

# Turnkey industrial solutions and collaborative networks

With a view to enhancing collaboration and establishing a more holistic portfolio of solutions, ThyssenKrupp AG has recently undergone a process of reorganisation and integration within its business areas. ThyssenKrupp Industrial Solutions is one such area that has also undergone a reorganisation to strengthen and expand its engineering, procurement and construction (EPC) capabilities. *MechTech* talks to ThyssenKrupp Industrial Solutions South Africa's new CEO, Dietmar Jürges (right), who took the reins in April, 2014.



**T**hyssenKrupp Industrial Solutions (TKIS) is a newly established entity that incorporates, among others, two business units that have been formed from the amalgamation of three previously separate companies. Uhde, with its engineering, design and construction expertise in the area of chemical, petrochemical and industrial plants has become the TKIS Process Technologies business unit; while ThyssenKrupp Materials Handling with bulk materials handling and mineral processing expertise; and Polysius, which brings expertise in comminution technology and cement and lime plants, have been combined to make up the TKIS Resource Technologies business unit.

"With numerous locations on every continent, we are one of the world's leading companies in the field of heavy plant engineering. We have the capacity and capability to support our customers to realise their projects. With our extensive knowledge and innovative technologies, we have comprehensive engineering and project management expertise in the fields of oil and gas plants, minerals processing equipment, materials handling solutions, lime and cement plants and we can offer a full maintenance and service function," says Jürges.

Explaining the reasons underpinning the new structure, he says that the idea is to move away from "the technical isolation associated with separate 'divisions' and towards a more collaborative business culture". "We have a substan-

tial installed base and ThyssenKrupp Industrial Solutions aims to unite our expertise to enable us to expand our offering. Going forward, we will combine the technical strengths of the business units with our project engineering and management strengths as well as our expertise in the regions worldwide to provide increased turnkey, whole-plant and EPC solutions to a broader market," he explains.

## TKIS' new leader in SA

Born in Duisburg in the 'Ruhrgebiet' of Germany, Jürges says he has "steel in his genes". "After completing a commercial apprenticeship, I studied ferrous metallurgy in Aachen, but I finished in 1993, which was a bad time for young metallurgists in Germany.

"So I joined a family owned company called ELG Haniel, which was quite a diversified group and a global leader in trading, processing and recycling scrap for the stainless steel industry. Haniel was operating some 30 scrap yards at that time and I was responsible for establishing the new ones," he reveals.

Jürges' combined commercial and technical skills led to several pioneering business innovations within the Haniel Group and he ended up as managing director of CWS France, a service company for washroom hygiene that was formerly part of the Haniel Group, a company that he led until June 2005.

"That year (2005) was an excellent year for steel and Siemens had just bought Voestalpine Industrieanlagenbau

(VAI). So I moved back to Germany to take over as head of corporate strategy for Siemens Industrial Solutions. Like ThyssenKrupp, this involved metals, mining, oil and gas, water, cement and paper. Siemens understood industrial solutions from an electrical perspective, and my task as business head of Mining was to change Siemens' mining equipment division from a supplier of electrical equipment to a plant builder," he tells *MechTech*.

Key to Jürges' experience is working abroad, being able to quickly adjust to new countries and cultures. He is also no stranger to working in a matrix. "With ThyssenKrupp Industrial Solutions, the aim is to bridge the technical expertise offered by its specialist business units by adding regional clusters, bringing together the expertise of the group with the requirements and expertise of the region," Jürges says.

"By focusing more on the regions, I am convinced that we can grow the business significantly. We have skilled people who know their own regions, technologies and industries and are able to identify specific opportunities. And we are able to specify a broader solution that adds value and enables projects to flow smoothly – and the end result is a more integrated plant and greater market share for ThyssenKrupp," he adds.

## The matrix approach

Globally, ThyssenKrupp AG has grouped its businesses into six business areas: Components Technology; Elevator Tech-



**Above:** A 3 300 t/day ammonia plant for the Saudi Arabian Mining Company (Ma'aden) in Ras Az Zawr, Saudi-Arabia.



**Top right:** The Sorfert Ammonia/Urea plant in Algeria, with a capacity of 2 x 2 200 t/day of ammonia and 3 450 t/day of urea, an African reference for TKIS Process Technologies.



**Right:** The Ndola lime plant in Zambia, a reference plant for TKIS' Resource Technologies business unit. ThyssenKrupp's cement plant expertise originates from its former company, Polysius.

nology; Industrial Solutions; Materials Services; Steel Europe and Steel Americas. "ThyssenKrupp Industrial Solutions South Africa falls under the global Industrial Solutions umbrella, which, itself, has four business units: Marine Systems which offers submarines and surface vessels; Systems Engineering, which offers assembly systems, car body technology, lightweight solutions and testing solutions for the automotive industry; Process Technologies, specialising in fertiliser, base chemical plants and contracting; and Resource Technologies, which offers machinery and systems for the minerals processing, materials handling and cement industries.

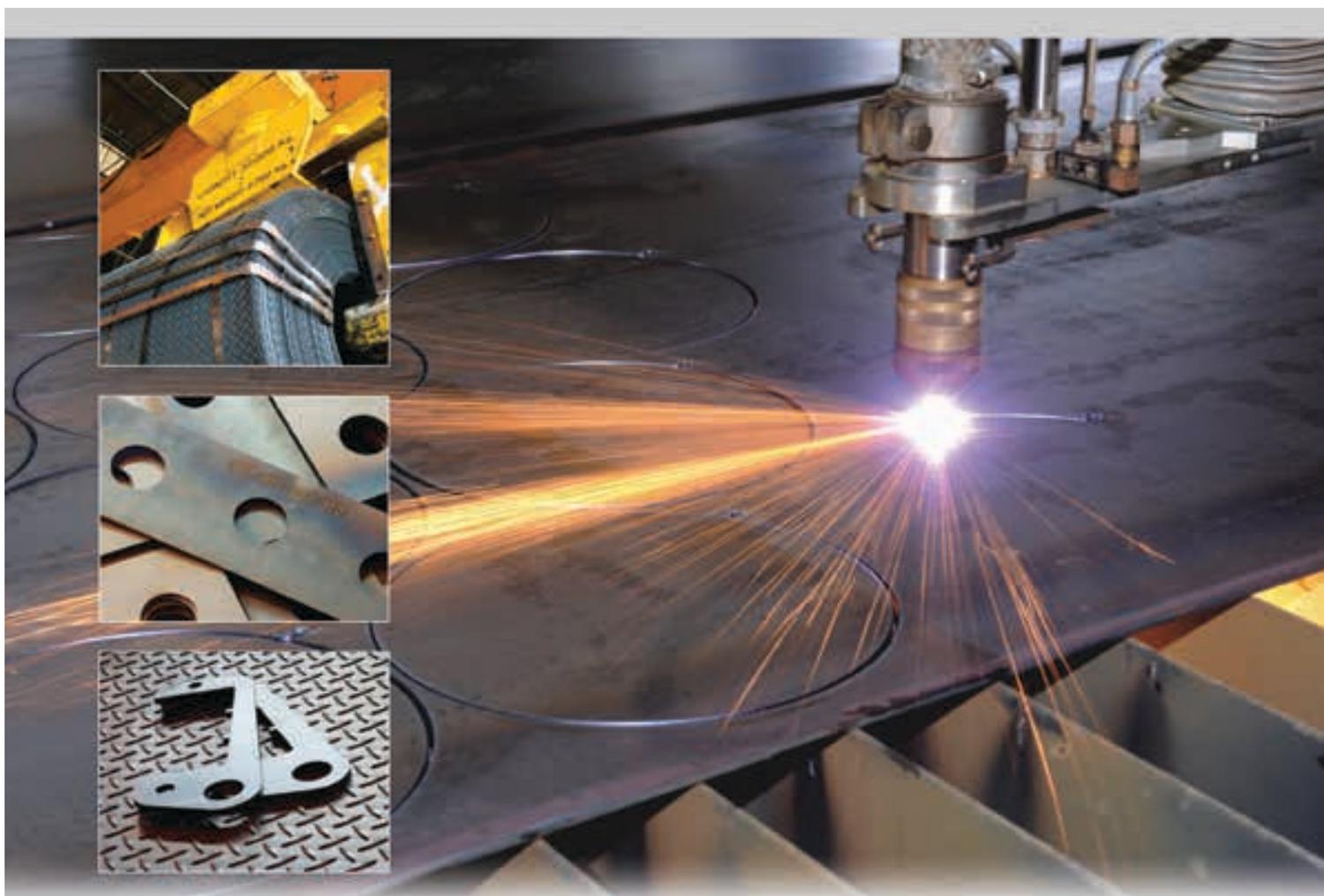
"All of these operate as specialist businesses. In addition, the matrix approach adds regional clusters to the organisation to build on market strengths and needs in different parts of the world. In our interaction with clients, we aim to combine business and technical level expertise with regional expertise. In prac-

tice, we have appointed operational officers (COOs) and charged them with the responsibility for implementation. Their role is about project management: the integration of technologies from several business units; taking care of electrical and other infrastructure requirements; and construction management. Under the COO, teams of engineers from the various segments will be assembled to implement projects and build plants," says Jürges.

"These people make projects happen across business units. With our new structure, we can easily draw on knowledge from our global competencies within the group. The matrix approach is about encouraging collaboration by actively seeking out the synergies and better coordinating the strengths of each business unit."

Jürges sees this approach as an

ideal platform for expansion into Africa. "We have created a regional cluster of ThyssenKrupp Industrial Solutions for sub-Saharan Africa. Work has already begun in Zambia and Botswana, and we are looking to set up offices in Ghana and Mozambique as well. We can provide the centralised office functions to support these offices from within the South African regional cluster. So what is needed in places like Ghana for example, are sales and implementation offices that allow us to get closer to our customers to service them better. African offices will therefore draw the necessary technical skills from anywhere in the matrix when needed," he explains. "The project implementation, from both a management and a specialist technical point of view, can come from South Africa or Germany or India, depending on the requirements of the



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projects and the availability of the most suitable experts," he adds.

But reorganising, according to Jürges, does not happen by drawing a new organogram. "My job is to encourage people to see the opportunities and to take advantage – and it is very exciting when one part of the organisation realises what another part has to offer. I am very proud of our Service Centre in Chloorkop, but we can offer so much more with it. Our capability goes far beyond the refurbishment of mills and HPGRs," he notes.

Turning attention to the maintenance side, he says that remote areas in Africa are increasingly interested in turnkey solutions because, from an ongoing maintenance point of view, "a single supplier offers simplified and more cost effective maintenance options."

"Lifecycle management, total cost of ownership and availability of the plant are increasingly important, particularly on remote sites. We have no interest in simply parachuting a plant into places such as the Democratic Republic of Congo and then walking away. We want to be doing the operational maintenance,



A stacker at the Kumba Iron Ore mine in Sishen. ThyssenKrupp's stacker/reclaimer expertise now resides its Resource Technologies (RT) business unit.

minimising downtime and maximising production efficiency," says Jürges. "We have an excellent installed base, but in the past, we have not been whole-plant and total service focused in all our businesses. Now, refurbishments, operational maintenance and performance-based contracts are all part of the vision.

"We want to support clients from beginning to end, for the long term, keeping plants available and operating at high productivity and efficiency levels. I see excellent market potential

for our technical systems, solutions and services. We have not even begun to discover the full potential."

In terms of new plant opportunities and Greenfields developments, Jürges says ThyssenKrupp Industrial Solutions South Africa is focusing on Mozambique, which has blossoming oil and gas and minerals industries, Ghana and Kenya. "We need to take a long breath in some respects, but we are going to be proactive. It is up to us to drive our growth," he concludes. □

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