

3C News



3C METAL GROUP ACHIEVES 1.5 MILLION MAN-HOURS LTI FREE

INSIDE THIS ISSUE

ISSUE 08 | Q4 2017

3C METAL MIDDLE EAST CARRYING OUT TWO MPD SYSTEM INTEGRATIONS FOR SEADRILL

Seadrill has awarded 3C Metal Middle East two projects for the integration of managed pressure drilling (MPD) systems onboard the West Capricorn and West Saturn.

UPGRADE WORK ON DRILLSHIP ENSCO DS-6

3C Metal is carrying out upgrade work to drillship DS-6, currently located offshore Egypt.

BLAST CURTAIN INSTALLATION FOR SEMISUBMERSIBLE ENSCO 8504

3C Metal Asia completes blast curtain installation onboard semisubmersible ENSCO 8504

CONTENTS

- 
- 03** A WORD FROM THE MANAGING DIRECTOR
A WORD FROM THE GENERAL MANAGER OF 3C METAL MIDDLE EAST
- 04** 3C METAL MIDDLE EAST CARRYING OUT TWO MPD SYSTEM
INTEGRATIONS FOR SEADRILL
- 06** 3C METAL PERFORMING UPGRADE WORK ON DRILLSHIP ENSCO DS-6
3C METAL REVIEWS CORIOLIS INSTALLATION ONBOARD ENSCO DS-9
- 07** BLAST CURTAIN INSTALLATION FOR SEMISUBMERSIBLE ENSCO 8504
- 08** FURTHER SUCCESS WITH 3C METAL SOUTH AFRICA DIVERSIFICATION
EFFORTS: TWO NEW SOLAR ENERGY PROJECTS
3C BELMET SERVICES ANNOUNCES NAME CHANGE TO 3C SUBSEA
- 09** 3C METAL GROUP ACHIEVES 1.5 MILLION MAN-HOURS LTI FREE
SOUTH AFRICA WELDING INSTITUTE WELDING EQUIPMENT DEMONSTRATION
- 10** 3C METAL MANAGING DIRECTOR ACCEPTS AWARD AT THE EY
ENTREPRENEUR OF THE YEAR AWARDS CEREMONY IN FRANCE
3C METAL TO EXHIBIT AT ADIPEC 2017
- 11** BELMET MARINE SHOWS SUPPORT FOR THE WORK OF CAPE TOWN KARATE CLUB
3C METAL SOUTH AFRICA CELEBRATES MANDELA DAY BY SUPPORTING
COMMUNITY DEVELOPMENT
- 12** CONTACT

A WORD FROM THE MANAGING DIRECTOR



We are nearing the end of what has been a busy and successful year for 3C Metal. The third quarter alone saw us reach some impressive targets. In particular, I'm proud to say that we have consistently demonstrated a strong safety performance this year. We recently reached our first Group HSE target by achieving 1.5 million man-hours with no lost time injuries (LTIs). This is an exceptional achievement for the Group - one that required commitment and dedication to safety by all employees. Our aim is to complete the year with no LTIs and our next target for the Group will be three million man-hours with no LTIs.

Achieving Group objectives, such as this, reinforces that everyone has a key role to play in the success of 3C Metal. This includes the many people working behind the scenes, offering their expertise and support to make sure our operations run smoothly and ensuring we are well-positioned to deliver the best results to our clients.

In September, I had the pleasure of accepting the Global Enterprise Award on behalf of 3C Metal, at the regional EY Entrepreneur of the Year Awards ceremony held in Toulouse, France. The award highlights our commercial success and the further potential for international growth. I would like to congratulate all employees for their efforts in helping us to achieve this recognition.

In keeping with our strategy to increase our global reach to meet the needs of our clients, I am pleased to announce the establishment of a new USA entity in Houston - 3C Metal USA. With some of our major clients based in Houston, our new

location will allow us to increase our responsiveness to their needs. It will also allow us to further our activities in North and South America. More details about this new entity will be shared in the coming weeks.

The continued and strategic growth of 3C Metal, enables us utilize our facilities to increase our competitiveness and improve our productivity. This has been evident in the execution of some of our recent projects that you can read about in this newsletter. Now more than ever, it is important that we continue to work towards achieving consistent values, culture, brand and information sharing across our expanding global presence. This is something I am confident we can achieve by building on our recent successes, gathering and listening to feedback from clients and employees and establishing principles that will govern our operations across the Group.

Philippe Boy
3C Metal Managing Director

A WORD FROM THE GENERAL MANAGER OF 3C METAL MIDDLE EAST



Throughout 2017, we have focused strongly on adapting to new modes of operation to increase our competitiveness in changing economic environments. This has pushed us to refine our estimation ratios, be leaner on our supply and fabrication offers and be more efficient than ever for installation work. As a result of these efforts, our facilities have remained reasonably busy on both the fabrication and deployment fronts.

Earlier this year, 3C Metal Middle East carried out the integration of a managed pressure drilling (MPD) system onboard Seadrill's

West Capella drillship. Following the successful completion of this project, Seadrill awarded 3C Metal Middle East two projects for the integration of similar MPD systems onboard the West Capricorn and West Saturn. Both projects are currently underway. The repeat business from Seadrill is testament to 3C Metal's capabilities for third party system integrations (details on pages 4 and 5). Another project highlight for 3C Metal Middle East is the upgrade work for drillship ENSCO DS-6 - the first project we have undertaken with BP as the operator (details on page 6).

In Asia, our dedicated team in Johor Bahru has been pushing hard to broaden our local client base and secure opportunities for rig refurbishment and new build activities. Recent project highlights include work on drillship ENSCO DS-9 and semisubmersible ENSCO 8504 (details on page 6 and 7).

I'm pleased to announce that 3C Metal Middle East has signed an agency agreement with Al Roumi

General Trading Establishment in Abu Dhabi. The new agreement will allow us to deploy personnel on offshore projects in Abu Dhabi and help us to tap into the markets which are still dynamic in the region. This is the second agency agreement we have established in the Middle East, following the agreement signed in Saudi Arabia in 2016.

As we continue to seek out new opportunities in the Middle East and Asia, we will explore ways to improve our services for clients. We will continue to offer our clients intelligent engineering solutions, effective project management, efficient installation services and the services of our highly-skilled, multidisciplinary teams. We have successfully extended these services to the downstream industry with the delivery of multiple EPC contracts in France. Moving forward, this is something we will work towards achieving in the Middle East.

Yannick Damry
General Manager of 3C Metal Middle East

3C METAL MIDDLE EAST CARRYING OUT TWO MPD SYSTEM INTEGRATIONS FOR SEADRILL

Seadrill has awarded 3C Metal Middle East two projects for the integration of managed pressure drilling (MPD) systems onboard the West Capricorn and West Saturn.



Earlier this year, 3C Metal successfully completed the integration of a managed pressure drilling (MPD) system onboard Seadrill's West Capella drillship in Tenerife, Spain. Seadrill subsequently awarded 3C Metal the structural and piping components for the integration of two Safekick MPD systems - one onboard Seadrill's West Capricorn (a semi-submersible on contract in the Gulf of Mexico) and Seadrill's West Saturn (a drillship on contract with Statoil in Brazil).

The design for both integrations involved the installation of the MPD equipment in stackable DNV GL 2.7-3 certified modules with the modules then clamped onto a spreader frame. The tubing and piping was designed with bolted connections and all electrical cables terminating at junction boxes near the modules. The design was intended to allow for the easy disconnection and demobilization of the non-permanent equipment.





Work is still ongoing for both projects, with the work set to be carried out in three phases. The first phase involves the installation of all permanent items onboard the vessels (structural reinforcement, hard piping connecting into the vessel system and electrical junction boxes). The second phase consists of the integration of the MPD manifolds within the modules – this will be completed onshore in Louisiana, close to the facility of the manifolds manufacturer. The third and final stage will be the installation of the modules, fitted with the MPD equipment, onboard the vessels. Planning the work in these three phrases has allowed 3C Metal to anticipate the preparation work onboard the vessels while they have not been in operation.

3C Metal has been actively involved in the engineering, supply and prefabrication required for all three phases of these projects as well as the offshore installations. In the early stages, 3C Metal's engineering and project teams performed 3D laser scanning surveys onboard both vessels in order to optimize the designs and maximize the amount of prefabrication that could be performed. With the intention of

producing the most efficient solutions for Seadrill's project schedules, the supply and prefabrication has been carried out from three locations. Belmet Marine (part of 3C Metal Group and located in Cape Town, South Africa) carried out the large structural fabrication, including the fabrication of eight DNV GL 2.7-3 certified modules (four per vessel). 3C Metal Middle East has been in charge of the piping for the West Saturn. The remaining piping and smaller structures required on the West Capricorn have been subcontracted to workshops in Texas and Louisiana.

The installation of the permanent equipment onboard the West Capricorn in the Gulf of Mexico is ongoing, with a team composed of 3C Metal and local personnel. The modules are about to reach the USA where they will be fitted with the MPD manifolds manufactured by Cortec and all the electrical actuators, sensors and lighting. Four of these modules will then be transferred onboard the West Capricorn for the final integration. The remaining four will be shipped to Tenerife and integrated onboard the West Saturn during its transit towards its operating location in Brazil.

3C METAL PERFORMING UPGRADE WORK ON DRILLSHIP ENSCO DS-6

3C Metal is carrying out upgrade work to drillship ENSCO DS-6, located offshore Egypt. This is the first major project 3C Metal has carried out with BP as the operator.



The upgrade involves the integration of structures, piping, sheave attachment points and electrical connections for various well completion systems - including the Intervention Workover Control System (IWOCS) from OneSubsea and the Halliburton Subsea Safety System (TSS) for the Upper Completion.

In the initial stages of the project, 3C Metal deployed personnel to carry out a site survey using laser scanning technology. From this survey, 3C Metal was able to create designs that would integrate seamlessly into the rig and ensure the installation phase would be carried out smoothly.

For the installation, 3C Metal delivered one certified DNV 2.7-1 offshore container, holding scaffolding and project specific tools. The material was delivered to ENSCO DS-6 in Egypt,

overcoming time constraints by utilizing the 3C Metal UAE workshop. The IWOCS structures were completed with a combined weight of more than 16 tons. To date, they have taken almost 420 man-days to install.

For the Halliburton Subsea Safety System, a full engineering survey was run on the Upper Completion. Umbilical deflectors and clamped pad eye were designed and installed in the derrick to run the Upper Completion Umbilical. In addition to this work, 3C Metal delivered and installed a new four inch oil based mud line on the U-Deck and an inch flow line bypass in the mud pit room.

With work still ongoing and an average of 11 personnel onboard ENSCO DS-6, 3C Metal has so far achieved more than 8,580 man-hours of installation over a span of 65 days.

3C METAL REVIEWS CORIOLIS INSTALLATION ONBOARD ENSCO DS-9

In early 2016, 3C Metal was commissioned by Ensco to review the installation of a Coriolis sensor loop onboard drillship ENSCO DS-9. The same Coriolis sensor had been successfully integrated on a sister rig, drillship ENSCO DS-8, by 3C Metal.



3C Metal was requested to follow the same integration route, where the Coriolis loop runs as a bypass of the rig's main flowline and is located beneath the drill floor near the diverter. 3C Metal provided a system on which all knife valves are pneumatically actuated and controlled by a pneumatic panel located on the drill floor. The panel contains an interlock that prevents the bypass valve from being closed when the valves on the loop are shut - mitigating the possibility of accidentally

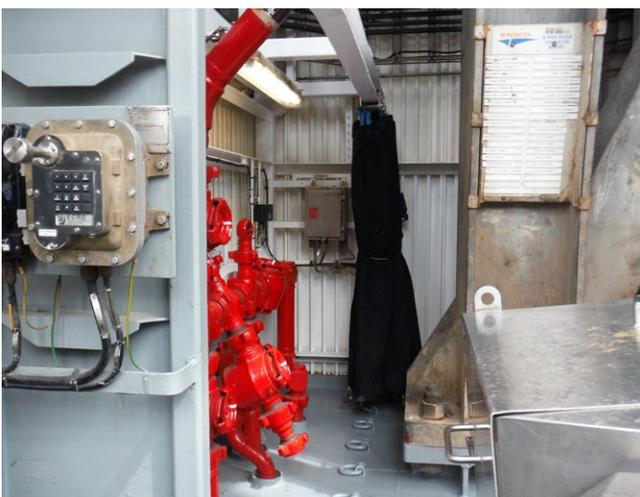
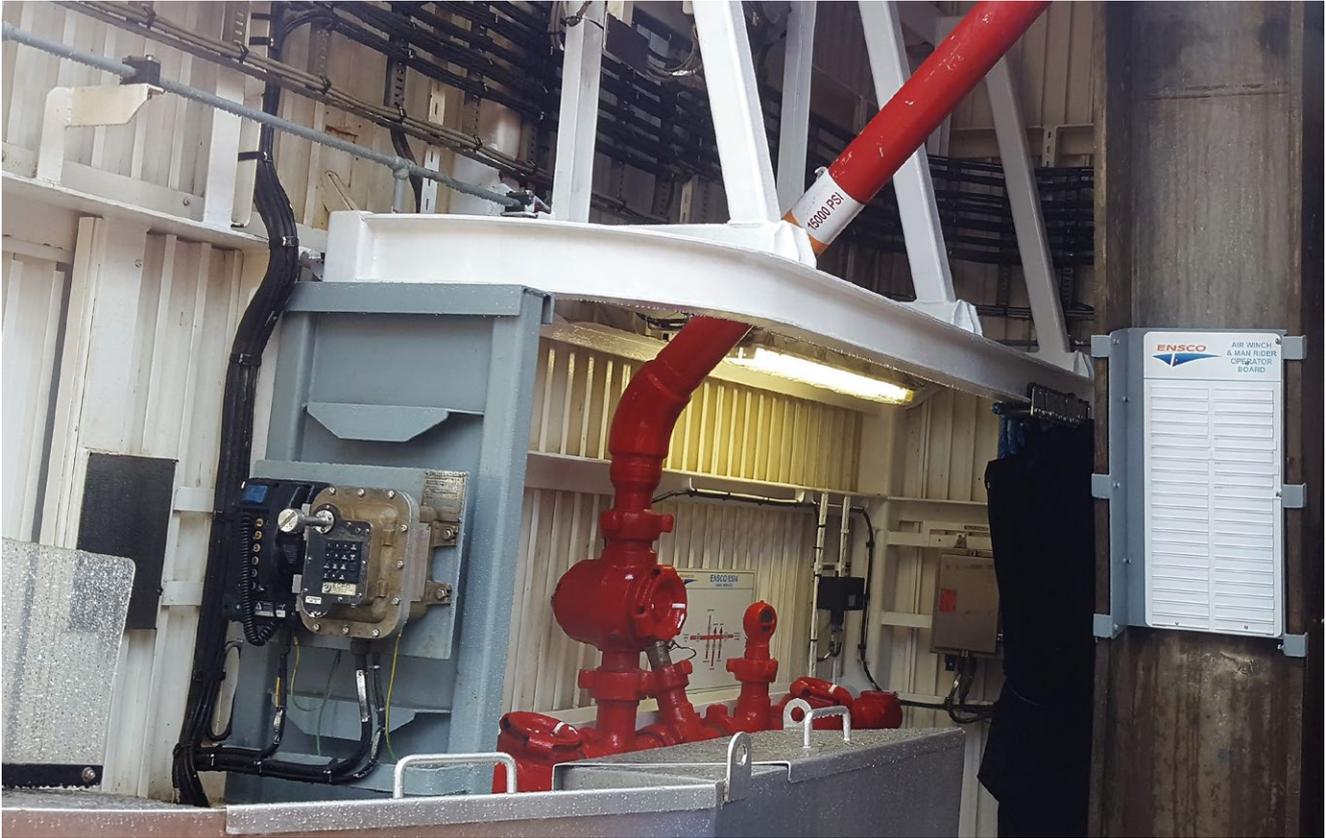


closing all valves at one time, which could plug the flowline and create an overflow on the drill floor.

For this project, all parts (pneumatic valves, the pneumatic panel, piping spools) were designed, selected and supplied by 3C Metal. The installation was successfully completed with the system functionalities tested and approved onsite while the rig was in a shipyard in Singapore.

BLAST CURTAIN INSTALLATION FOR SEMISUBMERSIBLE ENSCO 8504

High pressure components and manifolds require the utmost attention to safety. Drilling rigs have several high pressure manifolds where personnel are often required to work in the vicinity on the drill floor. The current risk mitigation strategy involves preventing people from being in the area while the manifolds are under pressure.



EnSCO requested further preventive measures for semisubmersible ENSCO 8504 by having blast curtains installed by 3C Metal. The blast curtains are designed to stop any projectiles caused by the unlikely event of a high pressure failure in the area of the drill floor. 3C Metal selected a suitable curtain designed to absorb the energy from a high pressure failure. 3C Metal was responsible for the design, fabrication

and site installation of the supporting structure. The system was fitted with rails, trolleys and attachment points at the lower side to allow the protective curtain to be opened and closed quickly and safely. The successful installation resulted in a safer working environment for personnel onboard the semisubmersible.

FURTHER SUCCESS WITH 3C METAL SOUTH AFRICA DIVERSIFICATION EFFORTS: TWO NEW SOLAR ENERGY PROJECTS

Following the successful completion of the loops and headers prefabrication projects for concentrated solar power (CSP) plants of Kathu and Ilanga, in Cape Town, South Africa, it is with great excitement that 3C Metal South Africa announces a further two projects have been secured for these plants.

The first project is for the site installation of a section of the header piping on the Ilanga 100 megawatt plant in the Northern Cape, South Africa. The second is a prefabrication project for the Kathu Solar Plant that will consist of 4 inch to 24 inch diameter carbon steel piping for the power block. These new projects will keep 3C Metal South Africa well on track to achieve and exceed the diversification targets that were set for work outside of the upstream oil and gas sector.

The parabolic trough technology used for these solar plants requires large numbers of Heat Transfer Fluid (HTF) piping systems. The projects obtained for the Ilanga and Kathu solar plants are resulting in record fabrication figures for 3C Metal

South Africa - such as welding inch equivalent produced per shift, the number of RTs per shift and welding defect rates compatible with, and exceeding, worldwide industry standards.

The newly obtained site installation contract at Ilanga has been contracted on a cost per inch equivalent basis - something that has not previously been done on a site installation project of this scale. In the coming months 3C Metal South Africa will share further exciting news about the developments of these solar projects.

3C BELMET SERVICES ANNOUNCES NAME CHANGE TO 3C SUBSEA

3C Metal South Africa's specialist division, 3C Belmet Services, recently announced its name change to 3C Subsea. A decision was made to change the name in order to give a better representation of the work undertaken by the entity.



3C Belmet Services was formed in 2012 as a joint venture between 3C Metal South Africa and Belmet Marine. Since its inception, the team in Cape Town have offered a full range of services to clients in the oil and gas industry for the maintenance of marine drilling risers and capital drilling equipment.

Under the new name, 3C Subsea remains an entity of the 3C



Metal Group of companies, operating as a specialist division of 3C Metal South Africa. It will continue to develop and offer a complete range of services for the maintenance of marine drilling risers and associated capital drilling equipment. 3C Subsea also remains a GE Oil & Gas approved vendor and Channel Partner for marine drilling risers in Sub-Saharan Africa.

3C METAL GROUP ACHIEVES 1.5 MILLION MAN-HOURS LTI FREE

3C Metal is proud to announce the Group's recent achievement of 1.5 million man-hours with no lost time injuries (LTIs).



3C Metal Managing Director, Philippe Boy said this safety milestone is a reflection of the strong safety culture fostered throughout the 3C Metal Group.

"I would like to congratulate all employees for helping to achieve our first Group HSE target. It is only through your concerted efforts and commitment to safety that we are able to achieve such a pleasing result. Our new target is set at three million man-hours LTI free – a target that I am confident we can achieve with your continued dedication," Mr Boy said.

As a token of appreciation, all 3C Metal Group employees were given a 3C Metal cap embroidered with the achievement on the back. Employees were encouraged to wear it and keep safety on their minds.



SOUTH AFRICA WELDING INSTITUTE WELDING EQUIPMENT DEMONSTRATION



On August 24, 3C Metal South Africa hosted a site visit, arranged by the South African Institute of Welding (SAIW), for a welding equipment demonstration.

As well as providing an ideal networking opportunity, the event allowed 3C Metal South Africa to showcase the company and its welding capabilities – in particular the waveform welding technologies such as the Fronius Compact Cladding Cell, Lincoln STT and Lincoln Powerwave S350. After a presentation by 3C Metal South Africa General Manager, Michael Birch, and Welding Engineer, Kristian Kruger, the attendees were taken on a workshop tour and given a demonstration of the equipment.

3C METAL MANAGING DIRECTOR ACCEPTS AWARD AT THE EY ENTREPRENEUR OF THE YEAR AWARDS CEREMONY IN FRANCE

On 21 September, 3C Metal Managing Director, Philippe Boy, was presented with the Global Enterprise Award at the regional EY Entrepreneur of the Year Awards ceremony held in Toulouse, France. The award was given in recognition of 3C Metal Group’s success under Mr Boy’s leadership.



The Global Enterprise Award is given to a leader of a company (either a small to medium-sized enterprise or intermediate-sized enterprise) that is a global front runner in its market and strategically positioned for international growth and development.

3C Metal more than fit the criteria, with the Group’s locations now including France, South Africa, the UAE, Malaysia, Namibia and most recently the USA, and with 80% of its turnover made outside of France.

Mr Boy said he was proud to accept the Global Enterprise Award on behalf of 3C Metal.

“This is excellent recognition, not just for myself, but for all of 3C Metal. The success of 3C Metal is something that has been achieved by the collective efforts of all our employees at every level of the organization and I share this accolade with them,” Mr Boy said.

Mr Boy said the key drivers to 3C Metal’s success have been the highly specialized and technical nature of its services, remaining adaptable to new markets and strategically expanding the Group by establishing entities in global oil and gas and industrial hubs.



3C METAL TO EXHIBIT AT ADIPEC 2017

3C Metal are pleased to announce that it will exhibit at the 2017 Abu Dhabi International Petroleum Exhibition and Conference (ADIPEC) which will be held from 13 to 16 November. ADIPEC is a flagship event and is the world’s most influential oil and gas exhibition and conference in the Middle East. It is the second year running that 3C Metal will take part. Once again, 3C Metal will exhibit in partnership with HYD&AU at the French Pavilion in Hall 9. Industry delegates are encouraged to preregister to attend.

BELMET MARINE SHOWS SUPPORT FOR THE WORK OF CAPE TOWN KARATE CLUB

Belmet Marine has a long history of supporting local community development projects. Keeping with this tradition, earlier this year, Belmet Marine made a donation of karate apparel to the students of Buntu Gojukai Karate School located in Langa, in Cape Town.

The club's mission is to not only get kids active and involved with karate, but to teach them discipline, respect and loyalty and keep them away from gang-related activity and other negative influences.

Belmet Marine Managing Director Pieter Kroon said that the apparel donation was part of Belmet's annual program to assist local sports clubs, schools or deserving individuals. Mr Kroon said Belmet aims to form a long-term relationship with the club, by offering continuous support for their work.



3C METAL SOUTH AFRICA CELEBRATES MANDELA DAY BY SUPPORTING COMMUNITY DEVELOPMENT

In celebration of Mandela Day, a small number of 3C Metal South Africa employees took part in a workshop hosted by non-profit organisation Ikaya le Themba (meaning 'home of hope' in Afrikaans).



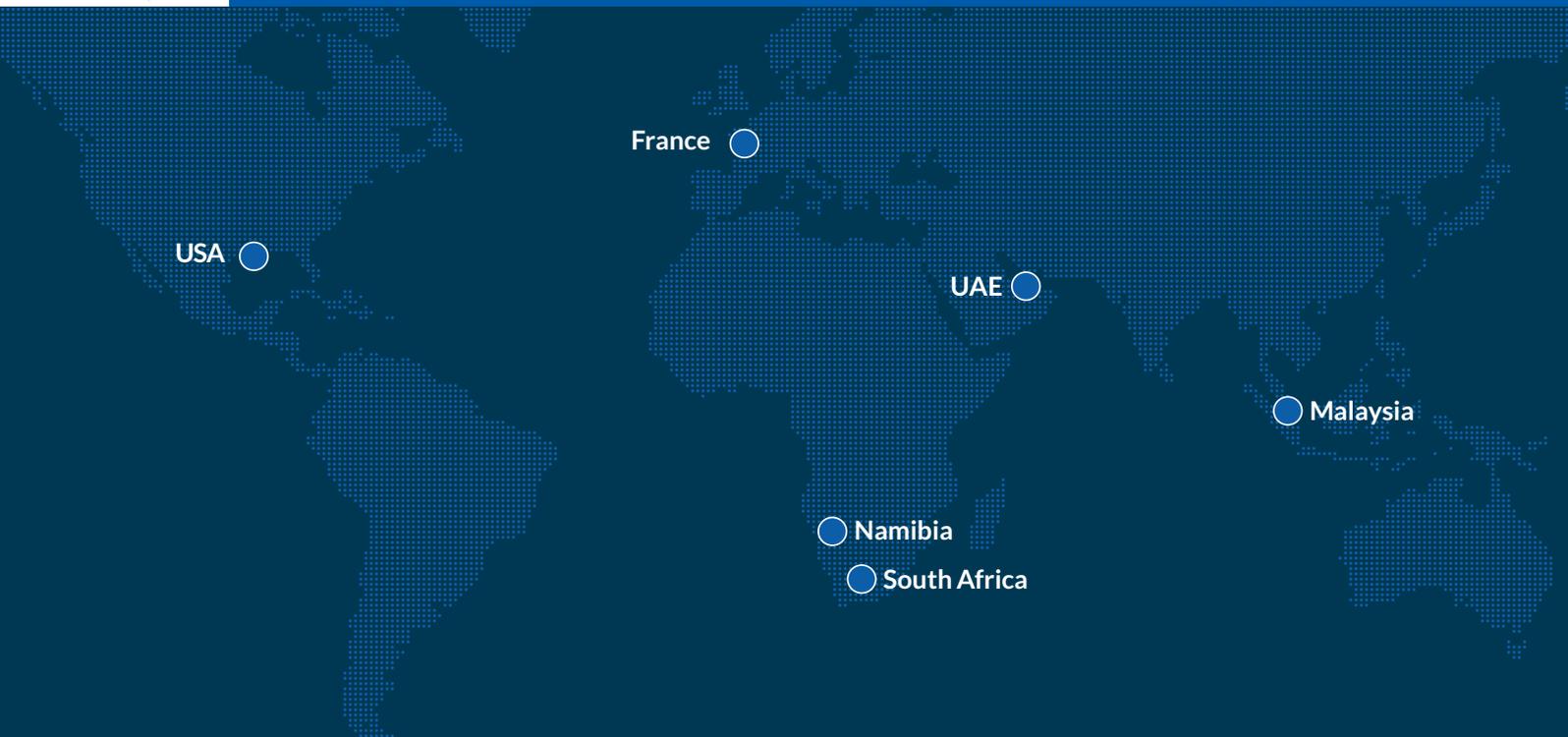
The organisation operates in the Khayelitsha community in Cape Town and provides community development services to assist vulnerable children and families in South Africa. 3C Metal South Africa employee, Deone Husselman, attended the event to learn more about how 3C Metal South Africa could support their cause.

"Ikaya le Themba is run by volunteers and it is just great to see how they give their love and support to the less fortunate. My breath was taken away by the wonderful things they do for the



Khayelitsha community and around the Western and Eastern Cape," Mrs Husselman said.

To support Mandela Day's 67 minute goodwill initiative, some of 3C Metal's South Africa's office and workshop employees chose to donate one hour of their wages to Ikaya le Themba. The initiative encourages people to donate 67 minutes of their time to a good cause, with every minute representing a year of Nelson Mandela's public service.



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Namibia

South Africa

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