



Peter and Frederic Schenk

# Schenk Stahl: the heat-resistant tube

It gets hotter in the rolling mill when heat-proof tubes are produced.

They are in power stations, lime kilns, smelting works, sintering plants, gas-fired furnaces and plaster burners: the heat-resistant tubes from Schenk Stahl GmbH in Neuss near Düsseldorf in Germany. This trading company has one of the world's most extensive warehouses of heat-resistant tubes. "This allows us to supply our customers' requirements within 24 hours," explains the firm's founder and managing director Peter Schenk. The idea has proven a success: the company is growing and the clientele is becoming more and more international.

*By Frank Wöbbeking*

Take a stroll through Schenk Stahl's warehouse and you will be amazed by the number of different piles of tubes – round, rectangular, short, long, thick-walled and thin-walled. What at first glance looks like huge piles of tubing in haphazard array is actually a very well thought-out system. "We deliberately store different-sized tubes next to each other so that we can avoid the risk of supplying a similar and hence incorrectly-sized tube for an urgent order," Mr. Schenk explains.

All the tubes in the warehouse have one thing in common, however – they are all extremely heat-resistant and are capable of standing temperatures of between 500 and 1200 degrees Celsius. One day, in the not too distant future, hot gases, molten metals or acidic liquids are going to be flowing through them – and thereafter for years to come. Even a fleeting glance shows that the warehouse is one of the best-stocked for heat-resistant tubes in the world. "We store tubes made of

eighteen different materials and in over 800 sizes," says Mr. Schenk. The tubes measure between six and 406.4 millimetres.

### Fast delivery

But how do customers benefit from such an extensive and highly-specialised warehouse? "Easy," explains Mr. Schenk. "Put very simply, we can fill every order almost immediately. Customers can pick up their orders from us within twenty-four hours." Only a very small number of stockholders would be able to supply their customers as quickly as that. And this is exactly what Schenk Stahl regard as being important: a fast and reliable delivery. This applies to end-users as well as wholesalers, says Mr. Schenk. "For example, a customer has just enquired whether we can supply 106 six-metre long tubes in two days. That's no problem – and we can even do it out of warehouse stock," he says, adding at the same time that Schenk Stahl GmbH also accepts small orders. Our customers don't have to take minimum quantities," he explains. This is part of his philosophy of a customer relationship based on a partnership. The result is a high number of long-term customers. Essentially the customers always have the option – either they need a certain type of tube at short notice in an unusual size or they order a factory-made size which

is correspondingly cheaper. "In such cases we have the order filled ex-works and sell the products at about factory price," explains Schenk. Of course, in this connection excellent relations with the manufacturers are necessary. And Peter Schenk can rely on these.

A warehouse just the way the customers want it. But generally speaking almost 90 per cent of all orders can be supplied directly ex-store. "We know basically what the customers want. We stock a lot of tubes as and when the customers need them". Mr. Schenk says the market is relatively stable and has been spared major economic fluctuations. Thanks to this security, the company has succeeded in continuing to expand the warehouse without reference to any manufacturers and has financed the expansions itself.

Peter Schenk has reacted to the currently high prices in his purchasing policies. "At the moment we mainly supply the so-called 'quick turnaround' stock. Nevertheless, we keep a basic reserve of about 200 tonnes in stock at all times." Each current product range is oriented specifically to the customers' wishes. This is why every customer enquiry is entered in the data base, even if, in the final analysis, no order is placed. "We want to know exactly what the market requirements are at all times," explains the company management. This was how things were done in the company's early days in 1986 when all enquiries were kept in folders.

One consequence of continual market studies is that welded heat-resistant tubes can also be found in the warehouse. "When we started, we only stocked seamless tubes. But today the customers are demanding welded

# e specialists

Tubes from Schenk Stahl GmbH must be able to withstand temperatures of up to 1200 degrees Celsius.







Schenk Stahl GmbH's warehouse of heat-resistant tubes is one of the largest of its types in Europe.

#### Facts and Figures:

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Japan or the USA. In the case of high-alloy materials in particular, the customers prefer to trust familiar names and reliable quality. And they need them, too. Tubes from Schenk Stahl are used for the most demanding jobs where absolute product reliability is essential. Steel producers, for example, need them in blast furnaces, foundries, sintering plants and roller mills. The operators of petrochemical plants use them as crack tubes and pigtailed and in the chemical industry they are used for high temperature processes. They are also used in heat exchangers in plant engineering, in the automobile manufacturing industry, the mining industry and in plaster burners, in power stations for soot blowers and radiant tubes, in industrial furnace construction as annealing and muffle tubes – the list is endless. Special wire-drawing tubes of up to 15 metres in length are used to manufacture wire. As well, "all well-known industrial furnace manufacturers in Germany work with our heat-resistant tubes".

heat-resistant tubes more and more frequently. But since their quality has improved, we've been selling them for several years," explains Schenk. Overall, he has found that 80 per cent of customers want tubes from established manufacturers in Europe,

#### Forty years in the industry

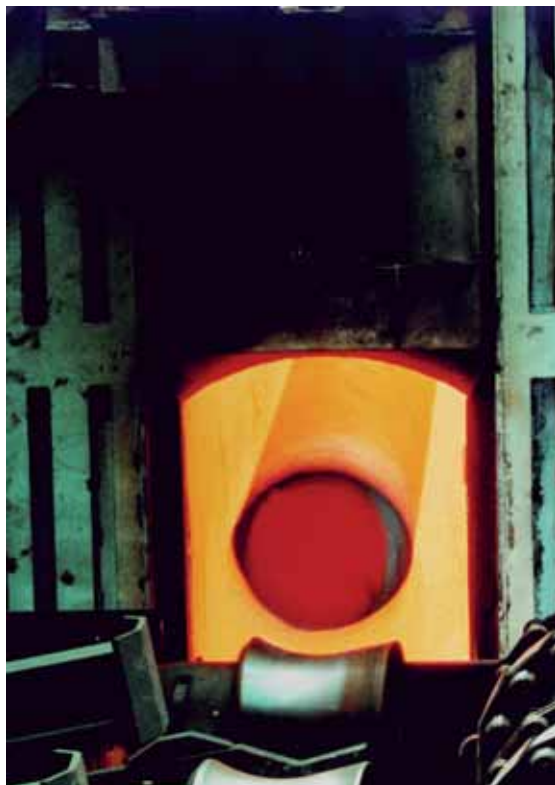
When it comes to heat-resistant tubes, Peter Schenk knows exactly what he's talking about – his professional life has revolved around this special product. "These tubes were always my hobbyhorse," says the founder of the company. He founded Schenk Stahl GmbH together with his wife Radmila in 1986 in Vienna, Austria, where he was trained in the steel industry. The move to Düsseldorf followed a short time later. "At first we were living among the office files at our new home," recalls son Frederic, laughing. Still a child at that time, he is

#### High-grade materials

The product programme of the Schenk Stahl GmbH comprises ferritic and austenitic tubes in the dimension range from 6.0 to 406.4 mm. The company stores tubes made of 18 different materials and in over 800 sizes. The following list gives an overview of the grades and materials the distributor has stocked. New grades are continuously being incorporated into its delivery programme.

##### Materials:

Material No.		Material No.		Material No.	
1.4713		1.4821	TP 327	2.4816	Alloy 600
1.4720	TP 409	1.4828	TP 309	2.4851	Alloy 601
1.4724	TP 405	1.4841	TP 314	2.4856	Alloy 625
1.4742	TP 430	1.4845	TP 310S	2.4858	Alloy 825
1.4749	TP 446	1.4864	TP 330		
1.4762	TP 446	1.4876	Alloy 800/ H/HT		
		1.4877	Typ 32/27		
		1.4878	TP 321 H		



## Applications

### Between Blast Furnaces and Power Stations

Schenk Stahl GmbH's heat-resistant tubes, elbows, flanges, fittings, bars and sheets are required for a wide range of uses. They are capable of standing up to temperatures of between 500 and 1,200 degrees Celsius. Hot gases, molten metals or acidic liquids are flowing through them.

Here is an overview:

- In the wire industry as annealing tubes
- For furnaces as lance/burner tubes
- In industrial furnace construction, for example as annealing and muffle tubes
- In pre-heaters and recuperators
- In steel production, in blast furnaces, melting shops, and sinter plants
- In the petrochemical sector as crack tubes and pigtails
- In the chemical industry for high temperature processes
- Pyrometer tubes
- In power stations as soot blowers and radiant tubes
- In rolling mills as furnace tubes, etc
- In plant construction as heat exchanger tubes for high temperature applications
- In measuring and control technology
- Heating conductor tubes

completely integrated in the company's management. In 1990 his father moved into a warehouse with offices in Neuss, near Düsseldorf.

Initially Peter Schenk dealt in both "normal" stainless steel and heat-resistant materials. "In order to optimise our product range and deliberately stand out from the rest of the wholesale trade, we decided in the mid-1990s to specialise completely in heat-resistant tubes." It was the right decision. Now the company has a unique pool of expertise in this field. And the customers benefit from this expertise as well. If someone orders a certain material, we can suggest similar alternatives which may even be cheaper," says Schenk.

Talk of this competence has got around. His customers come from all over Germany, neighbouring European countries and even Turkey, India, the USA and the United Arab Emirates have order goods from the company. And the company recently exported annealing tubes to South Korea. For some years now Schenk Stahl GmbH has observed a growing interest in their products from Eastern Europe. "For example, at the 2006 Tube & Wire trade fair in Düsseldorf, the majority of visitors were from Poland and the Czech Republic," reports Frederic Schenk, whose special responsibility in the company is for advertising, marketing and its trade fair presence. He also manages the sales structures at Schenk Stahl GmbH.

### Eastern Europe: a new market

The management sees new and interesting markets in Eastern Europe. This was the reason it was represented at a trade fair in Ostrava in the Czech Republic for the

first time in May 2007. Other trade fair participation in the Netherlands, Turkey and Russia are further options as well. Parallel to this, the company's website has also been updated and is available in 11 languages, including Russian, Polish and Czech. Service à la Schenk Stahl includes customers being able to download technical information on all kinds of materials from the website. The company's international orientation is accompanied by its gradual growth. At the same time, the company acts deliberately and with much careful thought, both with its staff and with its product range. The number of employees has now increased to seven people who together make the perfect team in customer care, marketing, sales and administration.

"We also want to gradually expand our warehouse inventory to stay competitive over the long term. For example, we've stocked the nickel base alloys 600 and 601 since Tube & Wire 2006. Now we're gradually increasing our inventory in a wide range of sizes," explains Frederic Schenk. "We don't want to grow without structure. Only when we're fully-stocked with a given material do we start stocking up on another." Anything else would contradict the company's philosophy he continued.

Apart from tubes, Schenk Stahl GmbH also carries fittings and flanges, elbows and sheets, bars and centrifugally cast extrusions – all heat-resistant, of course, because the company wants to remain the specialist in heat-resistant products. "We've still got quite a few plans," says Peter Schenk, looking at son Frederic, with whom the company succession is already in safe hands.