Drever International offers its customers the complete design of their treatment equipment. Each member of Drever's multidisciplinary team is an expert in his/her field. They study, conceive and develop cutting-edge technology, comprehensive knowledge of processes and a viable strategy for us to meet the increasing number of orders we are now able to look forward to 2011 with peace of mind, both in the design office and on the work sites.

One of Drever’s major technological successes in 2010 was the relaunch of production of stainless steel furnaces to make tubes for use in the nuclear industry. We are almost alone in this highly specialised niche market. On the R&D front we are continuing to develop vacuum galvanisation, as well as ultra rapid gas jets (we currently have 10 facilities up and running and one on order). Our key goal for 2011 and the coming years: to maintain our position as market leader. While we can be pleased with such an outstanding performance, we know that we cannot afford to slacken our efforts. We know that we must remain competitive in terms of prices and the quality of the service we deliver. As General Manager, I am determined to utilize all the resources within our small-scale structure, so that we can continue to offer the right mix of skills and flexibility. I think it is the only viable strategy for us to meet the increasing demands of our customers.

Our pricing policy is a reflection of our never-ending search for new ways to ensure our products offer the best value for money. As for the quality of our service, I am especially dedicated to ensuring my teams continually meet the highest standard of competency. Once again this year, we have invested in staff training in various areas. We have also been expanding our workforce in recent months, particularly in the areas of logistics, research and sites services. At the start of the year, Drever International employed more than 100 staff in Belgium and close to 150 worldwide. 2011 promises to be another outstanding year for Drever International! A number of projects will be carried out in places like Russia, India, Brazil and the USA, but we will continue to operate mainly in China, where the market offers attractive opportunities. I am convinced that China will continue to be an important market for many years to come. It is a country where the Drever International brand image is strong, and where we are expected to live up to very high standards. Thanks to the calibre of our teams and, especially, our many finished projects, we have managed to make a name for ourselves there. 2010 ended on a successful note, and 2011 has got off to an enthusiastic start. Allow me to thank each one of you, customers, suppliers and staff, for helping Drever International to keep its position as leader in the thermal sector.
Product

Radiant tubes

In the latest vertical furnaces built by Drever for operation with natural gas, the strip is heated up by double P type radiant tubes. The tubes are manufactured from 3 mm thick Inconel 601 alloy sheets.

To assess the design of the tubes, in particular to estimate their duration of life, Drever collaborates with GDTech, to provide all necessary finite elements calculations pertaining to the thermomechanical characteristics of the tube behavior. Particular care is paid to the modelling of the behavior of welds subject to creep.

These calculations are based on:

- experimental temperature distribution along radiant tube recorded during burner evaluation tests performed at the Faculty of Engineering—University of Mons (Faculté Polytechnique de Mons);
- Material Inconel 601 creep testing provided by Special Metals.

The radiant tube has been modelled, with Samcef Mecano finite elements code, by using volume elements for welds, shell elements for tubes and elbows.

A thermal conductivity model has been used to calculate the temperatures of the areas located between the zones where the temperature readings of the experiment have been set at boundary conditions.

The welds were modelled on base of information extracted from macroographies executed during the control of pre-sinter production.

This finite elements model allowed us to calculate equivalent stresses in the radiant tube zon and in the radiant tube welds.

Global temperature field

Outside Skin Stresses (MPa) - 30000 hours

Inside

New structure within SMS Siemag AG

Drever has joined the SMS Siemag AG as part of the SMS group in 2006. The SMS group - a group of global leaders in plant construction and mechanical engineering for the industrial processing of steel, aluminum and nonferrous metals - generated in 2009 a turnover of EUR 3.9 billion with more than 9,000 employees worldwide.

Business

Special Steel Strip Annealing Line at BSSB is in Production

A unique special steel strip annealing line was commissioned in November last year at Baosteel Special Steel Branch (BSSB). The line, jointly supplied by SMS Siemag, Drever and Siemens has many new features designed to suit the production of a great diversity of special and alloy steel.

The key part of this hot and cold strip annealing line is the thermal equipment. Drever proposed a furnace capable of dealing with the widest range of process temperatures. Specially configured cooling section allows cooling of both hot rolled and cold rolled strip at maximum efficiency and flatness. As the world leader in heat treating furnaces, Drever continues to extend its business area and develop customer oriented products.

BSSB is a branch company of Baosteel Group specialized in producing long products alloy. With the completion of the new coil production phase BSSB is able to supply market with some heat resistant alloy strips equivalent to Inconel and Monel, which totally relied on import in the past.

Supplying to Baosteel Group companies since 1980, Drever has also provided BSSB 's JV Baoyin Special Steel Co. with a 24m mesh belt alloy tube annealing line at the same time.

Customer

Ansteel Putian Cold Rolling Project: new contract signed in consortium with Drever International sa & DMT

On February 5th, 2010 Chinese major steel complex Ansteel Group has officially set up the wholly owned subsidiary Ansteel Putian Cold Rolling Plant in southern China’s Fujian Province. The move has reinforced the company’s consolidation strategy and further expanded its high quality strip production to coastal area as advocated by central government.

Mathematical Model upgrade at Arcelor Mittal Bremen covers process optimizations.

The Continuous Galvanizing Line No1 at ArcelorMittal Bremen has been in service for 18 years. (Bregal 1 has consistently delivered first grade quality strip) but ArcelorMittal decided to invest in a new generation Mathematical Model. Beside the classical objective of improved automation, better repeatability, and optimization of the process, the upgrade covers an additional cutting edge objective. While this all radiant tube furnace has been maintained and kept up to date over the years, with the new model Drever has proposed improved control techniques which have been implemented on many international plants. The mathematical model project at ArcelorMittal Bremen is a merger of Drever’s know how on process automation and new Mathematical Model technology implemented on recent Drever installations.
Drever International offers its customers the complete design of their thermal research and development department. Since 1966 and in collaboration with its long-time consortium partners, Drever intends to remain at the forefront. It has invested in a particularly successful research and development department. As world leader in industrial furnaces, Drever Engineering solutions are required by producers of high-quality steel used in many complex applications. As world leader in industrial furnaces, Drever intends to remain at the forefront. It has invested in a particularly successful research and development department. Since 1966 and in collaboration with its customers, the company has already put on the market many innovations, now considered as industry standards.

Drever International offers its customers the complete design of their thermal equipment. Working in this way ensures maximum quality. Construction is achieved in accordance with Drever International’s long-standing experience and together with its long-time consortium partners.

A presence throughout the world

Today, Drever International is a member of the SMS-Siemag AG Group, renowned for the design of integrated production lines. Its head office is located in Liège, Belgium and employs more than 100 people. Drever International can respond to customer demands all over the world by offering the benefits of long-standing engineering experience, cutting-edge technology, comprehensive knowledge of processes and a presence in several countries.

The Galvaniser’s Association Meeting was held in Huntsville, AL on October 24-27, 2010. The event included one and a half days of technical paper presentations as well as supplier exhibition. Nucor Steel, Decatur AL, hosted the event and conference attendees toured the plant’s continuous galvanizing line. Drever International participated in the event by presenting a paper describing the Drever furnace installed at Decatur and showcasing its products at the exhibition.

Invitations are available on request at the following address: henrotte@drever.be