"Energy efficiency is the biggest potential in Europe"

Paweł Wyrzykowski is President of the Management Board at SECO/WARWICK Group in Świebodzin, Poland. In this interview with heat processing he talks about the future of the energy industry and technological challenges, revealing his own personal energy-saving achievement.

The energy mix of the future: Are you prepared to risk a prediction?

Wyrzykowski: I am generally very positive and supportive for the energy from renewable resources. There should be enough potential in these renewable resources to constitute a substantial energy supply for the earth's population. Although I think the efficient process of making this energy useful will take some more time, as will the development of efficient storage and transportation of it. Nevertheless it is worth to work on it now with full speed.

The sun, wind, water, geothermics, etc.: Which regenerable energy source do you consider to have the greatest future?

Wyrzykowski: I think all of them have a lot of potential. The one which I do not regard as a real renewable source is the so called biomass, which uses wood residuals, and sometimes even wood logs! This is not really very clever to burn wood for gaining energy. First of all we release CO₂ to the atmosphere, and secondly we reduce valuable and very healthy sources of raw materials for the production of such goods as construction materials or furniture.

Which of the technologies currently emerging would you invest in today on that basis?

Wyrzykowski: I think all of them will play a certain role, but the importance of them will be different depending on the natural conditions in each region. The question is the economic and social cost of harnessing them. I am quite sure in the long run the society will be quite successful in some of the sources. I regard geothermic energy as the underestimated one, but having a huge potential.

How do you assess the future ranking of fossil fuels such as oil, coal and gas?

Wyrzykowski: I am sure they will be playing a major role

for some dozens of years, but I am also sure – not the prevailing role forever. I support the attitude of Europe that we do not want to take the dictate of oil and gas producers for granted in the long run. Europe had been struggling for solutions for decades, but only in the last years we can see substantial progress thanks to renewable resources and technologies harnessing them.

I would re-consider if we really have to give up the usage of coal. I think also in the areas of its efficiency and the environment protection we could achieve a substantial progress when processing coal. It would however remain, jointly with the renewable energy sources, our counterbalance guarding our future income from being transferred to OPEC or Russia for overpriced oil and gas. For the same reason I support the nuclear energy. The future safety technologies and all lessons learned must make it possible for society to develop triple, or even quadruple safety systems, which do not bear any real risks. I believe we can!



The energy turnaround: What changes will be necessary at the political (including the global political), the social and the ecological level to enable us to talk realistically of a "turnaround"?

Wyrzykowski: I am rather skeptical about the common global political compromise in this respect. There are too many differences, in terms of types and location of certain energy resources, but also cultural, religious or climate differences. We should struggle to have one common direction in the

EU, although also this seems not to be easy. I believe at least to have an integrated EU energy policy. This is the pre-condition for searching the global compromise.

There are at least two problems with renewable energy sources: the lack of infrastructure, and the continuing and persistent concentration of the established channels on conventional forms of energy. Will this change in the foreseeable future?

Wyrzykowski: The precautions to change this, has been started by most of the governments already. However this will take time, is costly and somehow there is an indication that the end user, who will pay it in the end, need to have more time, too, to adapt to costs and different usage behaviour.

Irrespective of the form of energy and the technology used, many consider the term "energy-efficiency" to be the key to the energy questions of the future. How do you view this subject? What do you consider to be the most important development in this field in the heat-processing technology industry?

Wyrzykowski: Yes, I consider energy efficiency as the biggest potential "energy source" in Europe. Starting from much better insulation of buildings through many types of industrial processes we should be able to save a lot of energy. Our industry is highly exposed on this requirement. There have been some inroads made in the recent years, but the biggest work is still in front of us.

The use of energy in the heat treat industry depends on, among other things, the size of the load that needs heated, the heat losses (on housing and exhaust), the cooling power and the process time. The load has been optimized by weight reduction of components, better and more accurate process treatment to improve safety measures on functional parts and optimized jigging with low weight fixtures. Our heat up simulation software and applied flow models helped SECO/WARWICK a lot in achieving already considerable savings here.

As a further step SECO/WARWICK's new process technologies for carburizing (PreNit-LPC®) and nitriding (ZeroFlow®) reduced process time, exhaust losses and we are working on more processes that optimize not only the energy use but also the functional properties of parts to minimize the specific energy expense of each individual functional component.

What benefits do electrical process-heat routes offer in your opinion?

Wyrzykowski: Electrical power on heating installations is as most engineers in the process business learn early net energy, as the exhaust losses of gas heated systems do not need to be considered. It is clearly not as simple as this, but

"We regularly convert our innovations into substantial new sales."

with natural gas as a limited resource and the distribution issues of natural gas in some areas, electrical heated systems have always been an alternative to gas heated systems. The benefit that electrical heating offers

is mainly its simplicity and the lack of heating gas exhaust systems. As a matter of fact the control of electric heated systems with a number of heating zones can be, as well simplified. On another hand, with the development of the technology to extract the shale gas, heating system based on this medium may be very economical substitute of the electrical heating.

In your opinion, how will energy consumption in industry, commerce and domestic households change?

Wyrzykowski: As emphasized before I expect a significant growth of energy efficiency. Secondly, the natural renewable resources will gain ground. Thirdly, there may be a shift of location of the heavy, energy consuming industry to countries and regions which offer cheaper energy, irrespective of its origin.

What role does your company currently play on the energy market?

Wyrzykowski: As the furnace producer we do not consume much energy ourselves, but we strongly influence the energy consumption of our customers. That is why we constantly search for new solutions in this respect.

What will be your company's most important innovation or project?

Wyrzykowski: In today's business environment, factors such as performance, energy efficiency, reliability are the key contributors to success. It is very much likely it will not change with time. SECO/WARWICK has always placed a great emphasis on the development of the technologies that deliver just that. Our low pressure carburizing technology, with its newest addition PreNit® technology, allows our customers to process parts at higher temperatures, thanks to which the cycle time can be reduced, and still without the risk of the grain grow. When applied with our new generation three chamber furnaces (with oil or gas quenching) it can reduce the cycle time by half. Another example of the same philosophy is the ZeroFlow[®] Nitriding technology. In this case the customers can benefit from the reduced nitriding gas consumption. It is especially important in view of the new regulations trying to reduce the consumption of such gases ammonia.

The race to develop the furnaces with faster quenching rates is on. SECO/WARWICK has developed a new high pressure gas quench furnace, VPT type, whose quenching rate is comparable to the rates reached in the oil quench systems.

What challenges do you see approaching you (economic, technological, social, etc.)?

Wyrzykowski: We think the energy questions are very up-to-date. The higher oil and gas prices the higher the heat treatment cost will be. Those companies who will be able to offer some comparative advantage will be winning some ground.

How do the expansion of the EU and globalization affect your company and its business?

Wyrzykowski: We definitely have some benefits from the globalization process. Many of our regular customers invite us to some new co-operation in new markets. In the recent years we have made some good effort in enlarging our geographical footprint from Europe and the U.S to China, India and Russia.

How important is a trade name or a brand for the success of products in the industrial sector?

Wyrzykowski: I really respect the brand approach also in the industrial goods. The brand stands for the guarantee. Not only for the mechanical or electrical product guarantee, but also, or mainly – for the guarantee of a lean process for our customers, and for delivering the customer some competitive advantage through our innovations. These two aspects are actually the core of SECO/WARWICK mission.

Have you been unable to pursue developments, or able to pursue them only after a delay, or at reduced speed, due to the lack of qualified personnel?

Wyrzykowski: We are generally happy with our innovations, which regularly and in a visible magnitude are converted into new sales. This is the main reason we are growing rapidly, even despite the economic slow down.

Does a management team need greater media capabilities in order to convince investors?

Wyrzykowski: We found a good balance between being visible in the public and reflecting our real strengths, without any exaggeration. As a stock listed company we are exposed on some natural interest of the financial investors. We have here a good feeling in meeting the main expectations.

What would you like to change in your company?

Wyrzykowski: At the end of October 2012 we announced our new strategy. We will need some changes in organization and communication to make the strategy work. The biggest challenge is to create a good internal network between all our subsidiaries and motivate their management to reaching the highest standards within our group.

How important is expansion abroad for your company?

Wyrzykowski: It is very important. We are traditionally very strong in Eastern Europe and in the North America. We successfully run our factories in China and India. We have a satisfactory track record in Western Europe, apart from Germany, where we intend to

"We should struggle to have one common direction in the EU." strengthen our position right now. We believe our technical solutions are now on the level meeting many expectations on this market. Our main plant in Świebodzin, Poland, is only one driving hour away from Berlin, Germany.

How much does your company spend on investments each year?

Wyrzykowski: We spend between 3 to 4 Mio. Euro on operational investments, but we have been spending much more on some capital investments. This we would like to keep at least in the next two years in order to strengthen our position in Asia and Brazil. Despite this rapid development we have been able to avoid bank debts, and we keep still a net cash position.

What has been/is your greatest energy-saving as a private person?

Wyrzykowski: Recently, I changed my car for a model which consumes 30 % less fuel. I and my family are trying to pay attention also to many, sometimes little measures, which help save energy.

How would you assess your dealings with employees?

Wyrzykowski: I try to do my best in having the high respect for my colleagues. I think it is important to find time for them and make sure their fields of responsibilities



are clearly defined. From my experience this is already a lot, when employees avoid conflicts in their dealings and know exactly what they are responsible for.

What moral values are of particular topicality for you? Wyrzykowski: I think fairness and being straight to the point are important values. You can create a good rapport with your employees if you are really fair in evaluation of their work. Being direct is also important, especially in today's world, where the speed of information has gained a lot of importance. There is less and less time for reading people's mind, if they are not open enough.

Do you, or did you, have any people whom you regard as examples to you?

Wyrzykowski: No, I am still waiting to meet somebody who I could admire in his or her full picture. But, naturally I've met some persons where I remember some traits I see as a good target for myself.

How were you brought up and educated?

Wyrzykowski: I was born in Warszawa, Poland, and grew up in the area of this city. I graduated from the Warsaw School of Economics. Now I appreciate my first job very much, which was in the banking business. I think it gives a good backup and orientation in the world of business.

RESUME

Paweł Wyrzykowski

Date of birth: 3rd of February 1969

Current job:

President of the Management Board, SECO/WARWICK Group

Studies:

Diploma in Faculty of Foreign Trade of the Warsaw School of Economics in Poland

Career:

- 1992-1998: Creditanstalt group in Vienna (Austria) and Warsaw (Poland)
- 1998-2001: Chief Financial Officer and member of the Management Board of Pfleiderer Grajewo S.A., Poland
- 2003-2009: President of the company's Management Board of Pfleiderer Grajewo S.A. , Poland
- 2009-2011: Member of the Management Board of Pfleiderer AG of Neumarkt, Germany
- 2012-now: President of the Management Board, SECO/WARWICK Group

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What is your motto for life?

Wyrzykowski: I do not have one and so far I do feel not uncomfortable missing it.

In your opinion, what was the most important invention of the 20th century?

Wyrzykowski: Without being too academic, I respect the mobile phone very much. I entered into my adult age when the cell phone was not in place and remember how different our life was.

When do you not think about your work?

Wyrzykowski: My family is generally a good counterbalance. I have three kids ages 10 and below. When dealing with them or taking care of them you really hardly can think about anything else.

What is your own personal tip for the upcoming generations?

Wyrzykowski: I would not dare a tip for more generations than only the next one. The speed of cultural and social changes is simply too high. My tip for my kids is quite simple: No invention will replace your mind (brain), so keep it ready all the time.

What has shaped you in particular?

Wyrzykowski: I had a very hard and demanding study but decided to go on with being a semi-professional footballer in the same time. This combination helped a lot with many difficult issues at the end of the day, like the team play, "staying on the ground", or good time management. Simultaneously you had to pass all the exams coming up. I learned quite well that you pass all your exams, if you take them one by one.

What can you absolutely not do without?

Wyrzykowski: I need some sport activity all the time. Due to a serious injury in the past I am not able to play football anymore, but now I try to go on with tennis and golf which give me some balance against some stress in business.

What do you wish for the world?

Wyrzykowski: Keep being successful in "no next world war". Even looking at all your previous questions, where some of them look really serious, we sometimes lose some real relations. You asked about generations. For almost all our preceding generations this stage we have had now would not have been seen as taken for granted. We often forget this.

Thank you for this interview.



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