

The customer magazine of ThyssenKrupp Steel Europe

compact

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2/2010

Group headquarters in Essen

Modern Quarter builds on steel

Viva Brazil

New steel mill
inaugurated

Efficient and sustainable

Electrical steel
from Gelsenkirchen

ThyssenKrupp Steel Europe
Thinking the future of steel



ThyssenKrupp

compact

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About our cover picture:

With its new corporate headquarters in Essen, ThyssenKrupp has constructed a building that radiates transparency, openness, sustainability and innovation. Products and materials from ThyssenKrupp Steel Europe are playing an important part in this. The historical foundation on which the Quarter has been built also exudes an identity with steel.

masthead

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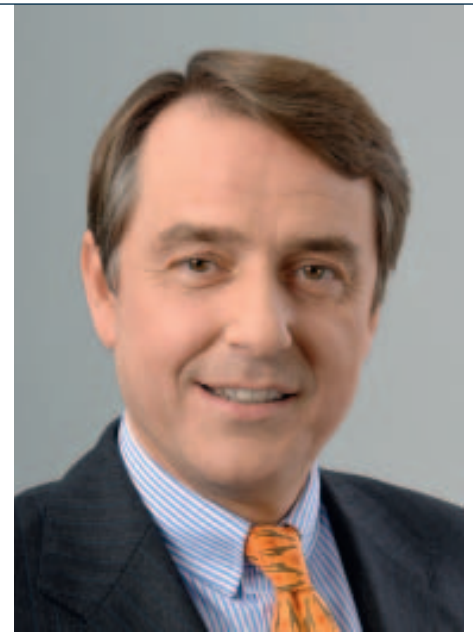
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Dear Readers,

We have been spared by the typical “silly season” this year. The economy is picking up again – although at varying rates in the industrialized countries. ThyssenKrupp Steel Europe is participating in this positive development. We are beginning to recover from the severe downturns of the last fiscal year. Incoming orders have increased again significantly on the European market for premium flat-rolled steel. Demand is developing better than expected against a background of relatively low inventories and imports. While the positive momentum initially came from the automotive industry and metal goods, the order situation has also noticeably improved recently in the late cyclical industries such as mechanical engineering and steel pipe manufacture.

Despite the uncertainty about future developments on the commodity markets, we are sticking to our investment plans and are still sure that we have made the right strategic decisions. That is why we inaugurated our Brazilian steel mill ThyssenKrupp CSA Siderúrgica do Atlântico in Santa Cruz on June 18. Because we are aiming to not just maintain but expand our leading position in the global market for premium flat-rolled steel. ThyssenKrupp CSA Siderúrgica do Atlântico is central to our Group’s growth strategy worldwide. The plant will in future produce approximately five million metric tons of slabs per year, which we will use to exploit the growth opportunities in our core market of Europe and the NAFTA market. In Alabama, we are currently building the USA’s most modern production facility for premium flat-rolled steel and stainless steel flat-rolled products; the new ThyssenKrupp plant with hot- and cold-rolling and coating facilities is being built in Calvert, 40 miles

north of Mobile. The slabs from Brazil will be further processed there and in Germany in order to be able to supply our global customers in the automotive, household appliance and electronics industries with high-quality products from autumn 2010.

On June 17 we inaugurated the new ThyssenKrupp corporate headquarters, the ThyssenKrupp Quarter. The new building is a clear sign of the Group’s firm commitment to its roots in the Ruhr area and its products – more than half of the materials used in the construction were produced by the Group itself. For background information and opinions please see the cover story.

“We are beginning to recover from the severe downturns of the last fiscal year.”

When it comes to steel, we continue to rely on development partnership, the combination of processing know-how and expertise in materials. We want to work with you to make lasting improvements both to our own products and the processes and products for steel processing, and to achieve lasting advances in quality. By concentrating on our technological strengths, we will create value together. Steel is and will remain a valuable material. With this in mind, I hope you will enjoy reading this issue.

Yours,

Dr. Jost A. Massenberg
Member of the Executive Board responsible for Sales
ThyssenKrupp Steel Europe

Abu Dhabi: Major contract for Formula 1 circuit



ThyssenKrupp Steel Europe supplied 9,500 square meters of Hoesch isowand integral® and 1,500 square meters of Hoesch isowand vario® to the Yas Marina Circuit in Abu Dhabi. The Yas Marina Circuit is a Formula 1 racetrack with architecture which combines the modern with the traditions of Abu Dhabi. The steel structures of the various grandstands form the basis for the membrane roofs designed in the style of Bedouin tents. Hoesch® products have been used in the Main Grandstand which can seat 7,000 spectators, in the West, North and South-Grandstand, in the Pit



Building which has 40 garages for the racing teams, in the Support Pit Building and in the Media Center for journalists and photographers. The Yas Marina Circuit is the largest construction project ever realized by the company.

<http://construction.thyssenkrupp-steel-europe.com>

Photo: Yas Marina Circuit

Group identity – with steel

ThyssenKrupp Quarter in Essen

“Show me how you build, and I’ll tell you who you are.” It would be difficult to express it any better than the poet Christian Morgenstern. With its new corporate headquarters in Essen, ThyssenKrupp has constructed a building that radiates transparency, openness, sustainability and innovation. The Group’s own products and materials are playing an important part in that.

During his welcoming speech at the inauguration of the building complex on June 17 Dr. Ekkehard Schulz, Executive Board Chairman of ThyssenKrupp AG, acknowledged that “the design of the entire site is the architectural embodiment of fundamental parts of our corporate culture.” The Quarter was designed by the consortium TKQ, JSWD Architekten and Chaix & Morel et associés.

The ThyssenKrupp Quarter is designed to be extended further. Initially, the Quarter comprises four new buildings named Q1, Q2 forum, Q5 and Q7. The headquarters and centerpiece is the 50-meter high Q1 which houses 500 employees. The other two office buildings Q5 and Q7 will also provide space for another approximately 500 employees between them. The Q2 forum is designed as a place for meetings and as a hub of communication with a diversity of facilities including meeting rooms and a hall for Supervisory Board meetings. A ThyssenKrupp Academy and two further administrative buildings are to follow in a future development phase for the Quarter. Construction of a child daycare center will begin shortly.

The building complex conveys corporate values such as openness and transparency with its intricate facade structures of glass and metallic materials. Q1 with its two panoramic windows measuring over 700 square meters each sends the strongest message. The Quarter is also a clear

commitment to sustainability: We are relying on an approximately 1,000 square meter geothermal field for our power supply, and power consumption is minimized via energy-saving fluorescent lamps. The German Sustainable Building Council has already awarded the ThyssenKrupp Quarter its seal of approval.

As a technology group, ThyssenKrupp has chiefly demonstrated its innovation capabilities by using its own products for the Quarter, with, for example, the Elevator Technology Business Area contributing its high-tech TWIN elevators and escalators. More than half of the materials used in the Quarter’s construction were manufactured by the ThyssenKrupp Group.

Extremely representative of this are the over 10,000 square meters of PLADUR® ZM Premium produced by ThyssenKrupp Steel Europe, which was used as cladding for the exterior facade areas and inside the Q1, Q2 forum, Q5 and Q7 buildings. This material owes its superior appearance to a multi-layer coating in a color resembling champagne called Pearl Metallic Gold Q1. PLADUR® ZM Premium is based on the new ZM EcoProtect coating for hot-dipped coated sheet. A zinc-magnesium alloy featuring twice the level of corrosion protection is used in place of the conventional hot-dip zinc coating. The new coating is just as easy to form, weld and paint as a conventional zinc coating. The material was used in the ThyssenKrupp Quarter in the form of

formed steel panels measuring up to three meters in length and 67 centimeters in width.

By way of this material ThyssenKrupp Steel Europe is opening up new areas of application for coated sheet. Products in this sphere were previously used above all for the facades of functional industrial and commercial buildings, but PLADUR® ZM Premium is eminently suitable for prestige buildings – thus competing with materials such as aluminum while costing significantly less.

ThyssenKrupp Steel Europe also supplied over 17,000 square meters of Hoesch Additive Floor® for the Quarter’s six-level parking garage. The lightweight decking system consists of steel profiles which are topped with concrete; this solution is around 40 percent lighter as against solid concrete decking with comparable load-bearing capacity. Stainless steel from ThyssenKrupp Nirosta has been used, among other things, in the construction of Q1: 400,000 stainless steel slats covering an area of around 8,000 square meters control light entering the building. The first of its kind in the world, the system automatically adjusts to the position of the sun. The slats were given their form by ThyssenKrupp Umformtechnik, a subsidiary of ThyssenKrupp Steel Europe.

Bernd Overmaat

<http://www.thyssenkrupp.com/quartier/>





A historic location: In 1811 Friedrich Krupp founded a new cast steel factory in the community of Altendorf – the seedbed for the 230 hectares of land now known as the Krupp belt. The site expands rapidly from the middle to the end of the 19th century.

as 73 kilometers of rail track and 140 kilometers of telephone lines.

At the turn of the century, Essen incorporates several surrounding communities, including Altendorf. The cast steel factory is now in Essen, but remains a cosmos of its own. Frohnhauser Strasse and Altendorfer Strasse are the only roads between the downtown area and Altendorf. They run through the site and are walled on both sides. Other than that, the “factory town” separates the two districts rather than linking them.

During the First World War Krupp receives extensive armaments contracts. At the end of the war, the company has to switch production and for a while finds itself in difficulties. New products such as locomotives, trucks and agricultural machinery are successfully developed, the existing factory buildings are converted and expanded. The end of the Second World War also marks the end of large-scale industrial production on the Krupp site, with two-thirds of the factory partially or completely destroyed by bombing. Much of the equipment that is still functional is moved abroad or dismantled as reparations. By the end of 1950, some 70 percent of the Essen cast steel factory has been destroyed.

From the 1950s the Krupp Group develops into an international conglomerate, but the density of development on the site of the cast steel factory never returns to the original levels. More and more buildings stand empty. New users are found for some structures, with new building projects mainly focused on the outskirts of the site. Rail tracks and former factory roads become overgrown, and the majority of the site falls into disuse. But the Company continues to own the land, and it becomes the largest item of real estate belonging to the new ThyssenKrupp Group when it is formed through the merger of the two Ruhr-based companies Thyssen and Krupp. The site now forms the seedbed of the ThyssenKrupp Group – the Quarter.

Editorial staff

The “factory town” History of the Krupp belt

The site of the ThyssenKrupp Group’s new headquarters has been part of the Company’s history since 1811. That was the year in which Friedrich Krupp and two partners built a new cast steel factory in Altendorf, a community to the west of Essen.

Two years previously they had succeeded for the first time in producing high-quality cast steel. The new production site initially comprises just a few buildings. They include a foreman’s cottage, in which the Krupp family later lives and which is to become known as the Krupp Stammhaus (ancestral home). The site of this small factory in rural surroundings is the seedbed for the 230 hectares of land now known as the Krupp belt.

In 2000 an urban master plan is drawn up for development of the Krupp belt. A multifunctional model combining living, working and leisure is to be realized in several stages. In 2006 the decision is made to build a new headquarters for the ThyssenKrupp Group in the heart of the Krupp belt. The story of the site takes a new turn with the historic opportunity to create a new, attractive quarter in the mid-

dle of a major city. It marks the start of a new epoch for the ThyssenKrupp Group.

Back to the history: in 1826 Friedrich Krupp’s son Alfred takes over the company, and from the 1850s a period of rapid growth begins for the factory to the west of Essen. In 1852 the factory produces over a million pounds of steel for the first time. From 74 in 1848, the workforce grows to 30,000 shortly before the turn of the 20th century. The site also expands quickly: between 1861 and 1873 its overall area increases 20-fold from 18 to 360 hectares. Two years later, the roofed areas on the site alone are as big as Essen’s town center. But the town is also developing: from a population of 3,000 when the cast steel factory was founded, Essen registers its 100,000th citizen shortly before the turn of the century.

In a book published in 1889, Essen-based publisher Diedrich Baedeker speaks of a factory “of astonishing scale and quite extraordinary expanse”. He calls it “a true factory town” and details its infrastructure: there are 1,195 furnaces, 370 steam engines and 361 cranes on the site, as well

Impressive Facts and figures

Size

The ThyssenKrupp Quarter site measures 17 hectares

Construction site

- More than 300 companies involved in the building work
- More than 1,600 workers on the site
- 450,000 m³ of earth moved
- Up to 12 meters depth of excavation
- 50,000 m³ of foundations uncovered
- Around 3,000 meters of site fencing
- 17 cranes (of which 13 in use at the same time)
- Several hundred site vehicles per day

Materials for the buildings

- 23,000 metric tons of steel
- 15,000 m² of steel facade
- 400,000 solar control slats made of ThyssenKrupp stainless steel
- 320,000 meters of wiring (excluding IT)
- Approx. 9,000 meters of water pipes
- 90,000 m³ of concrete
- Approx. 16,000 m² of glazing
- Approx. 30,000 m² of carpeting
- Approx. 10,000 m² of parquet flooring

Grounds

- 75,000 m² of green space
- 7,300 m² water basin, water depth 0.15 m
- “Avenue of the worlds” being built along the water basin: 68 trees from five continents (15 different tree types)



2007



2008



2010



Enthusiasm is making waves – opinions on the Quarter



Chairman of the Executive Board of ThyssenKrupp AG Dr. Ekkehard Schulz at the symbolic groundbreaking of the ThyssenKrupp Quarter in Essen in 2007.

Dr. Ekkehard Schulz

“We were always positive that we were firmly committed to this region, the Ruhr, to our roots. It was absolutely right that we utilize this optimum site in the Krupp Belt to build an administrative center in addition to Duisburg and to manage the global operations of the Group from here.”

Prof. Ulrike Lauber

“It looks really good and is an exceptional case of urban construction and architecture. The principal ThyssenKrupp organized an open international architectural competition. We, as architects, can only welcome this, because it offers an opportunity to design and implement building culture.”



Prof. Ulrike Lauber was a member of the panel of judges for the architectural competition.

Jürgen Steffens (right)

“We are very grateful to our client ThyssenKrupp for nurturing and maintaining such a high standard of quality. And, in particular, that it backed this standard even in difficult times. We are confident that the Quarter will be an absolute architectural highlight.”



The architects Philippe Chaix (left) and Jürgen Steffens at the groundbreaking in Essen in 2008.

Ralph Labonte

“We want to live and experience the clarity, transparency and efficiency we are documenting with this building. I am looking forward to it. I am also looking forward to being able to provide our employees with fantastic functional spaces and to being able to work on this historic site.”

Member of the Executive Board Ralph Labonte at the topping-out ceremony in Essen in 2009.



NewsFlash

Moscow: Parking garages with Hoesch Additive Floor®

ThyssenKrupp Steel Europe is supplying around 250,000 square meters of Hoesch Additive Floor® for 20 parking garages in Moscow. The steel profiles are to be delivered over the coming months. The new parking garages are of different sizes and offer on average 500 to 1,000 parking spaces. They are part of the Narodny Garazh (people's garage) program, set up by the Moscow city government with the aim of solving one of the most urgent traffic problems. According to officials, the city only has enough designated parking spaces for less than a third of the vehicles on the Russian capital's roads. By 2025, around 3.5 million additional parking spaces are to be created. Around 900,000 will be in the form of new parking garages. The use of Hoesch Additive Floor® will provide many benefits such as cost savings, durability and safety. In addition, the system is quick and easy to install.

<http://construction.thyssenkrupp-steel-europe.com>

RFCS experts meet at ThyssenKrupp Steel Europe

In early June ThyssenKrupp Steel Europe hosted the annual meeting of the panel of experts of the European Union's Research Fund for Carbon and Steel (RFCS). 14 international experts and 20 project managers, who are responsible for the research projects funded by the RFCS, held meetings in Duisburg over the course of two-and-a-half days and visited the casting-rolling plant in Bruckhausen. The project leaders from various European steel companies and research institutes reported on the status of their research projects on the subject of hot and cold rolling. ThyssenKrupp Steel Europe was itself involved in four projects, one of which is being implemented this summer. The project "variable-width cooling for hot strip mills" is to be implemented in hot strip mill 3 in Bochum in order to use water more efficiently during the cooling of

advanced high-strength steels. The RFCS manages the assets accrued from the European Coal and Steel Community (ECSC) from Brussels, and pays for research projects out of the interest.

bauma 2010: Things are looking up again

Icelandic volcanic cloud and flight ban or not, many interested parties managed to find a way to attend bauma 2010 in Munich. The leading international trade fair for construction machinery, building material machines, mining machines, construction vehicles and construction equipment achieved record figures in terms of exhibition space and number of exhibitors and marked a turnaround in the economic slowdown in Europe. The record number of innovations presented included products and solutions from ThyssenKrupp Steel Europe. "We are also sensing a turnaround," summarizes the head of the Heavy Plate Unit Peter Selbach, "because we have made many new business contacts and concluded contracts." The customer evening, which was very well attended despite the problems caused by the volcanic ash, was also a great success.

www.bauma.de/en

Hanover Fair 2010: Lightweight construction convinces

At the Hanover Fair which was held in the spring and had the motto "Efficiency – Innovation – Sustainability," the Steel Information Center (SIZ), in cooperation with ArcelorMittal, Benteler Stahl/Rohr, Salzgitter, ThyssenKrupp Nirosta and ThyssenKrupp Steel Europe, demonstrated the lightweight potential offered by steel. Numerous interested visitors took the opportunity to have a one-to-one discussion and find out about the wide range of characteristics of various steel grades and steel products and the many and varied possible applications and processing possibilities.

<http://www.stahl-online.de>

CWIEME 2010: well wound with Electrical Steel

CWIEME, the world's largest international coil winding, insulation and electrical manufacturing exhibition, took place in Berlin at the end of June. ThyssenKrupp Electrical Steel attended for the eighth time. "For us it is the largest and most important trade fair at which we display our PowerCore® grain oriented and non grain oriented electrical steel," says CEO Dr. Henrik Adam, stressing the importance of CWIEME. And it proved to be a very successful trade fair again this year. "The highlight, in addition to numerous inquiries and concrete offers, was our customer event. Some 150 customers from all over the world came to our booth for the party, which we called the PowerGoal Party, to watch the German national team's match against Ghana."

www.coilwindingexpo.com

FIREtec®: Fire protection at international level

Fire protection is important all over the world, but the standards vary from country to country. In addition, they are governed by the relevant building insurance. The Color/Construction Unit is now combining all of the fire protection classifications according to various systems under the FIREtec® umbrella. This also includes the certificates of the buildings insurer FM Global (FM) and the Loss Prevention Certification Board (LPCB). These companies have introduced their own certification, and the so-called FM and LPCB certificates are among the best known of their kind. If you opt for an insurance company's policy and one of its certified products, you are rewarded with a much lower insurance premium. Polyisocyanurate (PIR)® foam, which has a very high index of up to 300, is important for the very high level of fire protection of FIREtec® products.

<http://construction.thyssenkrupp-steel-europe.com>

Viva Brazil

New steel mill inaugurated

Sinter plant

Blast furnaces

Melt shop

A look at the world's most modern integrated steel mill near Rio de Janeiro in Brazil. The lines and equipment will be put into operation successively from the third quarter of 2010.



The historic resolution by the Supervisory Board of ThyssenKrupp AG in fall 2005 was the starting signal for a mega-project – the construction of an integrated iron and steel mill in the industrial zone of Santa Cruz, near Rio de Janeiro in Brazil. Five years on, the project has become reality.

On June 18, ThyssenKrupp's new plant was officially inaugurated, and Dr. Ekkehard Schulz, Chairman of the Executive Board of ThyssenKrupp AG, was pleased to confirm during the opening ceremony: "An important milestone in ThyssenKrupp's global growth strategy is now ready for ramp-up." The lines and equipment of the mill will be put into operation successively from the third quarter of this year, and the first slab will be produced by mid-August at the latest. Among the roughly 1,500 guests, including over 1,000 employees of ThyssenKrupp CSA Siderúrgica do Atlântico, he also welcomed Brazil's President Luiz Inácio Lula da Silva, the Governor of the state of Rio de Janeiro Sérgio Cabral, the German Ambassador Wilfried Grolig and the Chief Executive of Vale, the world's biggest ore producer, Roger Agnelli. Vale owns a 26.87 percent interest in ThyssenKrupp CSA Siderúrgica do Atlântico.

The new steel mill built by ThyssenKrupp in the state of Rio de Janeiro at a cost of €5.2 billion is the biggest industrial investment in Brazil in the past ten years and is also the first major steel mill to be built in the country since the mid-1980s. The investment project is central to ThyssenKrupp's growth strategy for premium carbon flat steel in Europe and North America. After start-up, the plant will produce five million metric tons of high-quality, low-cost slabs. Three million metric tons will be supplied to the processing plant also under construction near Mobile in Alabama (USA), and two million metric tons will go to ThyssenKrupp's plants in Germany, where they will be processed for customers in Europe.

The foundation stone was laid on the nine square kilometer site near Santa Cruz, west of Rio de Janeiro, at the end of September 2006. Key to the choice of location in

Sepeitiba Bay were cost advantages based on direct access to the Atlantic Ocean and the rail line, ending at the site, for the transportation of iron ore from the mines operated by Vale in the Minas Gerais region. The investment project includes the construction of a state-of-the-art plant complex with its own port terminal for importing coal and exporting the slabs, raw material handling facilities, coke plant, sinter plant, two blast furnaces, a BOF melt shop and a power plant.

During the construction of the integrated iron and steel mill, not only did ThyssenKrupp CSA Siderúrgica do Atlântico

comply with the national standards for environmental protection, but also, on a voluntary basis, with the more demanding European requirements. The construction project was checked and approved by the Brazilian environmental authorities. At the same time, all the necessary precautions were taken in order to minimize the environmental influences of the investment as much as possible.

Schulz promised that ThyssenKrupp will be a good neighbor in Santa Cruz. During the construction work, the new mill created more than 30,000 jobs directly, while many more were created indirectly. When all the equipment is operating, 3,500 people from the region will work there. This is in addition to the number of indirect jobs created, which will be four times this figure.

Katharina Mette

www.thyssenkrupp-steel-europe.com/csa/en

They have every reason to be delighted: (from right) ThyssenKrupp Steel Europe chief Edwin Eichler, Group CEO Dr. Ekkehard Schulz, an interpreter and Brazil's President Luiz Inácio Lula da Silva.



Smiling faces at the start-up of the sinter plant at ThyssenKrupp CSA on June 18: (from left) The Chief Executive of Vale Roger Agnelli, Brazilian President Luiz Inácio Lula da Silva, the Governor of the state of Rio de Janeiro Sérgio Cabral, ThyssenKrupp Executive Board Chairman Dr. Ekkehard Schulz and the Mayor of Rio de Janeiro Eduardo Paes.



“balancity” is ambitious and multifaceted The German contribution to EXPO in Shanghai

China is staying true to itself with EXPO 2010 in Shanghai: The land of superlatives has a world exhibition of superlatives. A total of 242 countries and organizations will be wowing the world public until the end of October on a site which spreads over five square kilometers on both sides of the Huangpu River.



The world expo is, above all, a showcase for the Chinese people, because the organizers estimate that of the 70 million expected visitors to EXPO, more than 65 million will come from the host country. The aim is to convince everyone of China's rise: "We want to use EXPO to present the achievements of 30 years of a policy of reform and opening-up," said China's communications minister during a tour of the grounds.

The theme of the world exposition "Better City, Better Life" represents the development of China: there are around 175 cities

with over one million inhabitants in China. In the city of Shanghai, in which more than 20 million people live, the challenges associated with urbanization can most easily be identified: the demolition of old buildings, the relocation of people, exorbitant and speculative real estate prices, millions of migrant workers who are not integrated into society, anonymous apartment blocks in the surrounding area and a transport system that is painstakingly trying to stay mobile.

Each year China's cities attract millions of migrants and migrant workers, meaning that people are reacting to the lagging development in the rural provinces. By limiting immigration in, among other areas, the greater metropolitan areas of Beijing and Shanghai, the Chinese government is endeavoring to control the overpopulation of the cities. Nevertheless, the rapid urbanization process is general politically desired. "Better City, Better Life" is translated in Chinese as "The city makes life better".

The German architect, urban and transport planner Prof. Albert Speer has had his own design office in Shanghai for years: "I believe China's biggest town planning challenge is in the management of the explosion of the cities in such a way as to conserve resources. These include energy, water, the public transport infrastructure and land use, the economical handling of the use of the soil which is urgently needed to feed the population." He indicates a mixed city with all of the features such as business, services, commerce, sports, entertainment, recreation and housing, which are "if possible near one another or on top of one another, but not far apart" as a model of city planning. Speer calls for the "where" and "what" to be planned exactly and for "cities not to be simply expanded." Speer's office was involved in the preselection of the EXPO site. Following the removal of EXPO, the former industrial and port area will be returned to its citizens as a river area with a new city district.

The German Pavilion takes up the EXPO theme and coins the new word "balancity" from the words "balance" and "city" for its presentation of the "city in balance", a place between innovation and tradition, urbanity and nature, community and individual development and work and leisure. Innovative, sustainable and energy-efficient solutions are also important for urban development. On June 20 the one millionth visitor passed through the various stages of the pavilion: countryside, outskirts, tunnel, harbor, planning office, garden, depot,

factory, park, studio, city square, forum and, finally, the power plant. Germany is thus presenting a crowd puller. Unlike the tourism video presentations of other countries, it is one of the exhibitors which is taking the set subject seriously by offering a sweeping picture ranging from environmental technology to Made in Germany products to garden gnomes as an expression of idyllic allotment gardens as a means of escaping urban life.

The German program accompanying EXPO has already been running for three years and is called "Germany and China – Moving Ahead Together". In this series of events, which has already been taking place in five of China's provincial cities, Germany is presenting itself with sustainable urban development and climate protection concepts, as well as conservation of resources in building technology. The two-story "German Chinese House" made of Julong bamboo, a particularly long type of bamboo from South China, is unique. The artist Markus Heinsdorff links bamboo, which has been used as a construction material for centuries in China, with modern technologies. In doing so, he marries the traditional with high tech. The house, which has a walk-through surface area of 330 square meters spread over two floors, is not only environmentally friendly but also mobile: it can be completely dismantled and rebuilt elsewhere. And even away from the EXPO site, Germany is presenting itself with best-practice projects from German cities such as Shanghai's sister city Hamburg with a "Hamburg House" which is the first certified passive house in China.

The program running alongside EXPO also includes the "Urban Academy," where writers, architects, public officials, involved citizens, engineers and managers from both countries deal with the question of how the city of the future will look and what sustainable urbanization means. The events include a Bauhaus exhibition in the famous artists' quarter M 50 and various cultural activities. In September, the 40 best urbanization projects in China will be exhibited in the Himalaya Museum in Shanghai. Germany's contribution to the EXPO in Shanghai is ambitious and diverse – a program which is impressive and one of the best in the world exposition.

Dr. Bettina Wiess, economics journalist

<http://en.expo2010.cn/>

The German pavilion is a crowd puller. Unlike the tourism video presentations of other countries, it is one of the exhibitors which is taking the set subject seriously by offering a sweeping picture ranging from environmental technology to Made in Germany products to garden gnomes as an expression of idyllic allotment gardens as a means of escaping urban life.



Efficient and sustainable

Electrical steel from Gelsenkirchen



Electrical steel is all the rage given the hot topics of renewable energy and electro-mobility. In order to maintain ThyssenKrupp Electrical Steel's leading role in this sphere, the separate lines of business of PowerCore® grain oriented and non grain oriented electrical steel have been united under one umbrella since the end of June. ThyssenKrupp Electrical Steel is therefore now able to cater for the entire energy value chain: from power generation to power distribution to the consumption of energy.

"Energy efficiency is an important issue globally and is increasing the demand for high-quality electrical steel," says CEO Dr. Henrik Adam, explaining the organizational merger. The material thus provides benefits for a wide range of different developments and requirement structures such as, for example, increasing urbanization and mobility and the rising energy needs of a growing world population. The trend is towards hybrid and electric vehicles as well as environmentally friendly power generation. Electric motors are becoming smaller and lighter. In the wind energy sector materials are required in the generators which can withstand challenging environments such as the salty air in offshore operations over a long period of time. "Our material therefore has outstanding chances for the future, because we are present wherever electrical energy is converted, distributed and used. And we are accompanying the trend by now positioning ourselves as a full-line supplier for high-quality and innovative electrical steel under the brand name PowerCore®."

The synergies are many and varied: "Thanks to the merger we are combining product capabilities, R&D and know-how in order to continue supplying the changing market with premium grades from a single source in the future. We will therefore maintain our leading position in the electrical steel Champions League," says Adam. In the case of grain oriented electrical steel it is particularly important to minimize core losses during the transmission and distribution of electrical energy.

This is a prerequisite for high energy efficiency. It is foreseeable that the requirements for low energy losses will increase further, but it is already a complex material which is created by complex processes. In the case of motors and generators – i.e. particularly in the case of non grain oriented electrical steel – ThyssenKrupp Electrical Steel expects a wider range of requirements: in addition to the small losses, additional criteria such as better magnetizability, high mechanical requirements and thermal conductivity all play a part.

The trump card is therefore quality. Dr. Adam: "We do not participate in purely high-volume business, the Asian suppliers lead that field. The critical factors of our position on the market will be product characteristics in the sense of sustainable quality and performance as well as the possibilities for differentiation." The electrical steel supplier therefore wants to stand out on the market for its application technology.

"We are a high-end premium supplier with technology-intensive products in electro-mechanical engineering and mobility."

Since early May, the German Government has been pooling its efforts in terms of electro-mobility in a "National Platform". ThyssenKrupp Electrical Steel is also involved in this activity. Developer Dr. Andreas Jansen explains the background: "As a manufacturer of electrical steel we are involved in the 'Materials and Recycling' working group, and in doing so are accommodating our customers' demands on the new materials being produced in connection with electro-mobility. Of course, we also want to provide input ourselves for the correct communication and use of our materials in order to avoid errors during selection." The prerequisite for the success of the initiative is that the participants in the platform put aside the idea of competition and rivalry in favor of unification and standardization of the solution striven for. Overall, Jansen is optimistic: "The German materials industry now has the know-how from research and materials science and we have an ambitious automobile manufacturing industry which wants to conquer this market." The first results are expected by November. "Initially, they will most certainly only point the way in the sense that the areas where further research efforts are needed will be specified, in order to then handle these as projects," says Dr. Jansen.

Christiane Hoch-Baumann and
Dr. Bettina Wiess, economics journalist

www.tkes.com



SCAIMapper

Comparison software combines simulation and practice

ThyssenKrupp Steel Europe and the Fraunhofer Institute SCAI have worked together on a comparison software. SCAIMapper helps to better illustrate the forming behavior of materials for the automotive industry in simulations in order to avoid subsequent processing problems in the stamping plants.

SCAIMapper – an innovation in the automotive industry. “In cooperation with the Fraunhofer Institute SCAI we have developed software that allows you to compare material properties,” explains Michael Linnepe, Project Manager at ThyssenKrupp Steel Europe. “SCAIMapper enables you to bring together simulation and practical results for the first time.”

“When we wanted to compare the practical forming behavior of high-strength and ultra-high-strength steels by means of simulation, we previously had to go through a

long-winded process of processing the data,” says Linnepe, explaining the reason for developing the comparison software. “In addition, the information collected only applied to very localized areas in the component. We wanted to have something which could be used to enable direct and comprehensive comparison.” For this ThyssenKrupp Steel Europe used an already existing program developed by the Fraunhofer Institute in St. Augustin. “This was already able to provide the information for crash simulations.” Together, they expanded the software to include key points in metal forming.

Together with Andre Oeckerath of the Fraunhofer Institute SCAI, Michael Linnepe (left), project manager at ThyssenKrupp Steel Europe, developed the innovative comparison software SCAIMapper.

In addition, SCAIMapper makes it possible to perform pure simulation comparisons but also practical comparisons. “If, for example, in practice, a component is stamped from two different materials, the influences of the material properties can be quickly shown with the aid of the new software,” he says. “We can provide this important information on process optimization directly to the customer.”

In the sphere of simulation the behavior of materials is particularly important during the development of new steels. “Validation, in other words confirmation of the data, is particularly important for us as steel producers,” explains Linnepe. “With the software we are able to create optimally adapted material cards for the customer for the forming simulation.” ThyssenKrupp Steel Europe is now successfully using SCAIMapper in its day-to-day work – as in the most recent innovation InCar®.

Daria Szygalski



www.scai.fraunhofer.de/en
www.mpcci.de/en/scaimapper



The Metallic Blue Space color concept is unique: Despite its huge size, the Neurath power plant appears to form a harmonious unit with the horizon thanks to the flowing blue and off-white tones. Developed for the Essen-based energy group by architecture firm fcg, the color concept is also being used for the project in Hamm.

Effective, modern and chic New power plants are setting new trends

RWE Power is placing its trust in ThyssenKrupp Steel Europe for the construction of the new Neurath and Hamm power plants, both of which have high-tech roof and wall elements as well as a high-quality polyvinyl fluoride (PVDF) coating system to protect the surfaces. In addition, the newly developed ZM EcoProtect galvanizing method is being used in Hamm.

The latest products from ThyssenKrupp Steel Europe are protecting and adorning RWE Power's power plants. Following a construction period lasting four years, the lignite-fired power plant in Grevenbroich-Neurath is to be inaugurated later this year; the coal power plant in Hamm-Uentrop is still under construction. "RWE Power is relying on us and our roof and wall elements," stresses Thorsten Leissner, project manager at ThyssenKrupp Steel Europe. "The double-shell wall structure of our steel components, which are filled with an intermediate layer of special rock wool, provides outstanding sound insulation. By these means we are reducing the noise by nearly

50 decibels." Leissner continues: "The eye-catcher is the colored facade. It consists of three shades, the so-called Blue Space metallic paints, and is coated with a special UV-resistant and weather-proof paint system developed by ThyssenKrupp Steel Europe.

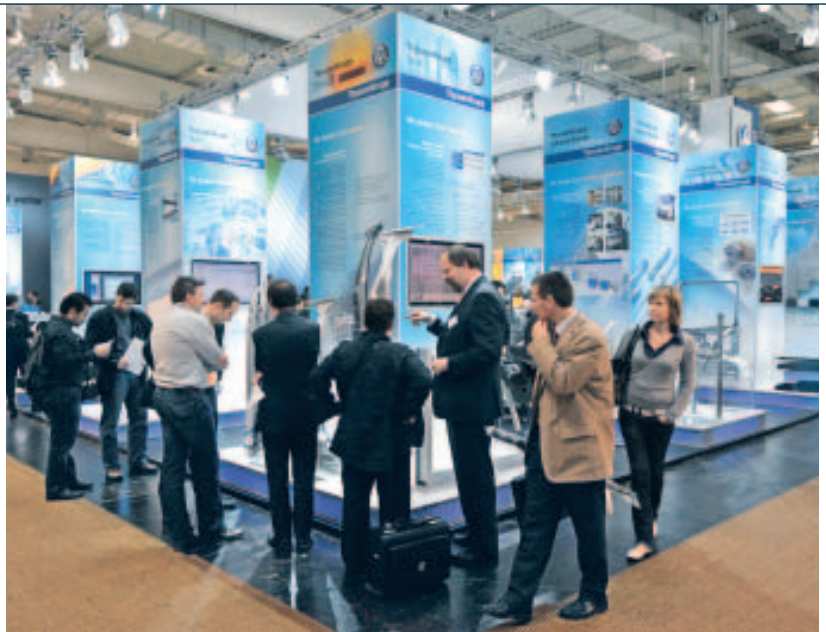
"In addition, the ZM EcoProtect galvanizing method, which was recently developed by us, is being used in Hamm," he adds. Cold-rolled steel strip is passed through a 460-degree Celsius molten zinc bath with a magnesium content of just over one percent and subsequently cooled so that the zinc coating solidifies on the strip surface. "The

protection against corrosion of cut faces and edges is even better with color-coated sheets with zinc-magnesium than with conventional galvanizing methods," he says, listing the benefits. "Compared with traditional galvanizing techniques, ZM EcoProtect also offers excellent corrosion properties while requiring 50 percent less zinc. This also makes the material easier to form." Looking to the future he enthuses: "The new process also protects the finite zinc resources."

Editorial staff

www.thyssenkrupp-steel-europe.com
www.rwe.com

Time for innovation ThyssenKrupp at EuroBLECH in Hanover



ThyssenKrupp Steel Europe will be presenting intelligent material solutions for the capital goods industry at EuroBLECH in Hanover from October 26 to 30. The International Sheet Metal Working Technology Exhibition attracts more than 1,000 companies to the capital of Lower Saxony. The exhibition motto is "Time for innovation," and Germany's largest steel producer is playing an active role.

An example from the sanitary sector shows how sophisticated design concepts are being implemented with steel from Duisburg: Conoduo is a bath tub designed by the renowned Milanese design studio Sottsass Associati and awarded the Design Center of North Rhine-Westphalia's Red Dot design prize; for its construction ThyssenKrupp Steel Europe supplies a deep-drawing steel with special flow characteristics, which can be enameled.

The Color/Construction Unit will be present at the exhibition with a whole range of new coatings. The modern surfaces give steel both aesthetic added value as well as additional functions. The two surfaces Relief stone and Relief wood from the PLADUR® product family have a special surface structure with a decorative stone or wood look – which is unique for steel surfaces.

The same applies to the PLADUR® Anticondensate and PLADUR® Luminous coating systems. The former is a paint designed for interiors and can absorb condensation. Previously, only glued fleece films were available on a steel base. The new solution looks more homogeneous and therefore higher-quality, but is cheaper than the fleece coating. The PLADUR® Luminous surface lets steel glow; this coating can store the energy from daylight or artificial

light and release it again over up to 15 hours. This means that, for example, emergency exits with steel doors can be marked. Emergency guidance systems made of PLADUR® Luminous mounted on walls or ceilings can also reliably show the way to safety, even in the event of a power failure.

ThyssenKrupp Steel Europe will be showcasing two newly developed B pillars from the InCar® research and development project for the automotive industry. With these crash-relevant components the company will be emphasizing the extent

of the project, which is aimed at providing solutions for various different customer objectives such as lightweight construction, reduced costs or improved performance.

Product innovations and exhibits from Hoesch Hohenlimburg will also be of interest to the metal working industry. ThyssenKrupp Steel Europe's subsidiary will be showing components made of medium-wide strip and used in dual-clutch transmissions for automatic gearboxes. The material is used here because of its cold-rolled strip-like thickness tolerances and special surface properties.

These and many other innovations from ThyssenKrupp Steel Europe await you at this year's EuroBLECH in Hanover. Why not come and visit us? You will find our steel team in Hall 16 at Booth 22.

Editorial staff

www.euroblech.com



The World's No.1

“Our customers are getting even better service” Color/Construction Unit

ThyssenKrupp Steel Europe's Color/Construction Unit has reorganized itself. The construction activities in Germany, Austria and Belgium have been integrated into ThyssenKrupp Steel Europe AG with retro-active effect from October 1, 2009. A particular feature of this is that the flat-rolled products will remain separate from the construction products in terms of distribution.

Reinhard Täger, CEO of the Color/Construction Unit and responsible for the construction division, briefly summarizes the objective of the reorganization: “We have maintained the clear distinction between flat-rolled and construction products, and will specialize even further and offer our customers the benefits of a self-contained value chain.” And that is quite complex in the case of the Color/Construction Unit, the activities of which range from hot-dip galvanizing with innovative coating systems to coil coating products, i.e. continuous strip coating with organic materials and systems as well as paints, right through to complete building systems for structural engineering and cold room construction. “We supply our customers with coils, trapezoidal and sand-

wich elements, liner trays, sidings as well as special products. We are continually launching top-quality products to guarantee our long-term success as well. In the construction market segment, we also offer our customers complete services from initial consultation through to the final assembly.”

His colleague from the flat-rolled side shares his view. CFO/CSO Volker Senger: “Innovative flat-rolled products, hot-dip coatings and coil coatings are ThyssenKrupp Steel Europe's strengths. They serve as high-quality input material for the construction market segment on the one hand but also for the household appliances, vehicle and electrical industries on the other.” And that is paying off. Täger

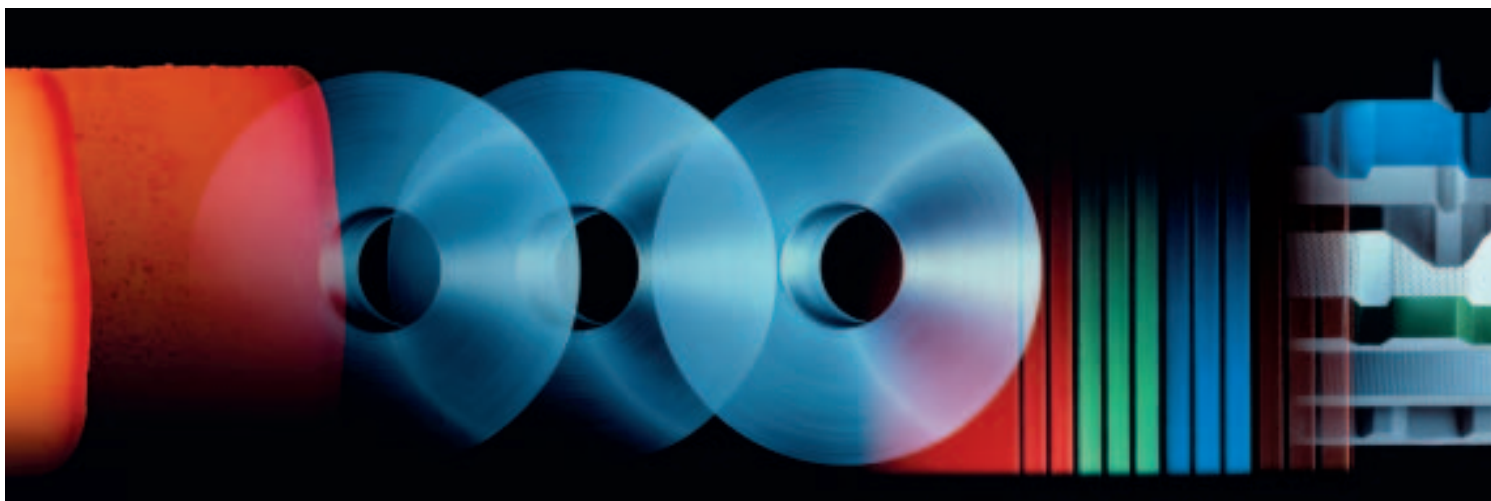
and Senger are holding out the prospect of shorter innovation cycles and faster market entries to their customers. They also agree where the topic of improved product quality is concerned: “We are benefiting from the clearly defined organization of the flat-rolled products and construction divisions, and are therefore making both a high priority.” This means that the activities related to the respective product and process development processes are also being further strengthened. The short and direct routes within the new structure also speak for themselves: “We are anticipating improved delivery performance with shorter lead times.”

The Color/Construction Unit is active throughout Europe. “With eight plants and 19 sales offices we have a local presence and are available to our customers at all times – no matter where they are,” stresses Täger. “The new structure enables us to reduce the complex, sometimes cross-site responsibilities and thus move even closer to our customers.”

Christiane Hoch-Baumann

<http://construction.thyssenkrupp-steel-europe.com>

The Color/Construction Unit has a very wide range of products. The new organization divides them into flat-rolled and construction products. They range from hot-dip galvanized coils to coated steel strips and sandwich elements to complete building systems.



Quality and service are priorities Westfalia Presstechnik

Westfalia Presstechnik operates in the traditional center of the automotive industry. Based in Saxony, it specializes in stamped parts, particularly for car seats. The company not only uses slit strip from the ThyssenKrupp Steel Service Center in Radebeul, but also calls on the Group's know-how.

Top: Johannes Hoffmann, Westfalia Presstechnik checks the quality of the seat rail adapter.



Bottom: From left: Ralf Schumann and Jürgen Zwahr, both of the ThyssenKrupp Steel Service Center in Radebeul, Mathias Schwarzendahl, General Manager of Westfalia Presstechnik, Achim Peuster, Technical Customer Advice Service ThyssenKrupp Steel Europe, and Jens Mogdans, General Manager of Westfalia Presstechnik, have been cultivating an open dialogue and a successful working relationship for years.



Saxony – an automotive state. This is also the location of the headquarters of Westfalia Presstechnik, which was founded in Crimmitschau near Zwickau in 1997. “The initial spark was the need for a stamping plant in the Westfalia Group,” says general manager Mathias Schwarzendahl. “Saxony was an ideal location because of its close proximity to many customers.” More than 100 years ago, August Horch laid the foundation for the current center of the automotive industry.

“We specialize in stamped parts made of high and ultrahigh-strength steels,” adds Jens Mogdans, who has shared the management responsibilities with Schwarzendahl since 2005. These are mainly parts for car seats: for example, stamped seat rails, seat frames and seat backs. “At the heart of our work are seven high-performance presses which exert a pressing force from 6,300 to 16,000 kilonewtons,” he says, going into detail. As mechanical engineers, both attach a great deal of importance to optimum product quality and efficiency. Westfalia Presstechnik, which is a division of the Heitkamp & Thumann Group, has grown very rapidly. Initially there were seven employees and two customers. Today the company boasts 180 employees, a second location in Hustopece in the Czech Republic, several major customers in the automotive and automotive supply industries and a turnover of around 40 million euros in crisis-ridden fiscal year 2008/2009.

Other reasons for the successful development: “We have a very well trained and highly motivated team and are enormously flexible,” says Mogdans. Schwarzendahl adds: “Whether we are dealing with our employees, suppliers or customers, we attach a great deal of importance to communication.” This means a common language, a constructive dialogue and transparency. “We make decisions together, especially during difficult times,” both stress. At the end of 2008, the general managers met with all of the employees. “Together, we found successful ways to master the sales slump without having to resort to short-time working or significant layoffs during fiscal year 2008/2009. We have been operating normally again for a year.”

They also tackled the situation with their supplier ThyssenKrupp Steel Service Center in Radebeul in a similar way. “We spoke openly about the difficult market and price situation and solved the problem in a professional way,” both recall. The sales experts from Radebeul Ralf Schumann and Jürgen Zwahr agree: “We have a very good working relationship.” Mogdans and Schwarzendahl named the ThyssenKrupp Steel Service Center in Radebeul as one of their three main suppliers. “Since 2002 we have been supplying slit strip made from hot- and cold-rolled as well as hot-dip galvanized grades from ThyssenKrupp Steel Europe to Crimmitschau,” explains Schumann. The volume has grown over the

years and now stands at 8,000 metric tons a year. “We also use the synergies with our sister factory in Dąbrowa Górnicza in Poland.” It has been supplying slit strip to Westfalia Presstechnik’s Czech plant for three years.

They complement each other. “We are working on further developing our range of services,” says Mogdans, looking to the future, “and want to develop our own know-how.” To do this, they aim to expand their cooperation with the ThyssenKrupp Steel Service Center in Radebeul and ThyssenKrupp Steel Europe. “This is because the steel mill’s knowledge and its innovations are of great benefit to us,” says Schwarzendahl. “It is also a competitive advantage for us,” says Achim Peuster, Industrial Sales Technical Customer Advisor of ThyssenKrupp Steel Europe.

“It is not just the quality of the products and the just-in-time delivery which we appreciate about this cooperation,” say Schwarzendahl and Mogdans in conclusion, “but the fact that it is a balanced give and take.”

Daria Szygalski

www.westfalia-group.com

www.thyssenkruppstahlservice.com

Success with steel

Innovations for the car

Steel is the material of choice in the automotive industry. To ensure that this remains the case, ThyssenKrupp Steel Europe is systematically developing new materials and design solutions which help customers to reduce weight and costs – without sacrificing performance. Current examples include doors, hoods and tailgates.

“The competition among materials is particularly intense in this field and this is driving the development of innovative steel products,” explains Dr. Heinz Hempowitz of ThyssenKrupp Steel Europe. The head of product and project coordination emphasizes how important the cooperation with customers is: “There is a great demand for customized solutions for extremely specific requirements. We are therefore involved in a constant dialogue with our customers, manage projects jointly throughout the development phase and agree on the focal points of research at an early stage.”

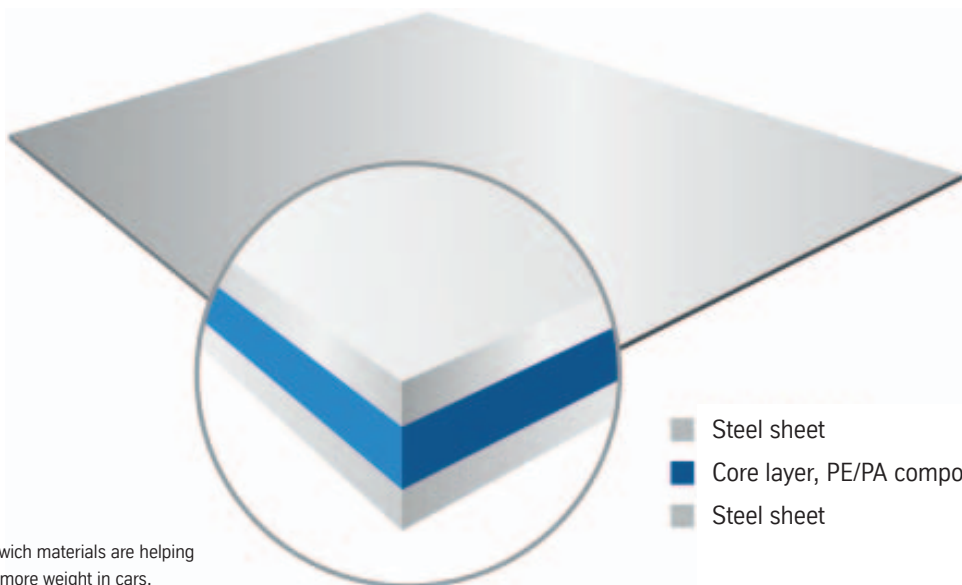
Door innovations have already become a tradition at ThyssenKrupp Steel Europe. In the 1980s the company revolutionized, among other things, the design of car doors with the introduction of tailored blanks; using them for door inner panels enabled a weight reduction of up to 40 percent. The technology is now firmly established in the sphere of body construction. Tailored blanks have also been reducing weight for a long time in side walls and safety-related structural components. Another breakthrough was the first side impact beam made of advanced high-strength steel, which was developed jointly with the subsidiary ThyssenKrupp Umformtechnik. Used for the first time in BMW's 5-series, the steel solution proved to be just as light and safe as the previously installed aluminum component, but cost only half as much.

The current weight and cost reducers are Advanced Door, thin sheet outer skin and stiffness-optimized sandwich materials. These solutions also came about as part of ThyssenKrupp's InCar® project, a Group-wide development initiative for innovations in automobile manufacture. The Advanced Door offers an eleven percent weight reduction and improved crash performance, and also makes a significant contribution to climate protection with nine percent less CO₂. The reference standard is a conventional door of an upper mid-range vehicle which is the best in its class in terms of lightweight construction and crash safety.

A radically redesigned door inner panel and a thin, lightweight outer skin made of high-strength dual-phase steel are at an advanced stage of development. The developers took a new design approach with the door inner panel by dividing the conventionally one-piece part into an inner and an outer part. All the reinforcements and also the side impact beam are integrated into the inner part. The component can thus be produced in one operation from a high-strength tailored blank, thus eliminating the need for multiple components and joining operations. The dual-phase steel for the outer skin of the door is only 0.55 millimeters thick, which is almost a quarter less than in the case of the outer skin of the reference door. This thin sheet solution alone accounts for seven of the total weight



ThyssenKrupp has been focusing on car doors for some time. A benchmark project in which doors from mass production are examined has been running since 2006.



- Steel sheet
- Core layer, PE/PA compound
- Steel sheet

New steel sandwich materials are helping to reduce even more weight in cars.

reduction of eleven percent. The thin sheet outer skin is also suitable for hoods and trunk lids.

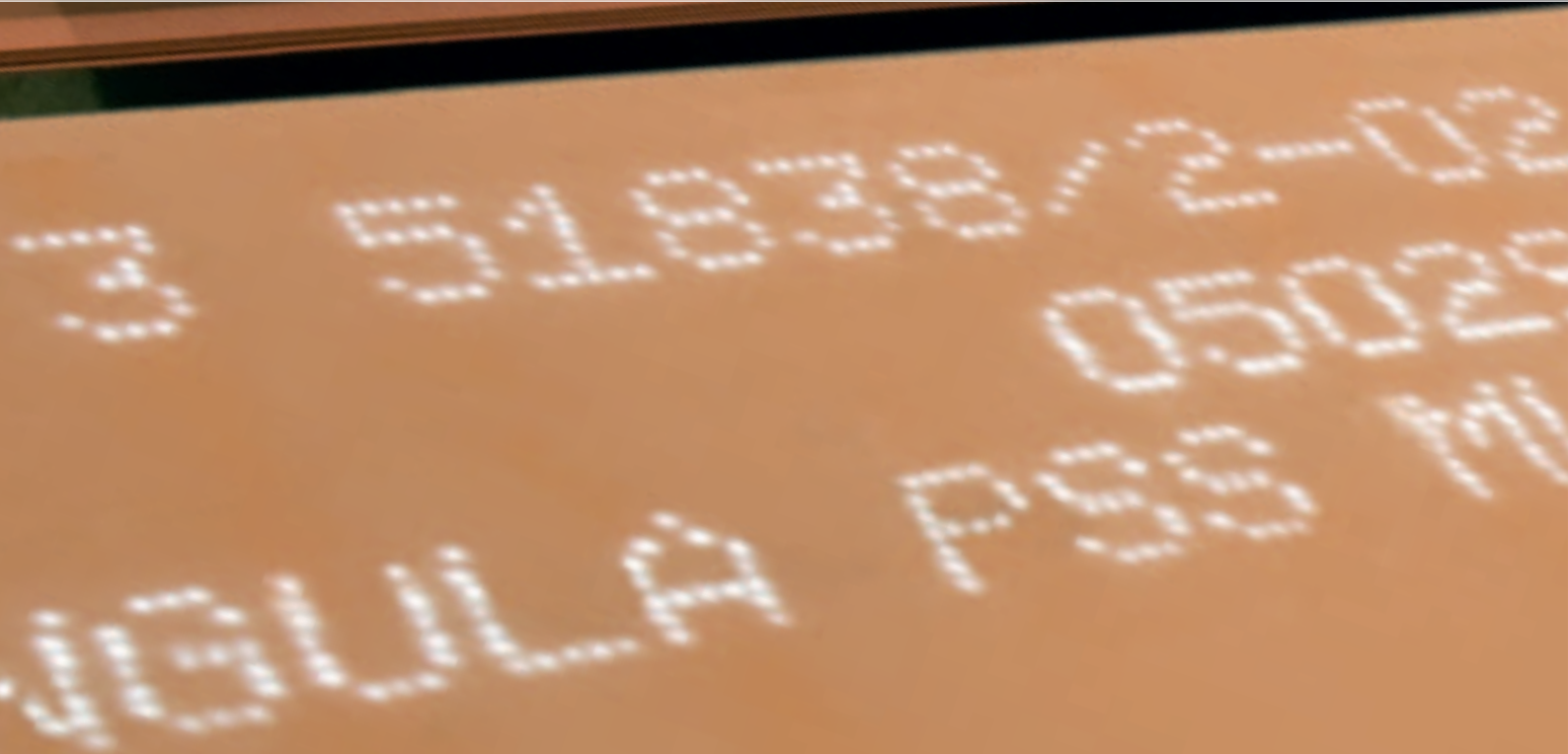
The same applies to new composite materials such as the stiffness-optimized steel sandwich materials. Tailor-made for the automotive industry, the multi-layer lightweight material is made of two extremely thin outer steel sheets and a polymer filling. In the InCar® project the material was used

as the roof outer skin and as an outer skin for another lightweight steel door. The lightweight steel door, with its extremely attractive lightweight construction costs, weighs 13 percent less than the reference model, with the new material accounting for about half of the weight reduction. The climate statistic: eleven percent less CO₂.

ThyssenKrupp has been focusing on large-scale outer skin components such as doors

for some time, and a door benchmark was created as long ago as 2006. Since then, door concepts from mass production have been examined continuously. Dr. Heinz Hempowitz: "This know-how and our materials expertise feeds into our customers' specific projects. The goal is to make existing production doors and new developments even lighter, more efficient and cheaper."

Bernd Overmaat

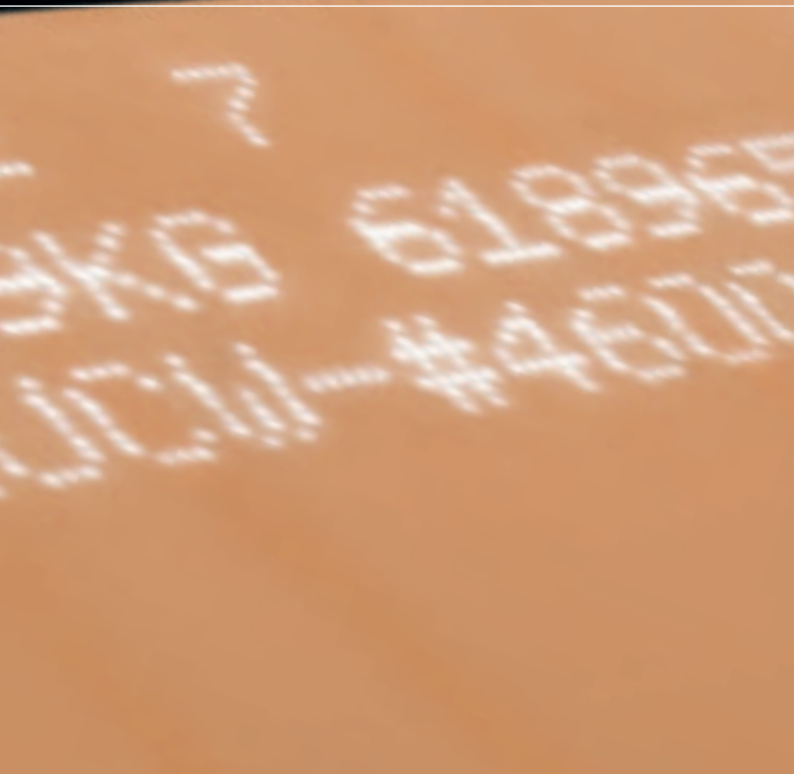


Hydroelectric power is driving South Africa forward Heavy plate for high pressure

There is a great deal of momentum in South Africa. Not just because of the World Cup which was recently held there, but also in the tight energy sector as well. The public electricity utility Eskom is investing billions of euros in the construction and repair of conventional power plants. In addition, topics such as renewable energy and energy efficiency are gaining in importance on the Cape. Against this background Eskom is currently building the gigantic Ingula pumped storage scheme – for which it has placed its trust in the quality and heavy plate supplied by ThyssenKrupp Steel Europe in Duisburg with the successful support of sister company ThyssenKrupp Mannex.

Time is of the essence in South Africa's energy sector in order to increase the country's power generation capacity. Public utility company Eskom aims to provide an additional 16,000 megawatts (MW) by 2018, in order to sustainably overcome the energy crisis which had its beginnings around three years ago and has since resulted in major power outages. In its new power stations the republic on the Cape of Good Hope is relying, above all, on the traditional fuel coal, which it has in plentiful supply. However, water is also becoming increasingly important as a source of energy for environmental reasons.

The Ingula pumped storage scheme is therefore currently under construction in the Drakensberg Mountains on the east coast of South Africa, and due to commence operation at the end of 2012. It is the first new project of its kind in South Africa for 25 years. The 16.6 billion euro scheme is located on the border of the Free State and KwaZulu-Natal provinces, in a region which is considered to be the center of the country's power supply. This is how it will work: Ingula is comprised of two reservoirs, each with a capacity of 22 million cubic meters. These two reservoirs are situated 4.6 kilometers apart, with a height difference of



The high-strength N-A-XTRA® 700 (M) steel is ideally suited to high-pressure pipelines such as those used in the pumped storage scheme in South Africa.



These plates are used to manufacture pipes up to 5.1 meters in diameter.

just under 500 meters, and connected to one another via a huge underground water pipeline. Located in the power station, which is also underground, are four pump turbines, each with a capacity of 333 MW.

Ingula is a huge bonus for the environment. Unnecessary emissions will be avoided, because the turbines will operate as generators to produce energy during times of peak electricity demand, with the water flowing from the upper Bedford reservoir into the lower reservoir, the Braamhoek, and driving them. At night, when energy consumption is low, the turbines will pump the water back into the upper reservoir and the stored power which has previously been generated will then be used to operate the pumps. At times of high demand such as during the World Cup final, peak current can then be fed in large quantities into the grid within a very short time using the water collected in the upper reservoir.

The approximately 4.6 km long high-pressure pipelines connecting the two reservoirs, the power plant and the turbines to one another like lifelines are made of heavy plate produced by ThyssenKrupp Steel Europe. "Our high-strength N-A-XTRA® 700 (M) steel is ideally suited for high-pressure

pipelines and therefore for this project," enthuses sales manager Roland Riesbeck. "We have received approval from the RWTÜV for N-A-XTRA® 700 for use in pressure vessels with temperatures of between -60 and +350 degrees Celsius at full load." The N-A-XTRA® 700 (M) for the Ingula project has to be easily and inexpensively cold-formed and welded to form pipes of a diameter of up to 5.1 meters. "This is made possible by its processing-friendly chemical composition and excellent mechanical properties," stresses Dr. Jürgen Kaiser, Head of the Technical Customer Advice Service in Duisburg. "It is also ideally suited for welding with higher heat input and longer cooling times, without its properties being affected too much in the weld area." In a nutshell: N-A-XTRA® 700 (M) combines a high yield strength of at least 700 megapascals (MPa) with optimum toughness for safety-related applications such as, for example, a high-pressure pipeline in South Africa.

Global team play – this advantage quickly convinced the decision-makers and won the Heavy Plate Unit the 17,000 metric ton order for the Ingula pumped storage scheme in South Africa. "It was not only because of our many years' in-depth experience of

high-strength steels that we were able to prevail against global competition. The excellent cooperation with our sister company ThyssenKrupp Mannex and the Italian customer ADQ as well as the considerable commitment of our technical customer advice service and quality department were also crucial for the execution of this order," comments the head of the Heavy Plate Unit Peter Selbach. "International projects are like soccer: It was only through teamwork that we were able to win the project."

Quenched and tempered steels were first manufactured by ThyssenKrupp in the late 1960s. Selbach: "In the long term we intend to further expand our capacity for manufacturing quenched and tempered high-strength steels." Environmentally friendly energy projects like the Ingula scheme could help to this end, because good references from such large projects will, in particular, also help the company to success in other target markets in the world. So it is 1-0 to South Africa – even if the hosts failed to win the World Cup.

Christiane Hoch-Baumann

<http://plate.thyssenkrupp-steel-europe.com>

Agenda

Alihankinta 2010

September 21 – 23, 2010, Tampere, Finland

On an area of about 13,500 square meters and with around 900 exhibitors in the Tampere Exhibition and Sports Center, the largest international industrial trade fair in Finland brings together the best contacts in the subcontracting industry. Alihankinta offers all of the participating companies an excellent opportunity to create and maintain effective networks with new and old business partners.

ThyssenKrupp Steel Europe will be represented, with the Heavy Plate Unit as a co-exhibitor, on the booth of the company's trading partner of many years, Flinkenberg.

Aerosol Conference

September 21 – 23, 2010, Rome, Italy

After the exhibition in Manchester in 2007, the 16th FEA Aerosol Exhibition and the 27th FEA Aerosol Congress are being hosted this year by the "Associazione Italiana Aerosol" (AIA) at the Rome Cavalieri, The Waldorf Astoria Collection in Rome, Italy. The Aerosol Conference will again this year serve the entire value chain of the aerosol can industry and provide a suitable platform for can, valve and machine manufacturers as well as input material suppliers. Rasselstein will be attending this year and presenting, under the motto "Excellence for Aerosols", its entire range for aerosol cans and, in particular, showcasing the film-laminated tinplate for valve discs in the Salone dei Cavalieri at Booth 43/44.

Internationale Zuliefererbörse (IZB)

[Automotive Suppliers Fair]

October 6 – 8, 2010, Wolfsburg

The 6th International Automotive Suppliers Fair (IZB) provides information, as Europe's leading automotive supplier trade fair, on the latest trends and innovations and presents these in the international marketplace. The IZB is now regarded as the top meeting place for the automotive suppliers industry. The motto of this year's IZB is "Connecting Car Competence". Held over the course of three days, the fair offers both exhibitors and specialist visitors outstanding opportunities for networking. The partner countries of IZB 2010 and, at the same time, the focal point of the extensive general program are the USA and Canada. ThyssenKrupp Steel Europe will be represented in Hall 7 (Booth 215).

Chillventa

October 13 – 15, 2010, Nuremberg

Chillventa will be opening its doors as an international trade fair for refrigeration, air conditioning, ventilation and clean room technology for the second time in Nuremberg following an impressive start in 2008. The Cleanroom Village – powered by Chillventa – will be taking place for the first time as part of this year's Chillventa. The highly specialized show will showcase the entire spectrum of clean room technology as the highest form of air conditioning. ThyssenKrupp Steel Europe will be present – together with ThyssenKrupp Bausysteme, Isocab and Hoesch Bausysteme – and showcasing special products for cold-storage and frozen storage warehouses and for clean room technology in Hall 1 (Booth 326).

EuroBLECH 2010,

October 26 – 30, 2010, Hanover

ThyssenKrupp Steel Europe will again be taking part in EuroBLECH in Hanover this year with other Group companies and will be exhibiting in Hall 16 (Booth E22). With some 1,500 exhibitors from 38 countries and approximately 70,000 visitors from 98 countries in 2008, the industry's leading exhibition for sheet metal working is the world's largest trade fair in this industry. The sheet metal working industry is increasingly facing complex challenges. All companies investing in the future are focusing on production optimization, energy efficiency, innovation and the development of research & development. As an internationally leading technology fair, EuroBLECH is regarded in the industry as a marketplace for global business and a platform for exchanging ideas and know-how.

baumaChina

November 23 – 26, 2010, Shanghai, China

As the leading international trade fair for all sectors of the construction machinery and building material machine industry in China and Asia, baumaChina saw a sharp rise in visitor and exhibitor numbers in 2008, as well as an expansion in the exhibition space. More than 110,000 visitors from all regions of China and many other countries visited the more than 1,608 exhibitors from 30 countries. China and its neighboring Asian countries are considered to be the growth markets for products, know-how and services in the construction machinery industry. ThyssenKrupp Steel Europe will again be represented with the Heavy Plate Unit this year at a joint booth with ThyssenKrupp GfT Bautechnik and Union Stahl.

Contact: **Achim Stolle**, Strategic Marketing, tel. +49 (0)203 52-41005, e-mail: achim.stolle@thyssenkrupp.com

Echo

Welcome back to the Ruhr area, ThyssenKrupp!

A cult Group from the Ruhr area is finally coming home. (...) Three years following the start of construction the new headquarters on the old Krupp site is ready for occupation (...), the headquarters is coming to the Ruhr. A milestone for Essen. Mayor Reinhard Pass: "The decision regarding the move and the development of a ThyssenKrupp campus on the Group's own historic site marks a new epoch. It is a sign of the Group's commitment to the Ruhr area and its confidence that this is a business location with a future!"

Bild Ruhrgebiet-Ost, June 16, 2010

ThyssenKrupp boss warns of dramatic bubble on the commodity markets

"If we are not prepared to oppose the commodity speculators in a determined fashion," stated ThyssenKrupp CEO Ekkehard Schulz, "they will become a serious threat to the entire steel industry and the global economy." He is worried about a major bubble on the international commodity markets which "could be even bigger than the real estate problem in the USA two years ago." Trading in derivatives, as operated by investment funds and banks, must be urgently regulated.

Spiegel.de, May 29, 2010

Thyssen's plant of superlatives

It is a steel mill of superlatives which ThyssenKrupp has built from the ground up in the west of Rio de Janeiro, a metropolis with over 6 million inhabitants. Costing 5.2 billion euros, it is the largest investment in the Group's history and the largest foreign investment in Brazil for a decade. (...) The plant is about to be opened. CEO Ekkehard Schulz gave a clear commitment to the steel sector and spoke of an "important milestone" in the Group's growth strategy: "We want to not just maintain but expand our leading position in the global market for high-quality flat-rolled steel."

Westdeutsche Zeitung, June 19