

DESIGNING TUBULAR SOLUTIONS FOR YOUR ENERGY & INDUSTRY PROJECTS





A SOLUTION-MAKER PARTNER YOU CAN RELY ON

Whatever your market, whatever the challenge, our smart tubular solutions will help drive your business. Vallourec works alongside you to develop new tailor-made solutions that meet your needs.

A COMPREHENSIVE PORTFOLIO

Our extensive portfolio of innovative, high value-added tubular products covers all needs for the Oil & Gas, Low-carbon energy and Industrial sectors.

From design and engineering through to delivery and installation, whatever the scope, whatever the challenges, we deliver the most reliable and cost-effective solutions, making them the go-to product for complex applications in some of the most extreme conditions.

SERVICES TO EMPOWER YOUR BUSINESS

A portfolio of high value-added services powered by digital technologies and advanced analytics help to drive productivity and optimize your business.

Focusing on optimization and integrity, we use the latest digital technologies to gather and analyze data from our pipes and physical services alongside information provided by our partners. Our digital solutions allow you to accelerate your strategic decision-making process, improve integrity and asset management, while reducing operating costs.

AT THE FOREFRONT OF INNOVATION

Innovation is core to our culture and central to our strategy, fostering creativity to anticipate your needs and improve our service. Using open innovation initiatives with in-house R&D and by collaborating closely with our customers, we leverage the collective business intelligence and new technologies necessary to create the high-tech products and solutions of tomorrow.

This allows us to develop a unique offer in terms of grades and materials alongside the world's largest range of dimensions as well as a range of digital solutions that help you to optimize and secure your operations all along the value chain.

WE CARE ABOUT WHAT COUNTS FOR YOU

We put our commitment to quality, health and ethics at the heart of everything we do. Whether it's during manufacturing or on site, the safety and health of those working with our products is our absolute priority. This commitment to uncompromising safety standards results in excellence across all aspects of our operations, helping us to achieve our ultimate goal: a fully satisfied customer.

Our track record of constantly improving the sustainability of our consumption and production is regularly confirmed by the ratings agencies and certification boards which provide independent recognition of our commitment in this area.

A COMPREHENSIVE PORTFOLIO

We offer you a portfolio, among the most extensive in the world, of innovative, high value-added tubular products including a range of seamless tubes for the energy sector and other demanding applications.

OIL & GAS

We cover all your needs

Providing tubular solutions to the Oil & Gas market is the core of our business ever since the first VAM® connection in 1965. Whatever challenges your Oil & Gas wells pose, we have the proven expertise and the right solution.

Exploration & production

We provide a full range of seamless steel tube solutions and VAM® premium connections including casing, tubing and accessories for the most challenging applications.

- OCTG – Casing & tubing
- VAM® premium connections
- Oil & gas mechanicals
- Accessories

Transportation of oil & gas

From design and engineering through to delivery and installation, whatever the scope (onshore or offshore) and whatever the challenges, we deliver the most reliable and cost-effective solutions.

- Tubes for risers and flowlines
- Onshore line pipes
- Specialized tubes for umbilicals

Hydrocarbon processing

Hydrocarbon Processing projects require a wide variety of seamless steel tubes. We offer the widest dimensional range adapted to the needs of your project.

- Carbon steel and steel alloy tubes
- Seamless tubes for refineries
- Process tubes

- A full range of steel grades, both API and proprietary.
- High yield grades up to 150ksi, high collapse, sour service, corrosion resistant alloys.
- Connections with highest performance on market.
- Widest dimensional range of seamless carbon steel and alloy steel pipes.

IN A NUTSHELL, THIS IS WHAT DEFINES US

LOW-CARBON ENERGY

We take a proactive approach

We already supply numerous renewable energies projects and participate in research on Solar, and H₂ and CO₂ capture & storage.

Geothermal

As a firmly established partner in Geothermal, and leveraging our OCTG expertise, we've developed a large range of products to boost geothermal drilling & operations.

Hydrogen

We provide line pipes and tubes for storage wells as well as tubes for hydrogen refueling stations.

Offshore wind

Our tubular solutions – PREON® marine and hot-rolled MSH sections – offer wind farms a cost competitive, environmentally-friendly solution.

Solar projects

We design tubes for photovoltaic panel structures and participate in innovative solar projects.

Biomass, waste-to-energy and biofuel

We provide biomass plants with tubes from simple grades to alloy steels.

Nuclear

We are a trusted partner to the nuclear industry, providing expertise and safe, durable tubes to power plants around the world.

CCUS

We provide line pipes and tubes for CO₂ storage wells.

INDUSTRY

We offer you excellence

Our hot-rolled seamless steel tubes and rectangular hollow sections are used in a variety of the most demanding applications, from daring architectural projects to extremely high performing mechanical equipment. We manufacture to fit any of your requirements.

Automotive & railway

Automotive components, high quality axles, precision and bearing tubes as well as a unique lightweight tubular railway axle.

Onshore & offshore construction

Structural steel tubes and rectangular hollow sections for infrastructure projects such as bridges and glass facades; tubes for foundations as well as high demanding steel for offshore jack-up structures.

Defense

Tubes with excellent resistance to tension and bending are the first choice for components in civil protection, special military vehicles, vessels and submarines.

Agricultural & construction equipment

High-strength mechanical steel tubes and hollow sections with outstanding weldability are used as structural elements in the business areas of agriculture, construction and cranes.

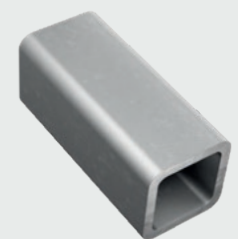
Mechanical engineering

Our tailor-made seamless mechanical tubes and shaped components make the ideal material for a huge variety of mechanical engineering applications such as hydraulic cylinders for mining equipment and hollow bars for machining.

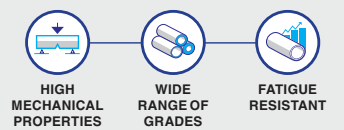
SOME OF OUR REFERENCE PRODUCTS

The intrinsic technical performance of certain Vallourec products has made them the go-to product in the industry for complex applications in extreme conditions.

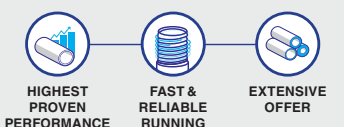
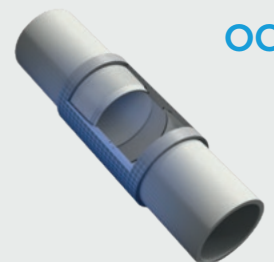
STRUCTURAL HOLLOW SECTIONS



LINE PIPE



OCTG



SUPPORTING YOUR OPERATIONS

VAM®Field Service
Boosting efficiency
& reducing costs

VAM® Field Service is our service offering designed to support all VAM® users in the world. Available 24/7, it is a worldwide network close to rig operations of more than 180 qualified field service technicians trained to provide best-in-class services for tubular inspection, running and make-up supervision. We ensure your peace of mind from the yard, to the rig and back.

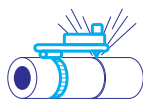
Your 3 key benefits

1. Reduction of costs by minimizing reject and back-out rates,
2. Faster operations by following best practices,
3. Supervision to ensure the right products are used during running.

State-of-the-art WELDING solutions developed by our affiliate Serimax

Serimax offers welding solutions - including pipe-end inspection, field-proven digital services and integrity management - meeting the most stringent industry requirements and delivering the highest operational efficiency.

Its worldwide track record showcases Serimax's expertise and industry-leading technologies for onshore and offshore applications.



Advanced expertise in:

- Steel Catenary Risers (SCR)
- Cladded pipes
- HP/HT
- Corrosion Resistant Alloys (CRA)

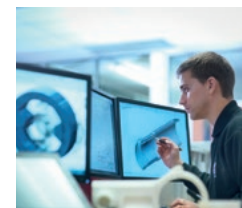
SOLUTIONS TO EMPOWER YOUR BUSINESS

We take the time to understand your challenges and to deliver effective solutions. With your needs at the core, we have defined a portfolio of high value-added services powered by digital technologies and advanced analytics to help you drive productivity and optimise your business.

A COMPREHENSIVE SERVICES PORTFOLIO FOR TANGIBLE ADVANCES IN SUPPLY CHAIN AND OPERATIONAL PERFORMANCE

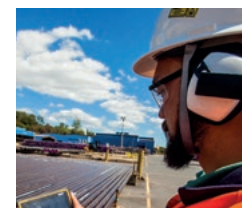
Vallourec provides an integrated services offering to accompany you along the entire value chain, combining both traditional services and digital solutions. With a strong focus on optimization and integrity, it uses the latest digital technologies to gather and analyze data from our pipes, physical services and information provided by our partners.

Our solutions allow you to accelerate your strategic decision-making process, improve integrity, asset management and reduce operating costs. It is what sets us apart from the competition and makes our value proposition unique in the market.



ENGINEERING

From engineering services to the training of your teams, we support you throughout the various design phases of your project.



SUPPLY CHAIN

Our e-Commerce solution helps simplify your supply process and reduce associated costs. Our tubular management services include logistics, storage and material management from the yard to the construction site and back, improving supply chain visibility, optimizing costs and the delivery circuit.



ASSET CONSTRUCTION

With on-site assistance services during assembly and installation, you improve your operations' productivity and ensure the integrity of tubular assemblies.



LIFE OF FIELD

Once the tubes are installed with the appropriate sensors, our solutions help you optimize your assets' service life by monitoring and analyzing their data.

COVERING EVERY STEP IN THE VALUE CHAIN



SMARTENGO DIGITAL SOLUTIONS THE NEXT GENERATION TO CREATE MORE VALUE

Enhancing our traditional services, our constantly evolving state-of-the-art digital solutions help you optimize your operations and save time and money.

Building on unique pipe identification, traceability and user-friendly applications, our **Smartengo digital solutions** support you to accelerate your strategic decision-making process, improve integrity, asset management and reduce operating costs.

Smartengo TRACEABILITY

A digitalized field application to scan your pipe and visualize data from the mill to the end-use site in real time

Smartengo INVENTORY

A solution to enhance your yard operations and optimize your inventory turns

Smartengo RUNNING EXPERT

A tubular running digital solution to save rig time

Smartengo BEST FIT

A fit-up optimization solution to drive pipeline construction cost down

AT THE FOREFRONT OF INNOVATION

Innovation is rooted in our DNA and is integral to our strategy. We foster creativity to anticipate your needs and improve the service we give you. We experiment and explore to create new and improved solutions and technologies that will boost your processes and give you a competitive advantage.

€41M
INVESTED
IN INNOVATION
IN 2020



OUR DIGITAL OFFER
"SMARTENGO" WINNER
OF THE GRAND PRIX
OF INNOVATION MAKERS
AWARDS 2020

AN OPEN BOOK APPROACH

We've adopted a collaborative Open Innovation mode, partnering with start-ups, laboratories and innovators through our Open Innovation challenges and with our customers via our Front End Innovation workshops to ensure we answer all our customers' needs. With this approach, we leverage both the collective business intelligence and new technologies to create the high-tech products and solutions of tomorrow.

AGILE TO CAPITALIZE ON EVERY NEW TECHNOLOGY QUICKLY

Thanks to our agile development approach for innovation, we can meet new needs more quickly. In addition to pipes and connections are no longer enough; you also need integrated solutions that make it easier to use our products, limit environmental impact, and enable you to cut costs.

Additive Manufacturing is now a reality at Vallourec, while our advanced digital services, low carbon footprint products and solutions equally demonstrate our capacity for innovation, always at the service of our customers.

DIGITAL TO OPTIMISE YOUR PERFORMANCE

We are constantly enriching our new generation of digital solutions to complement our tubular offering. Vallourec.smart offers distinctive solutions that combine products and services, optimize and secure our operations, simplify the traceability of products and their journeys, and support the entire value chain.



RESPONSIVE TO MATCH SPECIFIC NEEDS

Our innovative capability allows us to develop a unique offer in terms of grades and materials, and the world's largest range of dimensions, to ensure the integrity of your rig, line-pipes and industrial equipment. To meet specific requirements, and in addition to standard and enhanced API grades for OCTG, we design and develop customized steel grades for the most extreme applications in corrosive environments.

R&D TO INCREASE THE PACE OF DEVELOPMENT

It's not enough just to satisfy your needs; we bring your voices into R&D so that you can guide product development from the earliest stages. Your input influences the direction and quality of our products and helps us to anticipate market requirements. We maintain our R&D budgets at high levels to support this collaborative approach.

ECODESIGN APPROACH FOR R&D

Projects presented to the R&D committee are subject to an eco-design scorecard from the upstream to the downstream processes during the validation process.

WE CARE ABOUT WHAT COUNTS FOR YOU

As a recognized provider of tubular solutions to the energy and industry sectors, our commitment to quality, health and ethics unites our people around the world.



SAFETY

- Protecting the safety and health of those who work in our activity is our absolute priority.

We provide the data, processes and procedures to manage our working environments with the highest standards of safety and health conditions, including during operations on customer sites.

- Achieving uncompromising safety standards requires excellence in all aspects of our operations.

We've adopted multiple methods from the day-to-day routine of the Safety Moment to the incorporation of safety goals into the variable part of many managers' salary. Thanks to the constant vigilance and mobilization of our employees and subcontractors, significant progress has been made in this area.



Data from 2020

PROVEN INDUSTRIAL PROCESSES

- We integrate the highest standards of responsibility and excellence into our industrial processes, in terms of safety, social and environmental policies.

Our purpose is to manufacture smart, clean tubular solutions but not at any price. We have a proven track record of creating a smarter and more innovative approach to sustainable consumption and production patterns. For this, we are regularly recognized by the rating agencies, the latest distinction coming from Ecovadis in the environmental category.



QUALITY

- Providing premium quality products every time is our mission.

In our view, best-in-class levels of quality can only be achieved by putting your needs and experience first. We use KPIs, but never lose sight of the ultimate indicator: a fully satisfied customer.

- At every stage, from inquiry, to order, to delivery, our processes reflect a customer-first attitude.

We ensure that our ISO certified production facilities have the means to deliver not only first-rate quality, but consistent quality. So that every time you do business with us you get consistent accuracy in dimension, and the most innovative digital tools to support our services.



ETHICS & COMPLIANCE

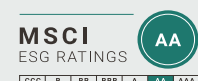
- Our activity is based on the strong values of integrity, transparency, high standards and professionalism, respect for people, collective commitment, performance and responsiveness.

Since the adoption of our Code of Ethics in 2009, we have made every effort to strengthen our internal Code of Conduct—specifically with regard to the fight against corruption and respect for free competition.



OUR PART IN THE GLOBAL CHALLENGE

As a company, we know we are not just working for the present, we are investing in the future. As climate change and other environmental issues take center stage and impact our lives, we work constantly to improve our sustainability and in parallel to support you in your initiatives.



IN 2020, VALLOUREC RECEIVED A RATING OF AA (ON A SCALE OF AAA-CCC) IN THE MSCI ESG RATINGS ASSESSMENT*.



ECOVADIS 2020 GOLD MEDAL FOR OUR CSR POLICY WITH A SCORE OF 90/100 (IN THE TOP 1% OF COMPANIES RATED). NEXT REVIEW IN 2022.



IN 2020, VALLOUREC OBTAINED AN 'A-' RATING BY THE CDP FOR ITS ACTION ON CORPORATE SUPPLY CHAIN ENGAGEMENT ON CLIMATE ISSUES.

WE PUT SUSTAINABILITY AT OUR CORE

Improving energy efficiency is a major driver to alter the trajectory of energy-related carbon emissions. Our performance, particularly in the three key areas of sustainable development – energy, water and waste management – makes us a responsible player in our sector. In 2020, we announced our ambitions to reduce our direct and indirect carbon emissions by 2025. These targets have been approved by the Science-Based Targets initiative (SBTi), thus becoming the first company in the Oil & Gas sector to obtain this recognition. We are committed to:

- reduce our direct emissions by 20% (scopes 1 and 2);
- reduce our total direct and indirect emissions by 25% (scopes 1, 2 and 3).

More and more efficient

From water consumption management and waste recycling to the use of biomass as a source of energy and a major by-products initiative, our actions are showing results. Today, 40% of our production is ISO 50001 certified for energy efficiency. This will rise in the coming years. Vallourec ambitions in terms of reducing its direct and indirect carbon emissions by 2025, taking 2017 as a reference year have been approved by the Science Based Targets initiative (SBTi) in May 2020.

Low carbon, begins at home

Today, our low emission steel production positions us as the best placed producer in this field. In all, 58% of the steel we use to make our tubes is produced in the Group's own steel mills, ensuring their CO₂ footprint is kept under control. Of this "in-house" steel, 69% is produced from recycled scrap.



Data from 2020

WE CONTRIBUTE TO YOUR SUSTAINABLE EFFORTS

All manufacturers are committed to reducing their CO₂ footprint, with Oil & Gas companies at the forefront. We are constantly devising new digital solutions, smart tubes and new materials to accelerate the reduction of your carbon footprint.

Our pipes prevent leaks to the environment

Our VAM® connections are designed to avoid leaks, especially methane. They are perfectly gas-tight and their design allows use with either oil or gas, allowing for the shift to gas as per the Oil and Gas Climate Initiative.

Alternative to toxic substances

The CLEANWELL® coating is also available for VAM® 21 connections. It replaces the toxic compound used for storage and threading on site, and enhances overall performance.

Reducing scrap

Additive manufacturing makes it possible to use only the exact quantity of raw material needed.

Recycling pipes

The circular economy inspires us too. A service to recover customers' unused pipes was selected as part of the 2019 internal innovation challenge. With some large operators, this could mean a second life for thousands of pipes. In 2020, 97.1% of our waste was recycled into by-products.



WE HELP SHAPE THE FUTURE OF GREEN ENERGY

We help shape the future of renewable energy beyond oil and familiar models

We have a history of supplying renewable energy companies. From geothermal to wind power, nuclear to solar energy along with hydrogen and CO₂ capture and storage, we have been investing for decades and continue to research and develop new solutions to reduce climate change.



PROUD TO BE A PIONEER

Our "Tubo Verde - Green Pipes", produced in Brazil, have a negative CO₂ balance per ton of steel.

In Brazil, we are setting an example. Steel is produced from recycled scrap or in blast furnaces powered by wood obtained from the Group's own forests in the region. The carbon absorbed by the managed forest plantations more than offset the CO₂ emissions of the production process. Added to which, the electricity consumed by the Brazilian site is mostly produced from hydroelectric and thus renewable sources, completing the virtuous loop.

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OUR WORLDWIDE PRESENCE & OUR EXPERIENCE AT YOUR SERVICE



AREA	California, USA
MARKET	Low-carbon Energy / Geothermal
CLIENT'S CHALLENGE	Expand the scope & reduce the cost of geothermal power generation, using a closed-loop extraction technology
OUR SOLUTION	Greenfire Energy uses a "tube-in-tube" system with Vallourec's THERMOCASE® Vacuum Insulated Tubing (VIT) as a key component



AREA	Gulf of Mexico
MARKET	Oil & Gas / OCTG
CLIENT'S CHALLENGE	Extreme HPHT projects optimization
OUR SOLUTION	14" 116.00# VAM® SLIJ-3 VM140CYHC



AREA	Bolivia
MARKET	Oil & Gas / OCTG
CLIENT'S CHALLENGE	Stringent safety requirements associated with exploratory gas wells
OUR SOLUTION	VAM® LOX surface casing connections / 89 joints run with 0 reject



AREA	Germany
MARKET	Civil Construction / Industry
CLIENT'S CHALLENGE	Find the right material to support the aesthetical design while also providing excellent machining properties and mounting characteristics
OUR SOLUTION	Supply of steel tubes for the 22m-high roof and circular MSH sections of 508mm in OD and heavy wall of 80mm for 32 columns



AREA	South Korea
MARKET	Offshore Construction / Industry
CLIENT'S CHALLENGE	Design and build a wind turbine installation vessel with high lifting capacity following specific market safety requirements
OUR SOLUTION	High-strength bracing pipes for the Pacific Orca wind turbine installation vessel as per DNV GL



AREA	Indonesia, Java Island
MARKET	Low-carbon Energy / geothermal
CLIENT'S CHALLENGE	Exploration wells up to 2,200 meters deep
OUR SOLUTION	VAM® 21, VAM TOP® and BIG OMEGA® connections

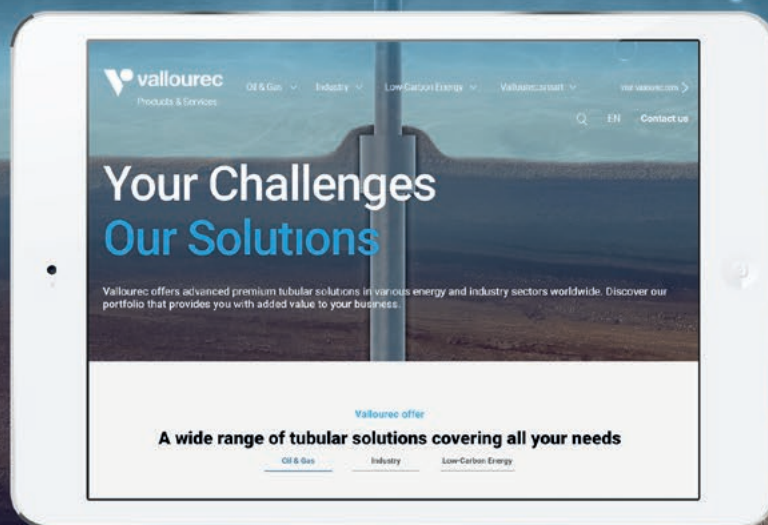


AREA	Brazil
MARKET	Oil & Gas / Line Pipe
CLIENT'S CHALLENGE	Making the riser and flowline system for interconnecting 13 wells in the pre-salt field Mero 1
OUR SOLUTION	Integrated solution with 12,000 tons of seamless steel rigid line pipe with outside diameters 8" and 10" for ultra-deep waters



AREA	United Arab Emirates
MARKET	Oil & Gas / OCTG
CLIENT'S CHALLENGE	Partner with a supplier able to accompany them in their long-term strategy
OUR SOLUTION	Supply a full range of casing and tubing products combined with "from mill to rig" services in a strategic partnership approach

DISCOVER ALL OUR KNOW-HOW ON OUR NEW WEBSITE



ADVICE
EXPERTISE
EXPERIENCE



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SMART TUBULAR SOLUTIONS

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