

ELG brings an innovative recycling tradition to China

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The need to protect the environment and the earth's dwindling natural resources has made stainless steel one of the world's most recycled materials – even more than paper and glass.

Germany's ELG is at the forefront of recycling materials for the stainless steel industry. ELG is part of the international Haniel Group, one of the largest privately-owned companies in Germany with a tradition of more than 250 years in the steel industry.

ELG has the industry's most extensive networks in close proximity to its 4,000 suppliers and more than 50 customers worldwide. Stainless steel scrap is collected, analysed and fragmented in one of 37 ELG yards located in 17 countries in Europe, the United States, Asia and Australia.

"There are many recycling companies around the world but only few of them produce on an international scale like us. ELG has grown in the handling of stainless steel scrap from 600,000 tonnes in 1992 up to 1.6 million tonnes today, with an annual turnover exceeding US\$5 billion and around a thousand employees," said ELG chairman Norbert Späker.

Asia accounts for 34 per cent of ELG's exports. It has supplied scrap products to steel mills in Japan, South Korea, India, Thailand and China since 1999. ELG sees great potential in scrap processing in China and wants to become a high quality scrap recycler for the domestic stainless steel industry.



A freight ship is loaded with scrap metal. ELG sees great potential in scrap processing in China.

ELG has been serving China's biggest steel producers Baosteel, Lianzhong Iron & Steel (JISCO), Taiyuan Iron & Steel (TISCO) and Jiquan Iron and Steel (JISCO) through its Shanghai representative office established in 2001.

The company purchases different types of stainless steel scrap, ferro-alloys and special alloys which are professionally processed by ELG and sold as secondary raw materials like chrome-cobalt alloy, carbide metal, cobalt, nickel-copper, molybdenum, nickel alloy, nickel, niobium, tantalum, titanium, vanadium, tool steel and tungsten.

Stainless steel is largely composed of iron, 8 per cent nickel and 18 per cent chromium which give the metal its anti-rust and corrosion-resistant qualities. It is used for a host of commercial and industrial applications such as cookware, cutlery, hardware, surgical instruments, jewellery, industrial equipment, and as structural alloys in the aerospace, automotive, construction, energy and shipping sectors.

ELG handles a volume of 1.6 million tonnes of stainless steel scrap per year which contains approximately 130,000 tonnes of nickel units. "We are number four in the world in terms of nickel production," Mr Späker said. "Our scrap already contains the exact analysis of chrome, nickel and iron needed by the mills to produce stainless steel. So our process of recycling is more economically viable, energy-efficient and

reduces the need to mine nickel to make stainless steel."

Stainless steel preserves its basic properties and values at each stage of production and consumption. Recycling actually restores stainless steel to its original quality without any degradation.

"Stainless steel has a long service life and contains valuable raw materials which are 100 per cent recyclable," Mr Späker said. "Our specialised expertise and advanced technology recover and prepare the alloys for remelting."

Stainless steel production worldwide has grown rapidly in the past two centuries. Production was 10 million in 1990 and had reached around 30 million in 2007. The industry has been growing at an average of 5 to 8 per cent annually, thanks to demand from China which has evolved from being a net importer of stainless steel to the world's largest producer.

Growing demand from the mainland has pushed up global nickel and chrome prices. "By this year China will produce almost 3 million tonnes of stainless steel. The country is importing raw materials like nickel which is expensive and unsustainable. Even the price of chrome has gone up from US\$0.28 in 2001 to more than US\$1 in 2007. So China needs to secure raw materials for future production. We provide cheaper, high-quality alternatives," Mr Späker said. ELG is also seeking partners for future expansion in China.

Chinese shipyards build ultra-modern vessels for carrier

Ranked No 1 worldwide in the niche market of heavy-lift cargo ships, Germany's Beluga Shipping began building ultra-modern vessels in China in 1997. The company operates 54 multipurpose heavy lift project carriers that transport large modules often weighing more than 200 to 400 tonnes including power plant equipment, windmills and cement-coated pipes for multinationals such as Alstom, GE, Siemens and Vestas.

Beluga plans to increase its fleet to 75 ships by 2011 and is working in partnership with shipyards in Jiangzhou, Qingshan and Jiandong to construct next-generation vessels fitted with adjustable 'beach decks' and high-performance cranes that carry greater tonnage while consuming less fuel.

The recently launched MV Beluga SkySails is the first ship of its kind to use a revolutionary towing-kite propulsion system which uses offshore wind power to cut fuel consumption by 10 to 20 per cent and reduce emissions.

Beluga's locations in 11 strategic cities including Beijing, Shanghai and its Bremen headquarters have been key to the company's success since its establishment in 1995. "With such a big fleet it is necessary to have an extensive global network and localised markets," said Niels Stolberg, the charismatic founder and chief executive of Beluga who has a knack for inspiring people.

"I went to the Jiandong shipyard

and told the workers that in the next 10 years they would build at least 30 ships for Beluga which will make them very famous around the world. It's important to convince people in order to win their trust."

Mr Stolberg believes that reinvesting his company's profits to build new ships and train personnel are key factors for future growth: "Through motivation you raise productivity."

Beluga is the biggest apprentice shipping company in Germany. It designates six vessels with extra equipment for training as well as a whole fleet of special vessels for this purpose. It also works closely with the University of Applied Sciences of Bremen in designing a shipping and chartering course for potential employees of Beluga's chartering department. "It is important to cultivate a 'Beluga mentality' and to develop professionalism."

Beluga's state-of-the-art vessels serve the booming trade between Asia and Africa where Asian companies have been successfully installing power infrastructure. Its E3 Ice class ship equipped with the highest capability in ice breaking are ideal for the northwest passage to Japan as it shortens travel time by 35 per cent.

"Beluga invests in growing markets at an early stage. It is necessary to find partners worldwide and develop good relationships in order to have mutual success," Mr Stolberg said.

Loba remains on top of developments

Environmentally-safe products are gaining importance in China's construction sector. Germany's Loba has supplied the mainland environmentally friendly water-based solutions for surface treatment of hardwood floors to the Four Seasons Hotel in Shanghai, the Olympic 2008 Laoshan velodrome, Shanghai Luwan Gymnasium, and the Beijing University of Technology Gymnasium – the badminton and rhythmic gymnastics venue for the 2008 Olympics.

Loba has been a technology leader and pioneer since 1922. It introduced

high-quality products for the preservation of parquet and hardwood floors in Germany in 1925. It transformed the market with the breakthrough two-component water-based varnish. Loba promotes a widely diversified line of water-based floor-finishing products that suit a variety of wood species worldwide.

"We are fully-focused on bringing innovation to the market," managing director Michael Fischer said. "We give a complete package of premium primers and top finishes including treatment, care and maintenance of hardwood and cork floors."

Twenty per cent of Loba's employees work on developing cutting-edge solutions from Ditzingen near Stuttgart where new products undergo rigid abrasion, scratching and staining resistance tests.

Loba launched a revolutionary system which reduces the application period from three days to one day at this year's Domotex floor exhibition in Hannover and Shanghai.

Loba opened a representative office in Pudong and a bonded warehouse in Shanghai in 2005. It has been providing water-based finishes for cork tiles made

in Xian since 2001. The company has also been working with distribution partners solutions from Ditzingen near Stuttgart where new products undergo rigid abrasion, scratching and staining resistance tests.

"There are many property projects under construction in China, but renovation of old wood floors will be the market in the future," said China country manager Rahel Baumgärtner. The mainland is Loba's third biggest export market.



Michael Fischer, managing director



Niels Stolberg says it is necessary to find partners worldwide.

Dörken seeks China springboard into Asia

About six years since it made a breakthrough in Shanghai as the only approved source of fasteners for Volkswagen, Dörken sees the country as the takeoff point for its expansion in Asia.

"We are a specified market leader in the German car industry and this automatically means a good reference for us in Asia. We plan to expand in the north and south of China as the automotive industry demands," said Asia-Pacific head of business development, Hans-Jörg Minas.

For 25 years and with professional experience from four generations as a family business, Dörken has set the global industry benchmark in the production and configuration of extremely effective surface protection with its DELTA-MKS systems for the automotive, electrical, construction and aviation sectors.

"Automotive suppliers don't scrimp when it comes to quality, they all take the highest quality level and we are the market leader in this respect. We are the only company in the field that can guarantee high performance corrosion, microlayer protection and correct friction value of the coating for the car industry," Dörken general manager Gerhard Reussmann said.



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Hans-Jörg Minas
Asia-Pacific head of business development

The company dedicates itself to high quality innovations and environmentally-friendly chromium 6-free products. "Our coatings are highly technical. We combine corrosion protection with chemical resistance, colours and

processability. We have to make sure that each customer buys the right coating equipment and the right quality management systems," Dr Reussmann said.

Dörken enjoys 80 per cent of sales in the automotive industry and counts on car giants such as Volkswagen, FAW, Bosch, Audi, MIRA, Tata and BMW as trusted partners. It is optimistic about capturing a bigger chunk of the Asian region, with expected growth in turnover placed at 20 to 25 per cent in the next three to five years.

As part of its aggressive stance, plans are underway for Dörken to build a modern technology centre for simulation and testing of new products in Shanghai. It will serve as the landmark to train Asian coating companies to supply to American automotive industry standards.

To lessen product costs while maintaining optimum quality, Dörken also invests a significant amount to continuing research and development. Concrete proof of Dörken's veritable achievements and non-stop growth in Asia in recent years include the opening of a subsidiary in Shanghai in 2006 in addition to offices in India, Taiwan and South Korea. It also expanded operations in Japan last year.

German machining company Chiron-Werke 'seconds ahead'

No other global machining company has beaten Chiron-Werke in terms of fast component output – whether small, medium or large volume production for the automotive, surgical parts, aerospace, watch or jewellery industry.

"We like to be the fastest in any respect – fast service, fast engineering support and so forth. We put our clients in a situation where they are seconds ahead of their competitors," said the company's president Hans-Henning Winkler.

Since 1921, Chiron has established and expanded its market position in Europe, the United States, Asia and Australia. It has been a market leader for more than 49 years, producing standardised machines in Germany and shipping these to subsidiaries worldwide for customisation.

"The key to success is our speed. Our motto 'seconds ahead' refers to how we exchange tools in just 0.5 seconds. We sell the latest technology and turnkey

solutions," said sales director Gerhard Böhm.

Dr Winkler said: "Machining centres 'Made by Chiron' are the first choice in all metalworking trades for companies looking for high-quality machining. We are in a market niche, doing vertical CNC controlled machining centres only."

Next to Europe, Chiron considers China an increasingly significant market in Asia. It entered the mainland 15 years ago and established Chiron China in Beijing and Shanghai in 2005.

"Three-quarters of our business is in Europe and a quarter outside – that is the United States and Asia. In Asia, the Chinese market is of utmost importance," said Dr Winkler.

Part of the grand plan is to open offices in Dalian as well as to do customisation through Chiron China.

"The automotive industry makes up 50 per cent of Chiron's business and this is the No 1 sector in China. We are building on that," Mr Böhm said.



Hans-Henning Winkler says Chiron enjoys being the fastest.

