

# Valtimet delivers beyond the tube



*Valtimet inside = quality & s*

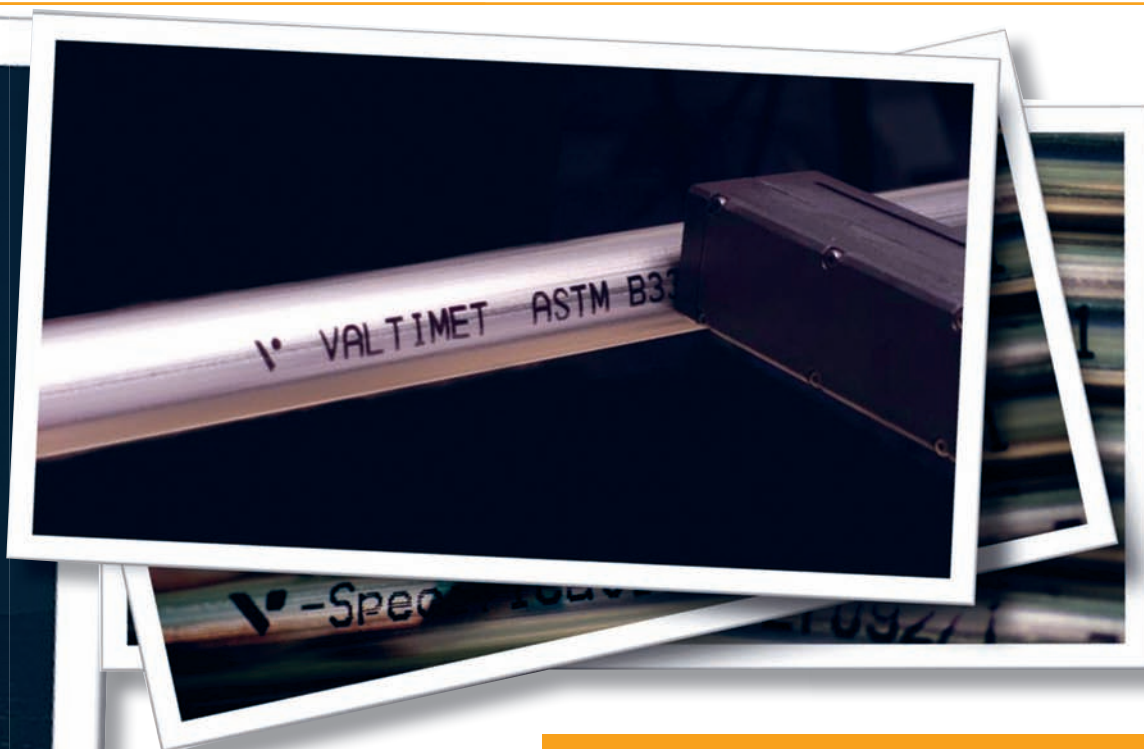
Here's a conundrum: when is a tube not a tube? The answer? When it was sourced from Valtimet. "We deliver beyond the tube," says V.P. Sales & Marketing Mr Jean-Paul Attard. "We help customers select the most appropriate materials solution for each individual, tailored application, to find the right balance between cost and performance. And with eight mills on three continents, we have the resources to then quickly manufacture and deliver those tubes." To learn more about Valtimet's mission, vision and strategy, Stainless Steel World visited the company's headquarters in Paris, France.

*By David Sear*

Take a look at Valtimet's past, present and future and you'll find two concepts – quality and safety – at the heart of everything it has achieved. "Sustainable development and environmental responsibility are central to each and of every one of Valtimet's products, processes and research endeavours," states President and CEO Mr Hervé Delhon-Bugard. "We have established our expertise on longstanding relations with leading utilities, engineering firms as well as manufacturers of shell and tube heat exchangers. We have

always focused on reliable and energy-saving solutions, aiming at reducing end user's operating costs whilst ensuring the highest level of quality and safety. Valtimet offers the whole pallet of corrosion resistant tubes and high performance products, serving the best total cost of ownership for its customers."

In recent years Valtimet has developed highly innovative products to meet the escalating challenges of sustainable development. Mr Delhon-Bugard: "Just to give some examples,



safety

tubes are now available that enable direct seawater cooling of the largest heat exchangers, with little or no impact on the environment. Similarly, tubular products have been developed that enable seawater or even wastewater to be used for air conditioning, which effectively saves clean, potable water for domestic consumption.

*"We are the world's leading supplier for titanium and stainless steel welded tube to the energy related markets, which take fully 90% of our sales".*

And helping to strengthen the arguments for nuclear power generation, Valtimet has developed tube solutions that increase power plant efficiency whilst again saving energy and cutting costs. In all areas, Valtimet will relentlessly aim at reducing end-user's operating costs, improving energy-saving solutions, reducing water consumption and guaranteeing higher safety and performance solutions. Quality and safety: that is Valtimet's philosophy for a better future."

### Global network

Valtimet's network of production facilities is unparalleled. Following an acquisition in India, in 2006, a new production facility in 2007 and a further acquisition in 2008, the company now benefits from eight fully-appointed mills, spanning three continents. "Our policy has been to develop a truly global capability," explains Mr Attard. "So we combine the power of a global organisation together with extensive

### THINNER WALLS = LOWER COSTS

Aware of the need for cost control, Valtimet has developed special welding processes to facilitate the production of thin-walled tubes. Current options include wall thicknesses down to 0.25 mm (stainless steel) and 0.4 mm (titanium). However, Valtimet can also easily meet the needs of local markets: in India, for example, walls of 0.7 mm thick tend to be preferred.

local knowledge. Furthermore, we are also most insistent that all mills operate to the same high quality standards. Regardless of the application or destination, all our customers expect the very best."

Having eight separate mills gives Valtimet extreme flexibility when it comes to scheduling production. Mr Attard: "To start with, we can channel orders to the most logical mill. That might be the one with immediate spare capacity, or the one within optimum reach of the client. Moreover, we can combine the capabilities of each mill to produce large volumes of tubes in record times. That helps the client to avoid bottlenecks in his own schedule."

The newest mills in the Valtimet family are located in China and the USA. Mr Attard: "Our facility in China, which incidentally is a new-build plant, specialises in small diameter heat exchanger tubes for automotive applications. In Brunswick in the USA, we acquired a plant which is a recognised specialist in the production of finned, refractory metal tubing. These investments and acquisitions have further broadened our portfolio and given us extra reach into new markets."

One point to note is that Valtimet does not carry stocks of finished products. "We buy supplies to meet the demands of each specific order, and with a wide range of grades, product sizes and wall thicknesses," says Mr Attard. "We have therefore built up excellent, long term relations with suppliers, ensuring we have ready access to every kind of strip – our base material – in the many years to come. In fact, we have become very proficient at keeping lean and responsive, and

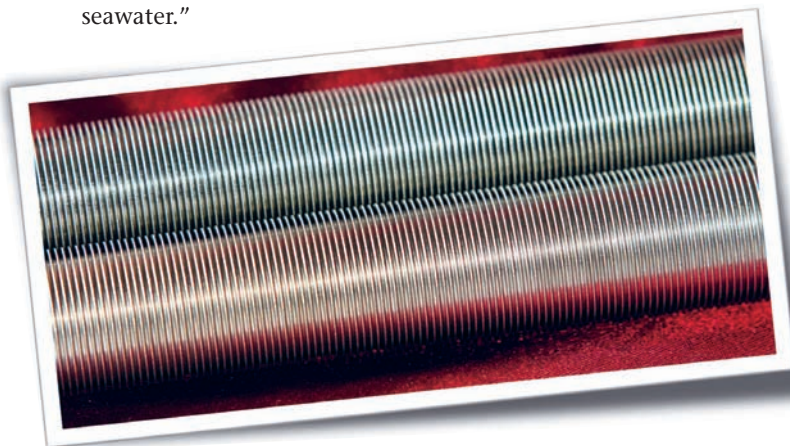


thanks to the flexibility of having eight mills world-wide can continue to meet demanding delivery times from our clients, even during the current project boom."

The global network of mills does not just yield technical and logistical advantages, notes Mr Attard. "Our facilities are manned by local staff and managers, who understand better than anyone else the needs of the local clients, both from the technical as well as the non-technical issues. They can advise on the applicable standards, on any client specific requirements, and even on the best packaging materials to ensure the tubes remain in perfect condition during shipping and subsequent storage at the project location. This customer proximity is yet another important selling point in Valtimet's favour."

### From R&D to NDT

Having people on the ground, around the world, gives Valtimet almost unique access to highly valuable market data. Data that can be used to help focus Valtimet's research and development initiatives. Technical Sales Manager Mrs Haydée Richaud-Minier explains: "Our staff are constantly in touch with clients, asking them about their current technical challenges and projected needs. We then tune our own R&D efforts to meet those needs. Take ValBrite™, for example. That is a premium super stainless steel welded tube solution we developed for brackish water and seawater."



Mrs Richaud-Minier further explains that ValBrite™ was developed and tested to meet customer needs for a cost-effective alternative for titanium in brackish water and seawater-cooled condenser tubing solutions. "We have recently performed an extensive corrosion testing programme, characterising all the grades of super stainless steel, offering our customers the most comprehensive data to help them select the materials in accordance with their need for quality and safety. And the range of non destructive tests we have available means that ValBrite™ is quite simply the highest grade super stainless solution currently available. The ValBrite™ bright-annealing process furthermore ensures that tubes offer optimum corrosion resistance."

Whilst on the issue of testing, V.P. Quality and R&D Mr Pascal Gérard quickly adds that Valtimet is the only company that can implement up to seven different types of non-destructive tests on its tubes. "In fact, we were pioneers in the use of ultrasonic testing," he proudly notes. It transpires that in 1976, the French nuclear programme called upon Valtimet to manufacture welded tubes in both stainless steel



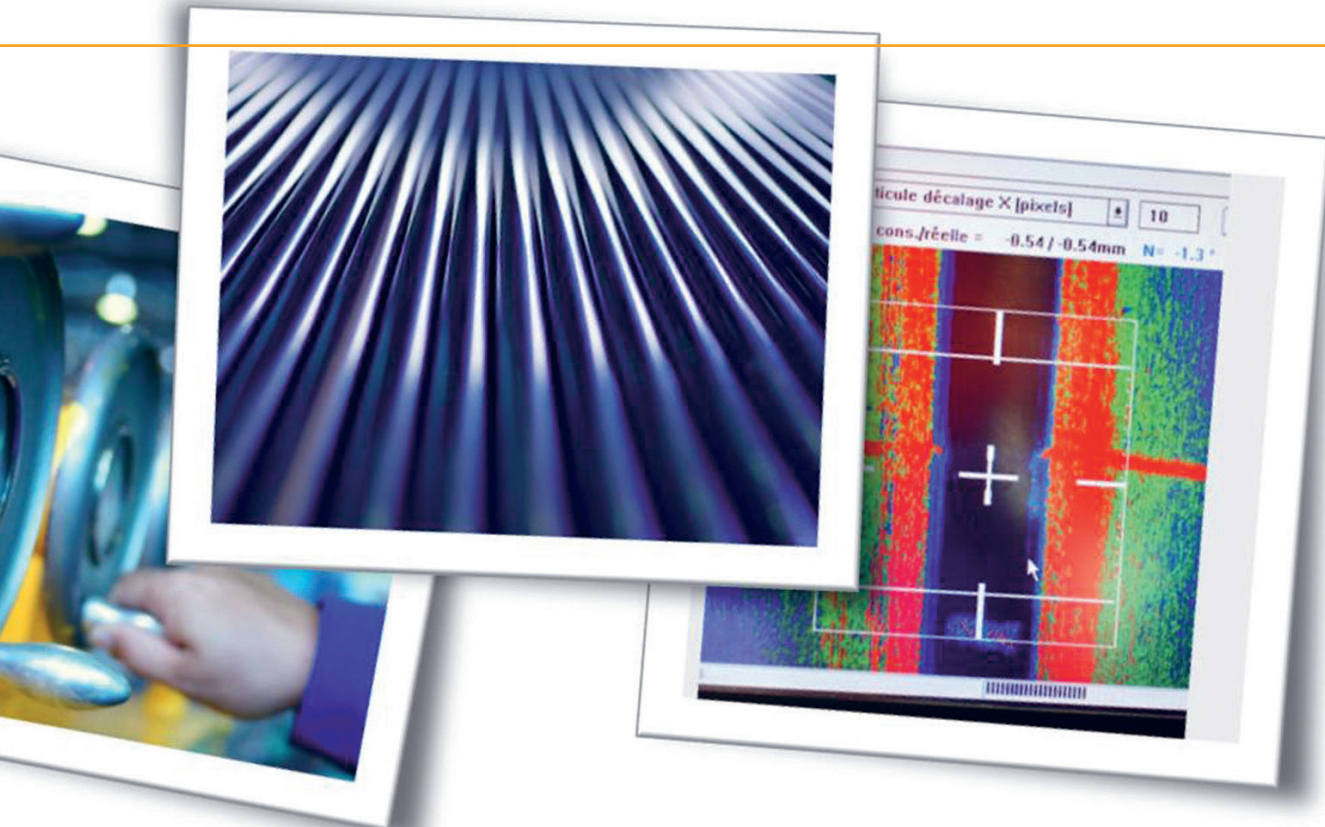
and titanium. For obvious reasons of safety and performance there was a crucial need for non-destructive testing (NDT) that would guarantee the highest possible quality. At that time, however, the only NDT option for welded tubes was the eddy current. Mr Gérard continues the story: "Eddy current testing, however, could not pick up on defects such as lack of weld penetration or weld mismatches. In response, Valtimet developed ultrasonic testing for welded tubes, exceeding the ASTM B338 requirement and safeguarding the integrity of titanium tubes in nuclear power plants. This capability has been further enhanced and extended : ultrasonic testing is now available for all our products and is currently being deployed at all Valtimet facilities."

### Straight, bent, corrugated, finned and dual-enhanced

Titanium and stainless steel welded tubes in all shapes, sizes and finishes are finding increased application in heat exchangers and other equipment thanks to Valtimet's research and development efforts. Today Valtimet is the unchallenged world leader for welded titanium tubing. Says Mr Attard: "Titanium is an efficient technical solution for a wide variety of tubular equipment, offering unmatched corrosion resistance and high mechanical characteristics. In fact, our titanium welded tubes have undergone forty years of opera-

### VALLOUREC GROUP

As part of the Vallourec Group, Valtimet benefits from its parent organisation's vast experience and expertise. Although it has its own R&D facility, for example, Valtimet can also draw on Vallourec's huge research efforts. For day-to-day business Valtimet is fully independent, following its own production and marketing strategies. However, in terms of overall vision – providing clients with the best possible technical solutions - Valtimet is fully aligned to that of the Vallourec Group.



tion without a single reported corrosion event."

As a matter of course, Valtimet offers clients with a choice of five basic product forms: straight, bent, corrugated, finned and dual-enhanced. Naturally, each form has its own merits. "Valtimet's High Performance Tube division, for example, is a world leader in the production of integral, low-fin heat exchanger tubing," says HPT Division Sales Director Mr Craig Thomas. "Called Fine-Fin®, the HPT product line is not just available in titanium, but includes other materials such as stainless steel, duplex and high nickel alloys. Fine-Fin® tubes offer superior heat transfer when compared to plain smooth tubes. With our tubes, clients can obtain much more compact heat exchangers, hence reducing plot sizes and the number of items of equipment that need maintaining. The added value benefits of specifying enhanced surface heat transfer tubing can only increase as material and commodity costs rise."

### Informed choices : remaining closest to the client

Valtimet is the world leader in energy related markets for welded tubes both for stainless steel and titanium offerings. Clients are found across the board and around the globe in the broader energy sector, including power generation, desalination, and the process industries. Comments Marketing Manager Mrs Marie Tronche: "Our client base is quite diverse. Here in France, for example, energy utility EDF is always heavily involved in materials selection for heat exchangers. In other countries the onus may fall more on the engineering company, or even the fabricator, to take the ultimate selection decisions. We are happy to work with all parties, and recognise that each may have a different viewpoint. One client may want to reduce maintenance, another may focus more on performance parameters. However, in all cases we provide technical solutions for them, drawing from our wide range of grades and sizes. Our goal is to properly inform clients about the pros and cons of all relevant options. Hence not just the purchase cost, but also issues related to corrosion, technology, life cycle, maintenance, etc. That way,

they can make informed choices. After all, when you install a heat exchanger it may need to last for decades. In a power plant, you cannot play with quality!"

Bringing the interview to a close, Mr Attard emphasizes that Valtimet's strategy is to consolidate its current global production network and to grow further in the energy market. "We are closely monitoring various trends, such as the move in some circles away from seamless towards welded products. There are also some shifts in materials we are tracking. But whatever the client's needs, we will be there – as a reliable, long-term partner - to deliver the appropriate tubing. I said earlier that we deliver more than just a tube. We provide clients with high quality product performance, helping them to conserve energy and ensure safety. But it's not just the managers around this table that make that happen. I'd therefore like to pay tribute to all the Valtimet staff, because they really are our greatest asset and it is they who are driving forward our core concepts of quality and safety." ■

### FACTS & FIGURES

<b>Name:</b>	Valtimet
<b>Headquarters:</b>	Paris (Boulogne), France
<b>Mills:</b>	8 (with a total of energy dedicated 34 welding lines)
<b>Total capacity:</b>	over 75 000 km per year, and growing
<b>Principal products:</b>	welded tubes: straight, bent, finned, corrugated, dual-enhanced
<b>Product applications:</b>	for heat exchangers, condensers, feed-water heating and MSR applications
<b>Main materials:</b>	titanium, stainless steel (ferritic, austenitic, duplex, super stainless steel).
<b>Key markets:</b>	power generation, desalination, oil & gas, chemical and petrochemical processing industries, automotive