In 1966 when Drever International was founded, all engineering documentation was developed by Drever Company (USA). There was an immediate need to translate drawings and to convert to metric units. A small drawing office was created for that purpose.

This drawing office quickly developed into an engineering department to the complete design of furnace, first for the European market but later on, in cooperation with European line builders, in the international market.

In 1985, Drever International was the first office within the Drever Group to install a CAD system. Over time, this CAD system completely replaced all the manual design drawings previously developed. Also implemented was CADMATIC 3D for plant project and piping design, BCAD for steel structure design, and finally with Solid Works for mechanical design.

In parallel, the mechanical and electrical engineering departments were organized by the manager, Mr. D. Lequet for mechanical design, and by Mr. V. Housen for electrical engineering, into a specialized teams system, centered around a home-made EDM system (MALIS).

Today, the complete production process of Drever is fully automatic, from the bill of materials on the drawings to the delivery on site, with connection to the accounting system. This efficient engineering structure allowed the creation of a huge data base of engineered furnaces where many parts can be quickly and easily used on a new project, reducing time and cost of engineering and minimizing errors.

This proficient organisation allowed Drever to achieve engineering up to three times the nominal capacity during the period of record business levels from 2006-2008. This performance was only possible because of easy access to a very large database and also through a very close co-operation with external engineering subcontractors all over the world.

I hope you enjoy reading our newsletter n°5 and hope this will give you some good reason to contact us for any question or project you could have.

J. Raick,
Managing Director

New order from Tianjin TISCO & TPCO Stainless Steel Co. Ltd. (TTSS) for a CAPL stainless steel strip.

TISCO & TPCO Stainless Steel Co. Ltd. in Tianjin, China, has recently awarded contract to Drever International for the supply of the furnace and cooling section of a continuous annealing and pickling line for cold rolled stainless strip (CAPL). Highly reputed for its stainless steel furnace technology for over half a century, Drever International once again proved its position as a strong market leader with many new developments.

Located in the free trade zone of Tianjin TEDA area, TTSS is a joint venture between TISCO and TPCO aiming at overseas markets. The new line will be built next to the existing combination hot & cold strip APL whose furnace has also been supplied by Drever in early phase. Similar to TISCO No.3 CAPL, but capable of producing all stainless strip series at high speed, the 400,000 t/y furnace and cooling section has many new features that ensure superior strip property and surface quality. The Drever Mathematic Model, which has been constantly developed in close collaboration with more than 30 customers worldwide, will enable optimized line control and achieve the highest productivity.

TISCO is the No.1 stainless steel producer in the world with an annual capacity of 3 million tons. Over the past 15 years, TISCO has invested enormously in the quality enhancement and new process development of its products. Equipped with most advanced equipment and modern technologies today, TISCO stainless steel is in the top level internationally. Although it has suffered from economic downturn, TISCO reached a record output of 2.48 million tons in 2009.

TPCO is the world’s largest seamless pipe producer with leading process technologies. Drever has long term relations with both companies and all together Drever has sold eight (8) stainless annealing furnaces to them since 1997.
Special Iron & Steel

Drever International is expanding its reference range for the Roller Pressure Quench. After MMK in 2007 and Yingkou in 2008, it is Jiangyin who has just opted for the system developed by Drever. The contract which concerns the design, installation and provision of a Roller Pressure Quench came into effect in February 2010. It is the fruit of close collaboration between Drever International and its subsidiary DMT, situated in Shanghai.

Drever's great reputation in the Chinese market, the guaranteed delivery times (the first plate will be produced 11 months after the contract came into effect) and the high technical performances of the Roller Pressure Quench are the main assets that prompted Jiangyin to work together with the Belgian company. Furthermore, Drever has been able to offer cutting-edge technologies at very competitive prices.

Technological advances

We will remember (see Drever-on-line n°2) that the Roller Pressure Quench allows the required cooling performances to be attained by using less energy than in conventional installations. Thanks to the installation's design, the cooling process adapts to the thickness of the plate and is standardised across its width.

Moreover, the Quench developed for Jiangyin makes use of several technological advances:
- The security system fitted, which engages if the metal sheet becomes too thick, will be completely electric (and no longer hydraulic), thus preventing any danger linked to oil leaks.
- The Quench assembly will be supplied by a low-pressure Take Over Point (TOP) of five and a half bars. The high-pressure TOP, source of high-energy consumption, is no longer necessary.
- The new investments and the latest research realised in collaboration with the Von Karman Institute, CRM and the University of Liège have allowed the performances of the Quench to be optimised. Drever International will continue with this development policy in order to further improve its equipment.

First contract with Jisco

Jiuguan Iron & Steel (Group) Co. LTD. (Jisco) has selected Drever for the design and installation of its new API. The geographical location, production capacity of the line and technical specifications required Drever to propose a high technology product, developed entirely on a customised basis.

The contract, signed in March 2010, is for the design and installation of an annealing and pickling line for the cold production of laminated steel strips. It will be manufactured in collaboration with Siemens (mechanical components), Siemens (electrical components) and CMI UVK (pickling). Drever International will be responsible for the design of the furnace. The API will have a production capacity of 500,000 tonnes/year, making the plant the largest of its type. Another non-standard feature of the unit: the skin pass incorporated into the line, will enable time savings and a better yield from the process.

Successful Start-Up of CAL and CGL at WISCO Cold Rolling Mill No. 3

On June 28th 2010, the first galvanized coil came out of CGL, the latest line in CRM 3 construction, symbolizing the completion of a brand new modernized automotive sheet plant in Wuhan Iron and Steel Co. (WISCO). Earlier this year on April 20th, another line with a Drever-supplied CAL annealing furnace was successfully put into operation only 11 months after construction started.

With the full start-up of CRM No.3, WISCO stands among the world-leading companies able to supply the market with top quality high-strength steel. It also brings WISCO's total yearly production of automotive-grade plate to a one-million ton milestone. Over 100 car parts in stainless steel produced by WISCO are now approved by global car manufacturers, such as Nissan, GM and Volkswagen. Since CRM No.2, Drever International has provided WISCO with all annealing furnaces integrated in six (6) lines.

The building of CRM No.3 has posed big challenges to the Drever site team. During the toughest construction time our supervisors worked under pressure day and night and overcame countless obstacles. Through close cooperation between WISCO, WISDR, MCC 19 and Drever, the goal was finally achieved and many new records set, such as a three and half day leak test and a seven-month construction of the CAL furnace. Drever site manager Mr. Faikata has been awarded by the municipal government of Wuhan as a model foreigner.

Looking forward to the great future of WISCO, Drever is committed to serving our customers with the newest technology and the most satisfactory services in new CRM No. 4, as well as in the new Fangchenggang Plant.
The Cadmatic/Piping team currently consists of seven engineers, working as project coordinator and subcontractor supervisor along with seven seniors draughtsmen. One of the largest sub-division of the drawing department, the piping section was elected to move into the new building. Extra space makes provision for future growth of the team.

Transparency and conviviality were the main factors taken into account for the planning of the new working place, with extensive use of glass panels and ergonomic furnitures. In order to save energy a complete building automation system was installed, regulating heating, air conditioning and lighting.

From left to right:
F. Malhage: Project coordinator
X. Moreno: Project coordinator
L. Maggio: Electrical cables 3D designer
A. Wernimont: Piping 3D designer
M. Trigallez: Piping 3D designer
P. Dimartino: Piping 3D designer
F. DeWorm: Piping 3D designer
E. Mertens: Piping 3D designer

Drever International, world leader in heat treatment of steel
Drever International is recognised by the largest steelworks of the world as an expert in designing and developing high efficiency heat treatment equipment. Each member of Drever’s multidisciplinary team is an expert in his/her field. They study, conceive and develop engineering solutions required by producers of high quality steel used in most 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 Liége, Belgium and employs 120 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.