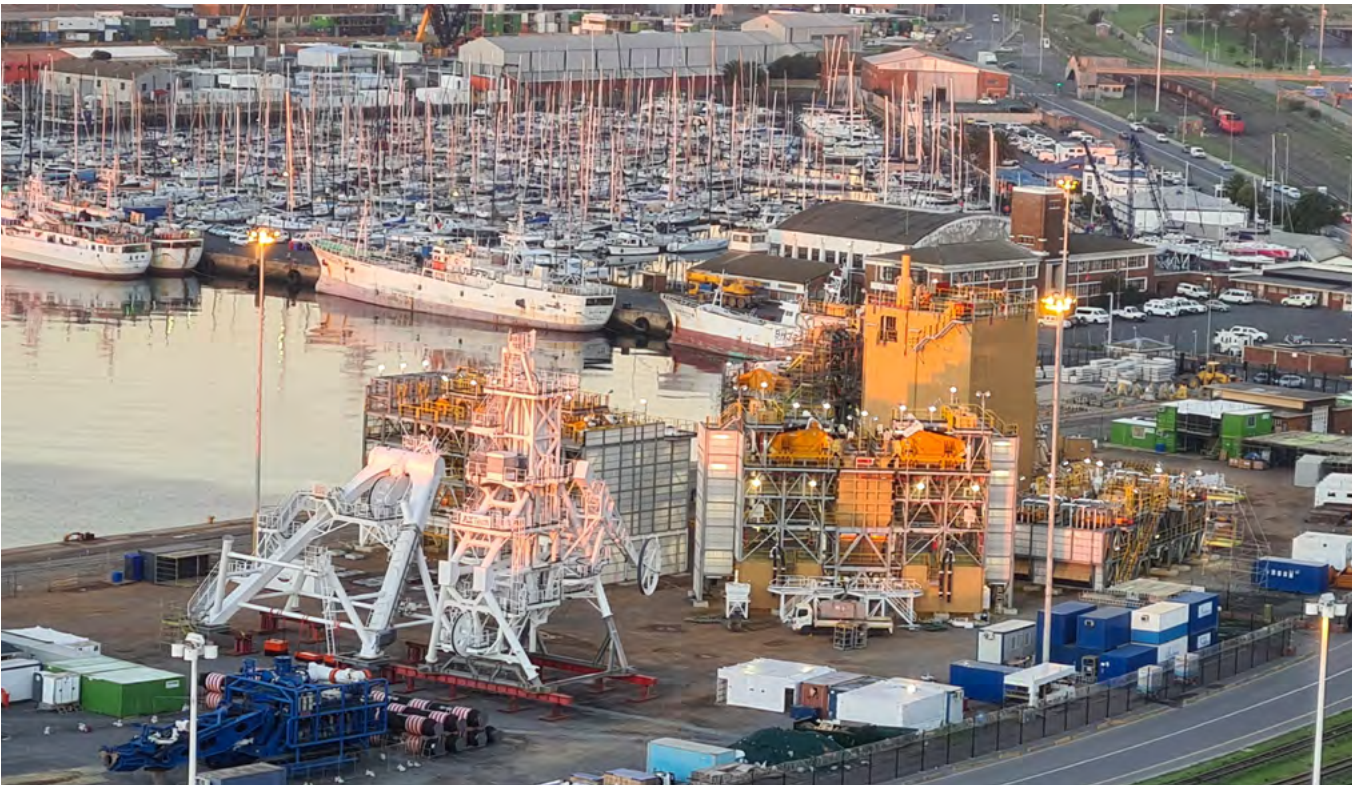
## NEXT PHASE OF AMV3 PROJECT SET TO BEGIN

Having successfully completed the fabrication portion of the crawlers and treatment plant SMPP project for Debmarine Namibia, 3C Metal Belmet is set to commence the installation phase.

The fabrication work started in Q4 2019 and was carried out within a year at 3C Metal Belmet's facilities in Walvis Bay, Namibia and CINCO Engineering (3C Metal Belmet's BBBEE joint venture). It was then delivered to Cape Town Harbour for the installation and assembly scope of work. Following that, a small amount of additional fabrication was carried

out at 3C Metal Belmet facilities in Cape Town, South Africa and was concluded in Q2 2021.

As 3C Metal Belmet prepares for the final phase of the project, the focus remains on safety, quality and on-time delivery.





## RECOMP PROJECT IN FRANCE COMPLETED FOLLOWING INSTALLATION OF TWO NEW COMPRESSORS

3C Metal successfully delivered a major EPC contract for the RECOMP project. The project was carried out for Teréga, the operator responsible for the gas transmission network in southwest France.

The project consisted of the integration of two new gas compressors in an underground natural gas storage facility operated by Teréga in the Lussagnet commune. The new gas compressors stop commercial gas emission into the atmosphere by catching it and reinjecting it in the existing pipeline network. The compressors (supplied by Teréga) were successfully installed in the new-built sheds, connected to the monitoring and control rooms and commissioned during the past few months.



The project was completed ahead of schedule and with zero HSE incidents. The success of this long project was thanks to the hard work and dedication of the entire team involved, including the personnel from Teréga, Actémium (3C Metal's partner) and Sogea (3C Metal's main civil works subcontractor).



## FRANCE TEAM COMPLETES CONNECTIONS FOR A NEW ARKEMA TRAIN STATION FACILITY

Despite a challenging project schedule, 3C Metal successfully completed the connections for a new train station to transport petrochemicals within the facility.

The project was carried out for French multinational Arkema - a global chemical manufacturer and a producer of industrial materials. The project involved connecting the

existing Arkema process unit to a new train station (used for product transfer) and newly-built storage tanks.





## 20 KILOMETER PIPELINE PROJECT UNDERWAY IN FRANCE

3C Metal, in joint venture with SPAC, was recently awarded a contract to build a 20 kilometer pipeline (with 17 special points and drilling operations) across seven sites located near Agen in southwest France.

The work includes seven gas interconnection installations and the fabrication of one distribution skid. The aim of this project is to maintain and secure the regional gas transport

network which was built between 1948 and 1960. On-site work started in May and is scheduled for completion in December 2021.





# 3C METAL'S NEW USA WORKSHOP BUSY WITH FABRICATION PROJECTS

3C Metal's Houston-based entity, 3C Metal USA, has been making good use of its new 40,000 square foot facility, with a range of fabrication projects currently underway.

Located near the Energy Corridor in Houston, Texas, the new facility includes a 16,000 square foot (1,500 square meter) open yard and a 14,000 square foot (1,300 square meter) workshop, equipped with two 15-ton capacity gantry cranes.

The facility has been operational since the start of the year, offering an extensive range of local, in-house services to clients in the region.





## SPUDCAN REPAIR FOR VANTAGE'S AQUAMARINE DRILLER

3C Metal's Malaysian team has carried out meticulous repair work to the spudcans on Vantage's Aquamarine Driller jack-up rig.



Spudcans are mounted at the base of a jack-up rig's legs and provide stability. 3C Metal was awarded a project to repair Aquamarine Driller's spudcans following findings from the client's routine rig inspection report. The team followed a highly-specialized repair procedure (developed with the client) and took time to discuss all the report findings and agree on all technical points with the DNV inspector before commencing the job. The full scope was DNV reviewed.

3C Metal deployed a team of highly-qualified welders to carry out the repair work which took place in Kemaman, on

the east coast of Peninsular Malaysia. The personnel helped with many other minor general repairs (such as handrails, vent lines and water-tight doors) while waiting for the rig crew to raise up the legs one-by-one and clean the spudcans before 3C Metal's work could commence.

3C Metal successfully addressed all the findings from the rig inspection report and completed the work as agreed by the client and DNV inspector. The project was completed safely, with zero lost time injuries, and to the client's complete satisfaction.

## DESIGN AND FABRICATION OF DRAIN TANK

In early Q3, 3C Metal was awarded a project for the full design and fabrication of a new drain tank.

The new tank's quality requirements and material specifications were met thanks to the resourcefulness of 3C Metal's supply chain. Main plates and fabrication of the shell and dish head were done in 3C Metal's workshop in Dubai, while requirements for specific bolts were purchased through 3C Metal's entity for global sourcing and logistics (3C Supply, located in France). Other material was purchased locally in Malaysia and Singapore after strict review of all certificates.

For the engineering phase, the scope of work included the design, full calculation and dimensioning of the tank, following ASME VIII standards. Additional requirements included external blast resistance which required a specific FEA analysis. The tank is currently under fabrication after successfully qualifying for a new welding procedure. The delivery date is scheduled for November 2021.





## TEXAS DECK MODIFICATIONS FOR VELESTO JACK-UP RIG

Velesto's Naga 4 jack-up rig was recently assigned to a drilling campaign with Petronas for a few wells in the east coast of Peninsular Malaysia. The campaign required modifications and reinforcement of the rig's Texas Deck to accommodate new drilling tools.

3C Metal was engaged by Velesto to modify the existing platform, to make the AFT beam removable for their drilling operations. In addition to this, 3C Metal also designed and fabricated an intermediate platform to temporarily accommodate the various subsea equipment (Christmas-tree skid) onto the Texas Deck during drilling operations.

This scope was reviewed by ABS throughout the design, fabrication and onsite modification process. Thanks to the

detailed design package and FEA, the onsite load test of more than 250 tons was waived.

Due to the pandemic restrictions, a remote survey was conducted during the onsite modification process. This scope was on the critical path and modifications were completed on time with no impact to the vessel's sail date.



## ONGOING FABRICATION FOR VELESTO NAGA 8 DECK MODIFICATIONS

Velesto have engaged 3C Metal to design and modify the starboard-side cellar deck on the Naga 8 jack-up rig to accommodate a new 55-ton blowout preventer.

The prefabrication is underway in the Malaysian workshop. One of the critical aspects of this scope is the installation. The existing cellar deck will need to be modified when the vessel is between wells.

A detailed installation plan, combined with double shifts (day and night shifts) have been reviewed with the client to optimize the onsite installation time.



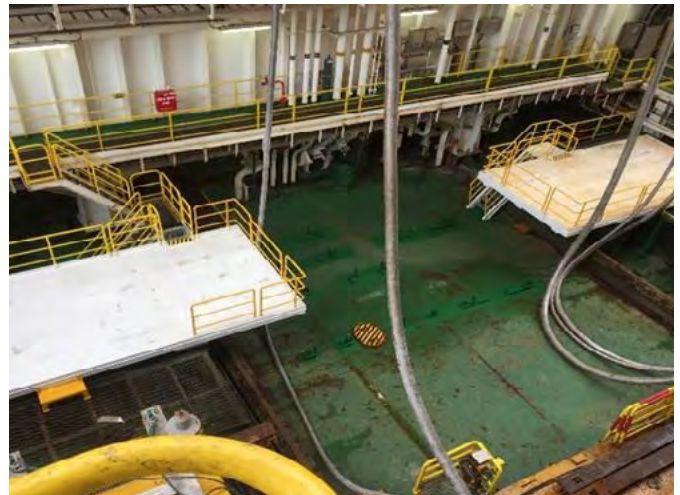


## BRINE FILTRATION UNIT PLATFORMS FOR DP3 DRILLSHIP

Earlier this year 3C Metal completed a project for two offshore platforms to house brine filtration units onboard a DP3 drillship working in Malaysia.

The two platforms were designed to be installed on a bolted heavy duty leg on the existing Christmas tree seats. The installation location was on the port and starboard sides in the forward moonpool area of the drillship.

Installation started while the vessel was anchored and was carried out while the vessel was in transit. Installation was completed on time and with no incidents.



## 3C METAL MIDDLE EAST RENEWS JSRS CERTIFICATION FOR OMAN

3C Metal's Dubai-based entity, 3C Metal Middle East, has renewed its certification as an approved supplier to the Oman oil and gas industry's Joint Supplier Registration System (JSRS).

The JSRS was implemented to create a joint supplier registration and certification system that aims to promote

local content, connectivity and productivity within the oil and gas industry of Oman.





# 3C METAL MIDDLE EAST GRANTED API 4F LICENSE

Effective as of August 9, 3C Metal's Dubai-based entity, 3C Metal Middle East, has received its API 4F license. The license allows 3C Metal Middle East to support clients with substructure upgrades, modifications, repairs and custom designs with the API 4F certification included on the fabricated items.

## API 4F – DRILLING RIG SUBSTRUCTURES



3C Metal holds an API 4F license for drilling rig substructures and can assist clients with design, fabrication and installation of parts and complete substructures.

### 4F LICENSE DETAILS

**LICENSE NUMBER: 4F-0481**

**SPECIFICATIONS: PSL-1, PSL-2**



## OUR SERVICES

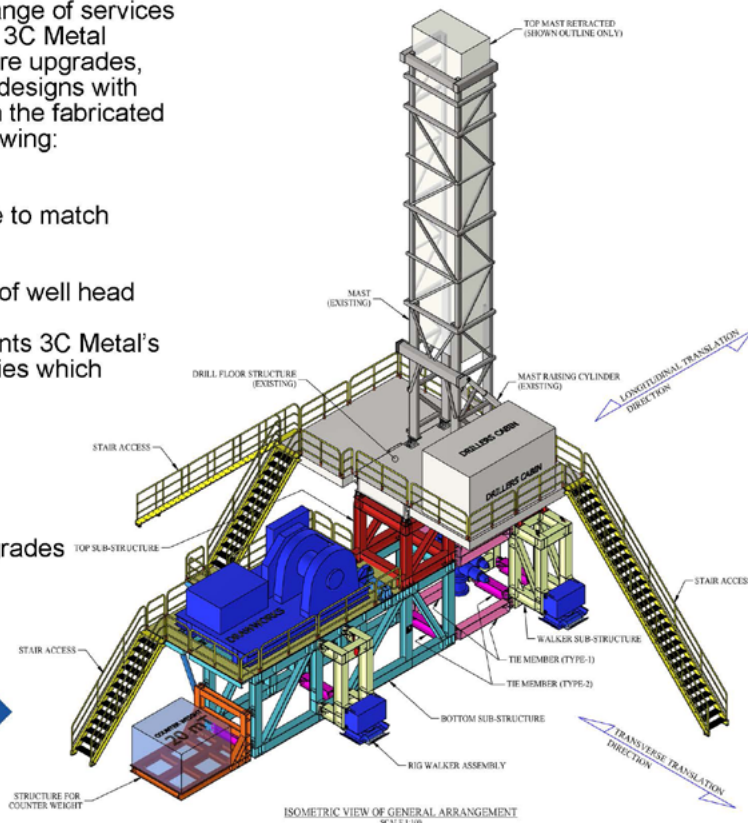
3C Metal has extensive experience in the drilling industry and can provide a large range of services for piping and structural upgrades. 3C Metal can support clients with substructure upgrades, modifications, repairs and custom designs with the API 4F certification included on the fabricated items. This service covers the following:

- ▶ Addition of pony subs
- ▶ Custom design of substructure to match drilling site constraints
- ▶ Addition of walking systems
- ▶ Upgrade of BOPs or handling of well head

The API 4F certification complements 3C Metal's specialized rig fabrication capabilities which include:

- ▶ API 16C kill and choke lines
- ▶ Mud piping
- ▶ Cement piping
- ▶ High pressure manifolds
- ▶ Managed pressure drilling upgrades
- ▶ BOP skids

Example of rig walker substructure designed by 3C Metal.





## 3C METAL BELMET NAMIBIA REACHES 400,000 MAN-HOURS LTI-FREE

Last month 3C Metal Belmet Namibia reached 400,000 man-hours LTI-free. In recognition of this achievement, each team member was presented with a cap with the safety milestone embroidered across the side.



## 3C METAL EXHIBIT AT THE 2021 OFFSHORE TECHNOLOGY CONFERENCE IN HOUSTON

From 16-19 August, 3C Metal exhibited at the Offshore Technology Conference (OTC), held at the NRG Park in Houston.

The OTC is a flagship event that brings together energy professionals to explore advancements in scientific and technical knowledge for offshore resources. For the third year running, 3C Metal had a promotional stand at the exhibition's French Pavilion. The event provided a unique opportunity for 3C Metal to showcase its brand to representatives from the world's largest oil producers and service providers.

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





## HIGH CALIBER TEAM BUILDING EVENT FOR USA STAFF

The 3C Metal USA team aimed high for their team building event. The team got together and took part in some clay shooting at American Shooting Centers, located inside George Bush Park in West Houston.

Sporting clays is a shotgun shooting game where clay targets are launched into the air in a matter that simulates

the flight of game birds in their natural habitat. Needless to say, everyone gave it their best shot.



## FRANCE GREEN WEEK

Following the implementation of 3C Metal Group's "Green Office Pledge", 3C Metal's team in France spent a week focusing on the five 'R's of sustainability: refuse; reduce; reuse; recycle and replant.

The keys aims throughout the week included eliminating single-use plastic, providing reusable or biodegradable alternatives, educating staff about recycling and encouraging staff to plant trees and create compost. Daily toolbox talks were conducted with a focus on the environment. Staff were all given reusable bags, more recycling bins were placed around the facilities and the teams started an onsite compost system.

3C Metal remains committed to minimizing our environmental footprint as much as possible and adopting practices to make our workplaces more sustainable





## 2021 TOUR PÉDESTRE DU BÉARN RELAY RACE

On Saturday 2nd and Sunday 3rd of October, seven runners representing 3C Metal took part in the annual two-day relay race, Tour Pédestre du Béarn (the Tour of Béarn foot race), in the south of France.

The route starts from Pau and goes from village to village in the Béarn region, passing through the foothills of the Pyrénées before descending to the finish line at Place Clémenceau in Pau. Over the course of the event the teams of seven runners cover a distance of nearly 200 kilometers (125 miles).

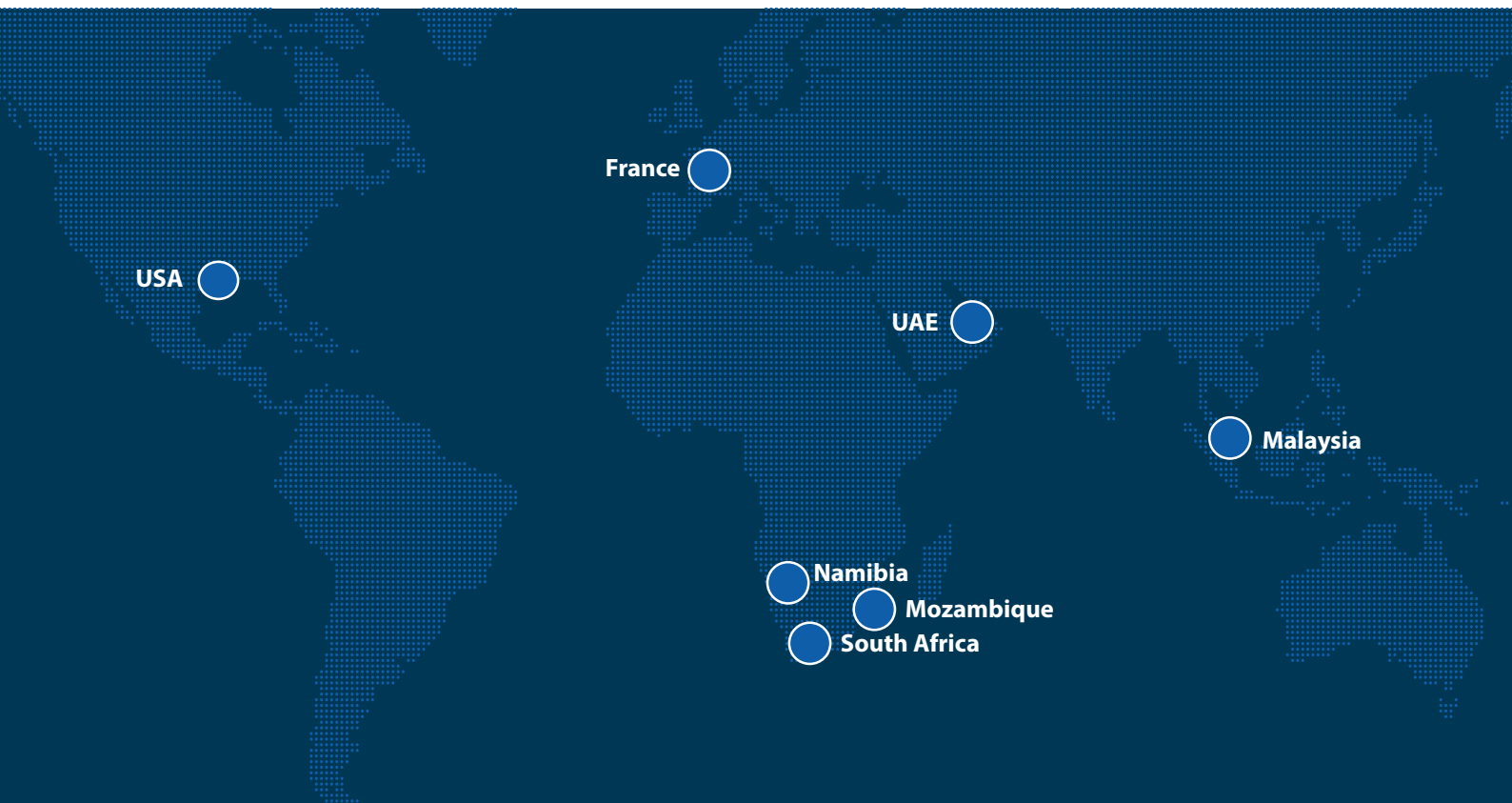
The 3C Metal team was made up of employees (Jonathan

Marque, Damien Secco, Loïc Geneau, Frédéric Martin and Dejan Zigic) and associates of 3C Metal (Patricia Ledrut and Mathieu Sallenave).

The team battled harsh conditions and steep ascents before securing 117th position out of 142 teams. Their overall time was 19 hours 31 minutes and 49 seconds.







## FRANCE

3C Metal/ 3C Supply  
3210 Route de Larvath  
64150 Sauvelade  
France  
T :+33 (0)5 59 67 64 67  
F :+33 (0)5 59 67 65 55  
E : office@3cmetal.com  
E : office@3csupply.com

## SOUTH AFRICA

3C Metal Belmet/ 3C Subsea  
9A Electron Street, Triangle Farm  
Stikland 7530 Bellville  
South Africa  
T: +27 (0)21 949 63 46  
E: southafrica-office@3cmetal.com

## MALAYSIA

3C Metal Asia Sdn. Bhd  
No.2 Jalan Sagai 2,  
Sime Darby Business Park,  
Taman Pasir Putih,  
81700 Pasir Gudang, Johor,  
Malaysia  
T: +60 (0)7 2520 321  
E: asia-office@3cmetal.com

## MOZAMBIQUE

3C Metal Belmet  
Maputo  
Mozambique  
T: +27 (0)21 949 63 46  
E: mozambique-office@3cmetal.com

## UAE

3C Metal Middle East  
Plot No. MO 0629  
Jebel Ali Free Zone (JAFZA)  
P.O. Box 261998  
Dubai  
United Arab Emirates  
T: +971 (0)4 883 0682  
F: +971 (0)4 883 0683  
E: me-office@3cmetal.com

## NAMIBIA

3C Metal Belmet  
29 Second Street East  
Industrial Area  
9000 Walvis Bay  
Namibia  
T: +264 64 274 500  
E: namibia-office@3cmetal.com

## USA

3C Metal USA  
11983 Nat Steel Suite 11983-A  
Houston  
TX 77041  
USA  
T: +1 713 808 9651  
F: +1 832 831 3487  
E: usa-office@3cmetal.com