



# SMST-Tubes is ready for the renaissance

## Nuclear tubes and pipes from proven experts

With extensive roots in the nuclear industry, SMST-Tubes has been continuously and resolutely enhancing its proven capabilities as a global supplier for many years. Now nuclear power is back in vogue, SMST-Tubes' mills in Europe and the USA are fully geared up to provide the wide spectrum of seamless stainless steel and nickel-based alloy tubes, pipes and hollows to meet all needs in this specialised industry. Focus on Nuclear magazine travelled to the company's headquarters in Muelheim an der Ruhr, Germany, to learn more from CEO Mr Michael Bellinghausen, VP Sales Mr Christophe Le Rigoleur and Key Account Manager Nuclear Power Engineering Mr Deepu Balasubramaniam.

*By David Sear*

In the nuclear business, reputation is everything. And a solid reputation is something that SMST-Tubes has in abundance. The company has long been active in the nuclear business, especially through its European mills in France, Germany and Italy. Commented

Mr Bellinghausen: "The nuclear sector is certainly one of the many specialised, high technology areas that perfectly fit our strategy. Germany has long been an important supplier of nuclear technology to other regions, whilst France has one of the largest nuclear programmes in the

world. With our geographical proximity, it was therefore a logical decision for us to extensively support this evolving industry. In recent years, for example, we have been providing tubes for new-build projects as well as on-going maintenance programmes."





### Focusing on niche products

SMST-Tubes benefits from an integrated, global network of four separate manufacturing sites. Mills in Montbard (France) and Remscheid (Germany) use hot production (extrusion) equipment to produce a range of tubes from 32 to 250 mm (1.31 to 9.84 inches). Hollows from these plants can then be cold worked (pilgered) at three locations: Remscheid, Costa Volpino (Italy) or Houston (Texas, USA). Cold worked tubes can vary in size from 6 to 220 mm (0.24 to 8.66 inches). Over the years, each mill has been encouraged to develop expertise in specific areas. This means that SMST-Tubes can provide a wide variety of tubes and pipes to suit an incredible array of applications. The company can therefore meet the most demanding of applications, from the chemical, petrochemical and OCTG markets through to environmental technology and waste incineration. Says VP Sales Christophe Le Rigoleur: "The SMST-Tubes' strategy for growth is not simply to increase tonnage levels. Instead, we are committed to further develop our selected range of premium niche products and provide clients with tailor-made services. The nuclear business is the perfect arena where we at SMST-Tubes can showcase our talents."

SMST-Tubes' high level of activity throughout the ups and downs of a changing nuclear market has given the company a definite edge in light of the current wave of activity. "Simply put, we have effectively maintained our knowledge level, regarding both the needs of the nuclear applications, the required metallurgies of the pipes and the engineering that is necessary to produce them," stated a confident Mr Bellinghausen. "Our roots are solid in this business. That is a critical factor given the current renewed interest in nuclear power plants. As a reliable partner we are constantly looking to see where investments can be made to benefit our clients. In consequence, we are fully ready and able to supply tubes and pipes just as soon as the industry needs them."

Slowly but surely, it appears that interest in nuclear power plants is turning from the theoretical to the tangible. Europe's new generation advanced pressurized water reactor (EPR™) is being built in Finland and France, with construction of

two units set to start soon in China.

Mr Le Rigoleur: "As I indicated, we have been closely monitoring the trends in the nuclear sector for many years now.

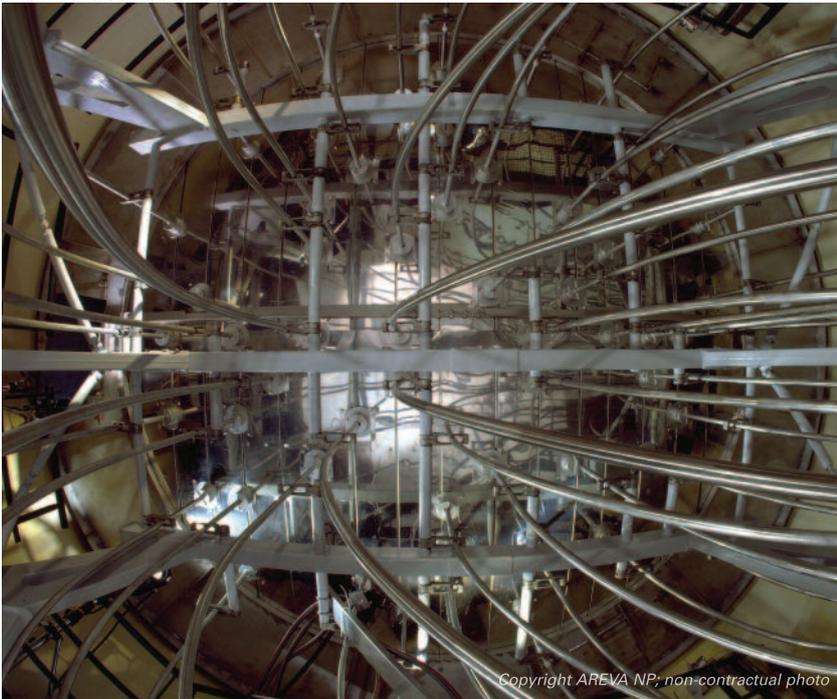
Drivers behind the renewed interest in nuclear power include demographic changes, issues with greenhouse gases from fossil-fuelled power plants and concerns about future energy security. Therefore we were fully prepared when the opportunity arose to supply tubes to the EPRs in Finland and France and in fact we booked substantial orders for these plants. Of course, we have also been supplying nuclear tubing to other technologies, e.g. in Korea, India, China and the Americas."

### Technical developments

To further develop its presence in the nuclear business, SMST-Tubes appointed Mr Balasubramaniam as key account manager for Nuclear Power Engineering. He has already become a familiar and trusted face to many organisations working in the sector, from top-flight engineering companies and utilities right through to the fabricators and stockists. Said Mr Balasubramaniam: "My key roles are to continually evaluate the market, our own assets and the status of our know-how. That way, we can identify any areas which may need attention, so that we can respond by improving our own product offerings. This is a highly specialised



## Instrumentation Core Tubes.



Mr Michael Bellinghausen,  
Managing Director and CEO



Mr Christophe Le Rigoleur,  
VP Sales



Mr Deepu Balasubramaniam,  
Key Account Manager  
Nuclear Power Engineering

industry and only a very few companies are able to meet the demanding technical challenges. So I am proud to work for a company like SMST-Tubes that is active at the top end of the market."

Asked to give some recent technical developments, Mr Balasubramaniam quickly noted superior materials cleanliness, reduced cobalt levels in austenitic stainless steel tubes, closer product tolerances and high surface finish as well as high-end quality testing. "To the uninitiated, the tubes may look the same. But the factors I have mentioned can have an important bearing on plant performance and so materials specifiers will really appreciate what SMST-Tubes can do."

### Niches

According to Mr Le Rigoleur, the market for seamless tubes and pipes in a nuclear power plant can be broken down into four core product groups. It goes almost without saying that SMST-Tubes is active in each. Mr Le Rigoleur: "Starting with the most sensitive area we provide tubes for heat exchangers. Next comes steam and water piping, then instrumentation tubing, and finally tubes for mechanical applications. Moreover, each type of application can be further classified according to the three different quality classes - 1, 2 and 3 - each

with its attendant quality requirements. The situation becomes even more complex when you realise that local R&D-authorities and utilities can each put their own technical contributions onto a given basic design. This so-called indigenous development is yet another influence on the material specifications. Therefore, it is no idle boast to say that, in the nuclear business, almost every order for critical areas really is unique."

Mr Balasubramaniam continued: "As you can see, the nuclear business has a wide range of niche applications, and the quality and technology vary for each one. As a supplier, we are primarily interested in the class 1 and class 2 areas, which are the

most demanding. Thanks to our know-how, we can properly understand the requirements of each application and provide tubes to suit. That requires expertise and long-standing technical experience."

SMST-Tubes is also playing an active role in related sectors, supplying tubes and pipes to nuclear fuel treatment as well as waste management.

Mr Balasubramaniam gave an example:

"Take the nuclear fuel treatment plant in France, for example, where we delivered a vast quantity of tubes during the 1990s. Our pipes are also seen as ideal containers for the safe, long-term storage of certain waste materials."

### What's in a name? From 'DMV Stainless' to SMST-Tubes!

For over a decade, the 'DMV Stainless' name enjoyed global recognition as a source for seamless stainless steel and nickel-based alloy tubes, pipes and hollow bars. The Salzgitter group assumed full ownership in 2003 and the company has been known as Salzgitter Mannesmann Stainless Tubes (SMST-Tubes) since April 2006. The name effectively conveys SMST-Tubes 'family membership' of the Salzgitter group, as well as highlighting its key product group.

SMST-Tubes' managers, however, stress that nothing else has changed. The four mills, the sales network, the wide product range, the support and service facilities and the personnel all remain in place. In fact, SMST-Tubes has retained the tried and tested product terminology, enabling clients to continue to order pipe and tube using the DMV-grades they are familiar with.



## Facts & Figures

Name	Salzgitter Mannesmann Stainless Tubes (formerly Mannesmann DMV Stainless)
Founded	1994
Headquarters	Muelheim an der Ruhr, Germany
Mills:	Remscheid (Germany), Montbard (France), Costa Volpino (Italy), Houston (USA)
Products	Seamless stainless steel and nickel-based alloy tubes, pipes and hollow bars
Dimensions	Outer diameters from 6 to 250 mm (0.24 to 9.84 inches) Wall thicknesses from 0.5 to 50 mm (0.02 to 1.97 inches) Lengths up to 25 m (82 feet), in U-shape longer
Main industrial sectors	Chemical and petrochemical industry, power generation (conventional and nuclear), oil and gas applications, OCTG, mechanical and plant engineering and construction, environmental technology and waste incineration, automotive industry
Workforce	approx. 1,100
Homepage	www.smst-tubes.com
Contact:	dmv@smst-tubes.com



research and development activities and meeting the challenging technical demands associated with pilot plants. "In the nuclear industry, technology is constantly improving," noted Mr Balasubramaniam. "SMST-Tubes is playing an active role here, and is really working at the cutting edge of what is possible."

Bringing the interview to a close, Mr Le Rigoleur confirmed the 'state of the industry': extensive discussions have taken place about the construction of many new nuclear power plants, and protagonists list benefits such as energy independence and lower emissions of greenhouse gases. Mr Le Rigoleur: "We are therefore monitoring the situation extremely closely, and are continuing to make our own investments. Our strategy is simple: we are able to produce tubes and pipes for nuclear applications as soon as there is any demand. To use the catch phrase: you can rely on SMST-Tubes to be renaissance ready!"

The company's supply strategy properly reflects the sheer diversity of possible applications. Mr Le Rigoleur: "For projects where the volumes are large and the procurement schedule is well known in advance, we can basically manufacture tubes to order. However, for other markets, such as maintenance, it makes more sense to have tubes delivered from stock. That is why we are looking to select a limited

number of highly qualified stockists to work with. The successful stockists will be able to provide complementary items such as elbows, fittings and flanges, so that together we can provide clients with a one-stop-shop convenience."

### Fundamental research

SMST-Tubes is helping to develop nuclear technology by engaging in fundamental



### About Salzgitter AG

Salzgitter AG (the owner of SMST-Tubes, which falls under the Tubes division) is one of Europe's leading steel and technology corporations, with some 23,000 employees. The 200 subsidiaries and associated companies are structured in five divisions – Steel, Trading, Tubes, Services and Technology.

