



NOT BUILT ON SAND

For European plant manufacturers, competition from Asia has been the predominant issue for years. And the other way round? This means looking at things from a different angle.

TEXT: Stefan Frank for P&A PHOTOS: Samsung Engineering www.PuA24.net/PDF/PAI12101

For German and European plant engineering companies seeking growth beyond their home markets, Asia remains the best place to look. According to the annual report of the Large Industrial Plant Manufacturer's Group (AGAB) presented at the German Engineering Federation (VDMA), this was where nearly 60 percent of all foreign orders were placed in 2011. This figure is up from 50 percent ten years ago, 42 percent in 1981 and 13 percent in 1971. "The industry has already responded by setting up engineering, production and service infrastructure in Asia, and it is now ready for the 'Asian Century' ahead", says

AGAB spokesman Helmut Knauthe, member of the Executive Board of ThyssenKrupp Uhde. Asian competitors, however, are generally not known for sitting idly by. Since 2006, Korean and Chinese companies have doubled their global market share to 20 percent. Hence, it is hardly surprising that when asked where the stiffest non-European competition comes from, decision makers within German industry answer that Korea and China currently pose the most formidable challenge. In a survey conducted by AGAB, both countries led the way in terms of competitive pricing, risk-taking and efficiency.



The world's largest ethylene plant was finished one and half months ahead of schedule.

More so than their Chinese peers, however, Korean companies stand out for the quality of their work, reliability and professionalism. 61 percent of the respondents answered that Korean companies have made considerable progress in terms of quality and delivery schedules. This achievement is all the more remarkable because as recently as ten years ago, South Korean companies were viewed along the lines of second-tier building contractors. "We were limited to executing small scale projects in South East Asia and Korea, and we were not invited to bid for the larger international-scale projects", says Sung-il Hong, Vice President of Corporate Communications at Korean engineering bellwether Samsung Engineering. The company earned its stripes when it completed a number of larger scale projects in the Middle East between 2005 and 2010.

Hong points to the TASNEE ethylene project received from Saudi Arabia in May 2006. "It is the world's largest ethylene plant. At the time we were awarded the contract, the Middle East plant market was at overcapacity with many large scale projects ongoing simultaneously. Workforce, equipment and materials were in short supply. As a result, our competitors delayed their projects for as long as 18 months, while we completed the TASNEE project one and half months ahead of schedule."

"The Koreans excel when it comes to quality, project management and sticking to tight schedules", says Marc Artmeyer, plant engineering expert at the consulting company Management Engineers. Germans, on the other hand, usually factor in more leeway, he says. Part of the reason for this is that German companies have to rely more on third parties. "Korean companies offer a one-stop solution", says Artmeyer. "They have the people they can send to the construction site. The Germans

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can monitor the construction site but they lack the extensive engineering capacity.” However, many German companies have changed course and are beginning to recover these skills. “The developments of the last 20 years show that it will be necessary to go back to offering a complete range of services”, says Lothar Jungemann, Member of the Executive Board of ThyssenKrupp Uhde. “Companies have to provide and supervise construction and engineering themselves and fill all positions down to the level of foreman with their own employees. This is the route that we will take at Uhde over the coming years.” But labour remains a bottle-neck for German plant engineering companies. “The lack of skilled workers like electricians and mechatronic engineers is a crucial issue”, says AGAB market information manager Klaus Gottwald, adding that “many people don’t want to go abroad”, thus necessitating incentives. “German companies react in various ways, one of which is to recruit a workforce in foreign countries.”

Samsung doesn’t have such headaches, says Hong: “One of our benefits is that we have a strong base of engineering graduates coming from Korea, whereas in Europe and America the number of engineering graduates is declining. It is also a plus that cultural strengths of Koreans lie in their flexibility, speed, passion to succeed and goal-oriented working style. Samsung Engineering engineers are often willing to work overtime to support the ultimate goal of finishing a project on time and on schedule.” A strength of ThyssenKrupp Uhde is its global reach and long-established network, says CEO Michael Thiemann. “We have a global network of local organisations on the ground in each particular market. In India we work with Indians, in China with Chinese, in Russia with Russians. This integration is a big strength in executing orders. I don’t see the Koreans having reached this point yet.”

One of Samsung’s biggest trump cards might be its risk-taking approach. “Samsung Engineering takes on most projects on a lump-sum turnkey basis, which means the majority of risk is given to the contractor”, says Hong. Thiemann agrees that Asian and especially Korean plant engineering companies are willing to take more risks. “However, Western plant engineering companies take risks, as well”, he says, and adds: “But they have to remain within the boundaries of their Corporate Governance which is an important part of the strategic focus. Our long-term success has proven us right.”

Kai-Ingo Voigt, Professor of Industrial Management at the University of Erlangen-Nuremberg, has observed that German

and Western European plant engineering companies tend to take on more risks than in the past, especially supplier risks, such as the employment of cheaper but unproven local suppliers. “There are ongoing efforts to make these risks more manageable.” This issue will become even more pressing, since the employment of local suppliers is often included in the terms of a contract, especially in developing countries. “It is more and more important to use local resources for materials, supplies and manpower to stimulate the country’s growth”, says Hong. What a government wants to see is a commitment to society: “Samsung Engineering pursues localisation in the host countries, which means investing in local communities through hiring, training for engineers and skilled labourers. Our Engineering’s mindset and significant contributions to the local region has greatly increased its reputation in our key markets such as Middle East, Mexico and India.”

The AGAB study points out that many German plant engineering companies have not even begun to feel the heat of the Korean competition; until recently companies like Samsung have concentrated on the construction of oil-related facilities in the Middle East. But this is about to change: “Based on our hydrocarbon project track record in the Middle East, we were able to diversify our business geographically and branch into new businesses such as power, water and metallurgy projects”, says Hong. “In the last year alone, we

have entered new markets such as Iraq, Uzbekistan, Qatar and the US and we have strategic plans in place to continue this trend in the coming years in markets such as South America and the CIS countries.” By now it should be clear that although Samsung has a strong presence in desert countries, its business success is not built on sand. □

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