

Interview Jörn Rohde / Gord Montgomery

1) Jörn you and I met at FNA in Florida a couple of years back and since then have run across each other at a number of shows, including Wiesbaden, Germany last year where we enjoyed a few beers and too much Schnapps but at the end of the day I don't know a great deal about your background. How did you ever get involved in the heat treating industry?

*Yes, Wiesbaden at night is always good fun and I also enjoy that every year. Well, I got involved in the heat treating industry since I was a child. My father founded the company over 30 years ago and anytime I wanted to get something like for example a new bike, I had to work during the holidays and earn my own money. So I started by cleaning the workshop and step by step I was allowed to do other work. Then I did an apprenticeship as an industrial mechanic before I started my studies as a mechanical engineer. And today I run the business together with my wife Natasha. So I could say that heat treatment or better said industrial furnaces have always been and will be in the future an important part of my life.*

2) Your company ROHDE Schutzgasöfen GmbH would appear to be quite well known in Europe but less so in North America and I think of ROHDE mainly for pit furnaces but this impression could be incorrect. Perhaps you could give us some details about ROHDE?

*This is correct. As we are a family business our main focus in the past has been on the European market. But the last couple of years we started to get more international and the North American market is also interesting for us. We try to get known better and that's also the reason why we attend the FNA and Heat Treat Shows in the US. I believe we are mainly known for pit furnaces as we are very innovative in that field and maybe even the technology leader. We constantly develop in that area and make improvements. For example our "big furnace" which is 5,2m x 5m is a completely new construction in pit design and this project was a great challenge for us. And we managed that challenge as the furnace is now running. Besides pit furnaces we also manufacture chamber furnaces, furnaces for special processes and salt recovery units. Basically I can say that our product range includes every furnace with a retort.*

3) Every furnace builder in the world is eyeing China, India and other developing countries as the areas where most growth in heat treating will be coming from. Do you share this view and if so how are you expanding your presence in these areas?

*I do agree that these are definitely growing markets. We are not expanding our presence in China, but in India we have a representative as it is not possible to handle that from Germany. We believe that in the future India will be an important market for us. But we do not want to establish production sites in one of these countries. We deliver our products worldwide but we want to guarantee "quality made in Germany".*

4) Perhaps I could pick your brain a little about the European market in general and the German market in particular seeing as you are a German company. I have spent quite a bit of time in Germany over the past few years and what I see is that heat treating in Germany primarily revolves around the auto industry both captive and commercial. In most other areas

around the world I do not see as large a percentage of heat treating being dedicated to the auto industry. Am I way off the mark on this?

***I think you are right. I have heard that around 40 % of heat treating is done for the auto industry and in some heat treat shops even more.***

5) It is estimated that in North America 10% of heat treating is done commercially however as far as I can tell this is at best an educated guess. This might be an unfair question but do you have a good feel for what percentage of heat treating in Germany is done in commercial shops as opposed to captives?

***I am sorry, but I have no idea.***

6) There are quite a few different heat treating technologies on the market today everything from tried and true such as batch IQ furnaces, pushers, pit and vacuum furnaces all the way to what is perceived as newer technologies (which isn't always the case I realize) such as gas and plasma nitriding and vacuum carburizing. I certainly realize that the process is largely determined by the actual part but out of all the technologies out there which one do you find most interesting with the brightest future?

***You are absolutely right. Either the part or the process determines which furnace is the most suitable. In my opinion the process with the brightest future is nitriding. There are more and more parts that need to be gas- or plasma (ion) nitrided. We have developed a prototype furnace together with IWT (Institut für Werkstofftechnik) - a university research institute - in Bremen and Process Electronic (United Controls) which allows plasma (ion) nitriding and gas nitriding in one furnace. We are now able to develop new processes together with our project partners and we are very excited. And in the field of gas carburizing there will also be new processes in the future which will allow companies to treat parts at atmospheric pressure without surface oxidation. We have done research on that issue together with IWT Bremen and the results are really promising. Once the process development is completed there will be the possibility to combine the advantages of atmosphere carburizing technology with low-pressure carburizing technology.***

7) Wind energy is big business in Germany and involves a great deal of heat treating. From what I have seen in Europe the typical approach to heat treating large gears for the wind industry is pit furnaces. In North America on the other hand the trend seems to be larger and ever larger batch IQ furnaces. Obviously there are advantages and disadvantages to both technologies but if you personally had to make the decision about which style of furnace to use for large gears which would be your choice? Pit or Batch IQ?

***Do you mean multipurpose chamber furnaces? As we do not manufacture this kind of furnace, for me the choice is easy. The wind energy plants get bigger and bigger and the components, that need to be heat treated get bigger, too. I believe that for big parts, big amounts of parts and parts with a high weight, pit furnaces are the best and most beneficial alternative.***

8) Europe is home to a large number of new furnace builders, do you have a feel for where ROHDE fits in in terms of annual sales? Continuing with this thought are there too many new furnace builders if the economy slows down substantially?

*Europe is a big market, but you are right, there are also many furnace builders. Sometimes I am surprised when I get to know new companies in the industry. If the economy slows down substantially, it will be hard for the furnace builders and competition will get tougher. It is hard to say if there are too many furnace builders. I believe it depends on which industries they serve. If they only serve one industry like for example automotive, then it is problem for them, if the economy slows down. But if they serve many different industries like we do, they can handle a potential crisis much easier.*

9) Which of your competitors are you the most impressed by?

*It is hard to say. There are of course some competitors which we can partially compare our company with. But in many ways we are different from other companies. The fact that we are not part of a group, that we are an owner-managed family business, is in my opinion our biggest advantage.*

10) Recently I asked the CEO of a very large European furnace builder if he was worried about competition from low cost areas such as China. His response I completely agreed with when he said in his opinion distance would be a factor and that he did not see in the near or medium future that it would be an issue. Do you agree with this statement or do you see an influx of competition from other low cost areas such as Eastern Europe.

*I think I read your interview. Regarding Asia I do agree and I believe that the costs in the so called low-cost countries will increase in the future and with that also the costs of the products. But I think the main problem is quality and quality is expensive everywhere. I think Eastern Europe is a bigger issue for us. You need to be better than your competitors and if you are better, then you don't have to be afraid. But that means permanent development and research. And that is what I try to do at my company.*

11) So Jörn what do you see in the future? A consolidation of furnace builders? Substantial growth or a decline in new furnace orders? New technologies changing the face of the whole industry?

*In the past years I have seen -especially in Germany - many companies becoming part of groups and I think that this will continue in the following years. I think it is a shame because in my opinion, when a company becomes part of a group, it loses its own personality and I do never want to become part of a group. I am sure that there will be a decline in new furnace orders. For Rohde this current year has been absolutely great and we do not expect the next year to continue the same way. The worldwide economy is decreasing and the problems in Europe are present and will have an important influence. But I believe that there will be new technologies which improve our products and those will assure even in bad times orders for the innovative companies on the market.*