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SOLUTIONS THAT MAKE THE DIFFERENCE

VALLOUREC HAS ROBUST AND INNOVATIVE EXPERTISE, to meet the most demanding needs of both onshore and offshore installations, in the oil, gas, renewable energies or industrial sectors. And most importantly, it is 100% customer-oriented— even in the most complex environments.

#2 SATISFIED CUSTOMERS

In 2021, Vallourec was awarded a major 10-year framework contract with Exxon Exploration and Production Guyana Limited (EEPGL), a subsidiary of ExxonMobil. This covers the long-term supply of the line pipes needed for EEPGL’s oil and gas field development projects. EEPGL operates the 26,800km² Bakken Block, on which around 10 billion barrels of oil equivalent have been discovered since 2013. And Vallourec’s recipe for this commercial success? Its strategic presence in the area, as well as its cutting-edge expertise, and its wide range of steel grades, like the 300 grade which is suitable for the most corrosive and deepest offshore environments.

#1 HIGHLIGHTS

VALLOUREC’S EXCELLENCE COMES TO ADIPEC

Nearly 100,000 professional visitors, 2,000 exhibitors and 51 of groups from all over the world met in Abu Dhabi for the ADIPEC exhibition from November 15 to 18, 2021. This event, the most influential in the oil and gas market, represented a unique opportunity for Vallourec to meet players in the sector after two years of the pandemic and social distancing. To meet the expectations of its customers and prospects, the Group used its stand to showcase its spirit of innovation. Innovation in the products and services presented, such as Intelligent Drift, which provides real data on casing tubes during critical operations (see p. 5), Additive Manufacturing (see opposite) and Smartengo digital solutions (see p. 4). Innovation too in the solutions presented by Vallourec: for accelerating the energy transition (bacteria and hydrogen transport and storage solutions, geothermal energy, see p. 6-7).

And finally, innovation in the immersive and interactive experience offered to visitors who were able to attend live demonstrations.

5,000
WAMP®-PRINT®-II CONNECTIONS INSTALLED SINCE MAY 2021 BY AN OPERATOR FROM WEST TEXAS, FOR ITS UNCONVENTIONAL WELLS IN NEW MEXICO.

VALLLOUREC’S RESPONSE

When Weatherford called on Vallourec for an emergency delivery of WAMP® TTR HW lifting plugs, the Group proposed its innovative Additive Manufacturing system, which is fast, economical and offers the same level of performance and quality. This innovative connection, available solid bar or we would have been limited to the OD of the process as we would have solid bar with a larger OD possible with traditional processes. This wouldn’t have been the same mechanical properties and meeting the customer’s specific OD requirements with no minimum order quantity. This wouldn’t have been possible with traditional processes as we would have been limited to the OD of the available solid bar or we would have had to purchase a new solid bar with a larger OD further extending the lead time."

Weatherford

Weatherford, an American company specializing in the design and manufacture of equipment for the oil and gas industry, was able to count on Vallourec to manufacture and deliver two lifting plugs in record time. Rising to the challenge, the group used its brand-new expertise in Wire Arc Additive Manufacturing, to offer a 3D printing solution. This ensures a fast, competitive response to customer needs that meets all performance and safety criteria.

THE BRIEF

Weatherford needed to quickly deliver two lifting plugs for a well optimization project being carried out for one of its customers off the coast of Australia. These safety-critical components each weigh 170kg, are 50cm in diameter and can support loads of nearly 100 tons.

THE PROBLEM

These parts are designed to fit existing equipment and needed to be customized using a non-standard material. The manufacturing times were therefore very long.

THE EXPERTS’ WEBINARS ORGANIZED BY THE SINGAPORE AND JAKARTA TEAMS IN 2021.

More than 400
PARTICIPANTS IN THE 11 “ASK THE EXPERTS” WEBINARS ORGANIZED BY THE SINGAPORE AND JAKARTA TEAMS IN 2021. A great example of open and transparent dialog with local customers for OCTG and geothermal activities.

60,000 TO 70,000
TUNS OF TUBE FOR INDUSTRY (AUTOMOTIVE, ENERGY, MANUFACTURING (SEE OPPOSITE), AND SMARTENNO) FOR A WIDE RANGE OF NEEDS.

The Additive Manufacturing revolution

“Thanks to WAAM, we were able to manufacture a lifting plug in half the time of the traditional process with the same mechanical properties and meeting the customer’s specific OD requirements with no minimum order quantity. This wouldn’t have been possible with traditional processes as we would have been limited to the OD of the available solid bar or we would have had to purchase a new solid bar with a larger OD further extending the lead time.”

CUSTOMER SUCCESS STORIES

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by enhancing its range of services – both physical and digital – to work as closely as possible to the end-users of our tubes, Vallourec is now able to provide solutions all along its customers’ value chain. And this momentum is now gathering speed, reinforced by many technological and commercial successes.

Launch of a brand-new marketplace: Behub-e

At the end of 2021, Vallourec officially launched its marketplace, Behub-e. Open to Group entities as well as all energy and industry market players worldwide, this platform enables suppliers to sell their surplus production and their range of products to buyers in the sector. It therefore offers the triple advantage of reducing supply costs, contributing to the circular economy and reducing the carbon footprint of these products. Eventually, Behub-e is set to offer up to 500,000 product references (in 20 product categories) from 100 different suppliers. Vallourec services were also due to be included on the site. DENISE MOORE, MARKETPLACE BUSINESS MANAGER, VALLOUREC (USA)

“During development of the platform, we had to tackle one important challenge—to make it stand out from other marketplaces in the sector. We wanted to offer users added value. Part of the challenge was finding the right service provider that could provide the kind of B2B payment functionality we were looking for. Integrating this functionality and implementing rigorous contractual controls to protect suppliers and buyers was a real dedication from our team.”

ATIF MAZHAR, SUPPLY CHAIN MANAGER, VALLOUREC (Saudi Arabia)

“With Behub-e, we saw an opportunity to offer some surplus items for sale. So far we have advertised more than 500 product references. We are also considering the possibility of using the platform as a customer, as well as opening it up to our suppliers.”

DONALD WINATA, MANAGING DIRECTOR OF PT. OPTIMA SUMBER ENERGI (Indonesia)

“We joined Behub-e when it was launched, as this platform gives us the opportunity to reach new and more customers outside of our own traditional market (Indonesia, in our case). This is a real asset for our business.”

Large-scale deployment of the Smartengo Inventory solution for the ADNOC megaproject

September 2019: Vallourec signs a $900m deal with ADNOC (Abu Dhabi National Oil Company) to supply OCTG tubes. A new 100% digitally managed yard was built especially for the needs of this megaproject. Vallourec also has the opportunity to conduct the large-scale roll-out of Smartengo Inventory, its inventory management service, which also manages all flows and activities in the yard. Arnaud Revilloux, Digital Services Delivery Director, gives us the key reasons which he feels best sum up this collective endeavor.

#1 RACE AGAINST THE CLOCK

Delivery of the Smartengo Inventory was contractually set for the start of September 2020. We therefore had 12 months, and no more, to develop and deliver this highly complex, operational and entirely digital yard.

Although we had already implemented an initial version of Smartengo Inventory for Petronas in Brazil and TotalEnergies in Angola, we were still at the stage of a first version. The requirements contained in the specifications were much broader. To meet ADNOC’s needs, we were almost starting from a blank page before being able to ramp up our solution.

It was an ambitious move, but all of the teams stepped up and successfully rose to the challenge. By September 2020, we were on schedule to meet the target set by our customer.

#2 ENERGY, FLEXIBILITY, COLLABORATION

These are the three strengths at the heart of Vallourec’s DNA which we have been able to rely on. They also allowed us to overcome the Covid crisis, despite the involvement of teams from all around the world – teams in the Middle East (business sponsors and yard operation), developers in Brazil and teams in France (technical development and IT managers, as well as project management).

Following its transformation process, Vallourec has shown great agility in combining its historical activities as a tube manufacturer with its commitment to this new era of the development of digital solutions. By taking advantage of all of the Group’s skills, we have managed to deliver a high-quality, highly technological response that is totally in line with the customer’s expectations.

#3 STANDARDIZATION & INDUSTRIALIZATION

The yard has been running at full capacity for almost a year and a half and more than 160,000 parts have been delivered so far! We are now working to enhance our range of services, particularly by combining it with the Smartengo Running Expert solution, designed to increase the reliability of well construction operations on platforms.

As for Smartengo Inventory, standardizing and industrializing the entire flow of data that feeds into the application will be our next major challenge in order to boost its commercial expansion.

This initiative has already begun in the United States, based on Vallourec’s services in the Gulf of Mexico, and in Africa (Angola and Uganda) for TotalEnergies.

LOGAN BERTAI, PRODUCT OWNER VALLOUREC (France)

“Behub-e has brought Vallourec into a new digital era, with two very marked differences. Firstly, it is a worldwide marketplace, totally unprecedented in the sector. Secondly, it offers online payment solutions (with the possibility of payment on invoice for the seller and according to a payment schedule for the buyer) with international laws calculated in real time. Our aim is obviously to bring together as many suppliers and buyers as possible. But we are also driven by the will to go even further in supporting our suppliers in their own digital transformation by giving them access to digital marketing solutions, for example.”

AN INCRESINLY MATURE RAGE

Vallourec is consolidating and accelerating its ambition to offer a comprehensive range of products and services going beyond tubes:

Supply chain services in the United States and Africa for Serimax, the Group entity specializing in pipeline welding services.

Initial commercial presence in the Gulf of Mexico with seabed Drilling and services Drilling solutions and for radar and control and control protection pre-installed cable ramps.

New partners, including the Mexican firm Oceanwell and US firm Hughes International.

More than 160,000 parts delivered by the ADNOC yard in just a year and a half.

New customers for the Smartengo Best Fit solution, which combines tube testing.

More than 20,000 tubes incorporating the Smartengo Running Expert solution.

More than 10,000 references (in 20 product categories) delivered from all around the world—teams from all around the world as well as all energy and industry market players worldwide.

The Intelligent Drift solution now includes optimization of operational processes and costs, contributing to the circular economy and reducing the carbon footprint of the triple advantage of reducing supply costs, contributing to the circular economy and reducing the carbon footprint of these products. Eventually, Behub-e is set to offer up to 500,000 product references (in 20 product categories) from 100 different suppliers. Vallourec services were also due to be included on the site. DENISE MOORE, MARKETPLACE BUSINESS MANAGER, VALLOUREC (USA)

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New Vallourec open innovation campaign

This year’s challenge—designed to explore potential innovations combining new technologies and Vallourec products—focuses on three objectives: solutions for the production of marine energy, digitalization of workbays, and automated and digitalized tube storage sites, and the reuse of tubes and pipelines to give them a second life.

Tubes delivering data in real time

The Intelligent Drift solution now allows automated retrieval of real-time data on the inside diameter of tubes, in order to analyze their ovality. This enables operators to select tubes during platform preparation operations. Achievements so far include optimization of operational performance with limited risk of human error, reduced drilling time and optimized costs.

Additive manufacturing: now at the application stage

In the latest chapter in the development of the additive manufacturing range, the Group recently launched the Vallourec® Additive Manufacturing mobile app. Once downloaded from the App Store or Android Play Store, the customer can enter the specifications of the desired part directly via the interface. If the project is compatible with additive manufacturing, a 3D image and a digital file are created, accompanied by a production schedule for the part—thereby optimizing customer experience, accelerating delivery times and reducing physical storage.
ADVANCING THE TRANSITION

AS AN INTERNATIONAL INDUSTRIAL GROUP, Vallourec is fully aware of its impact and its role in helping to build a more sustainable, resilient and responsible world—a venture in which it involves its employees, customers, investors, suppliers and all of its stakeholders.

Equally importantly, CSR also means striving to be a responsible employer, one that supports the professional development of all its employees. From that perspective, our Women@Vallourec initiative, which promotes women within the Group, has set itself the target of increasing diversity in order to boost our performance and innovation.

What would be the key success factor to further speed up this transition?

Corinne Willecomme:

"The social and environmental changes we are facing are unavoidable. We therefore need to involve everyone in the company. We also sense very high expectations from our teams, which is why we have recently carried out actions (workshops, etc.) to share this growing awareness and align our knowledge of these issues. And this concerns all employees on the ground, in offices, right up to the Executive Committee. At all levels, we all have a part to play in this transition."

For two years now, Vallourec has been committed to the promotion of low-carbon energy by exploring five promising segments: thermal, carbon capture, hydrogen, wind and energy storage. This momentum is fueled by our expertise in tubes and related services, our know-how in materials, the quality of our R&D and our global presence.

The transition is not being consolidated thanks to our concrete achievements with pilot customers, such as Chevron’s Neptune Energy in the UK, GreenFieldEnergy in the US, and Storengy in France. With them, we have demonstrated the relevance of our solutions under real-life application conditions for stationary hydrogen storage, geothermal energy, carbon storage, and even hydrogen storage in salt caverns.

We are now ready to take the next steps, particularly to support the future increase in electrical energy needs. This is a new direction which, for Vallourec, means acquiring new skills that go beyond the product: we don’t only have to do with GreenFieldEnergy, for example, by contributing to geothermal loop systems with our proprietary THERMOAC® Pleasured Insulated Tubing solution, and through greater involvement in future projects.

The definition of our strategic direction in the coming years will therefore involve taking on new employees, who will be able to combine their expertise with that of the teams already in place and generate real cultural change. It will also involve training and cooperating with different players in the energy sector. This will enable us to create the conditions for real acceleration."
We are proud to have been chosen by STORENGY, a subsidiary of ENGIE, to provide a complete range of tubular products to support the #EuropeanUnion. Read more about the project and how Vallourec’s offer made the difference! #EnergyTransition

🎊 Improve fatigue performances in challenging riser configurations with PURE® 65 (Premium Upset Riser Ends). The Technology® additive manufacturing app! 🎊

Leila Faramarzi is our #CCUS Director. She is responsible for building our technical expertise and investments with her passion for connecting people, her enthusiasm for our industry and her commitment to #Decarbonization.

🎊 Our first So TUBES! newsletter is finally here! Are you excited? 🎊

 Reduce your CO₂ emissions and avoid third party suppliers with our new Second Life Protectors service. We collect your used protectors and manufacture new ones. 🎊

We are again part of the “A List” of the CDP, a global environmental non-profit organization that encourages companies and governments to reduce their greenhouse gas emissions. #Environment

Vallourec today announces that it is strengthening its international presence* through digital. Congratulations to the team for this brand new additive manufacturing app! 🎊

Discover the full story on our Project Discover on our social media:

- Facebook
- Instagram
- LinkedIn
- Twitter
- YouTube

**EDITORIAL**

Philippe Zamora, Shutterstock, London, United Kingdom

**CONFERENCE DATES**

- London, United Kingdom: April 12-14, 2022
- Baku, Azerbaijan: June 1-3, 2022
- Reno, Nevada, United States: June 14-15, 2022
- Houston, Texas, United States: August 28-31, 2022
- Bremen, Germany: October 19-20, 2022
- Abu Dhabi, United Arab Emirates: Oct. 31-Nov. 03, 2022

**ADHOC**

- The Group enriches its offer with new protectors. inspect them for either immediate use or for future projects. Reduce your CO₂ emissions and avoid third party suppliers with our new Second Life Protectors service. 🎊

* Vallourec’s attendance remains dependent on health and geo-political conditions.