The internal organization chart of Drever has been recently revised to consider a new distribution of responsibilities.

First of all, Mr. Serge Vanderheyden (vanderheyden@drever.be) who was responsible for developing business of new furnaces becomes Vice President Sales & Marketing. The mission of Mr. Vanderheyden is to improve the Drever approach of the furnace markets and to understand the needs and wishes of our customers. In his former job, Mr. Vanderheyden was in charge of the activities on Silicon Steel Lines, Plate Heat Treatment, CSP Tunnel Furnaces and Tubes Annealing Furnaces.

The activities are redistributed as follows: Mr. Pierre-Yves Halleux (halleux@drever.be) is now in charge of Silicon Steel Technology and Mr. Paul-Henri Picard (picard@drever.be) who is already responsible for Stainless Steel Technology takes the responsibility of the Plate Heat Treatment with Mr. Youzi Rosen (rosen@drever.be) and the Tubes Annealing Technology with Mr. Guy Raymond (raymond@drever.be).

With this organization, Drever reinforces its technical oriented strategy proposing in priority the most reliable and efficient solutions. The activities are redistributed as follows: Mr. Pierre-Yves Halleux (halleux@drever.be) is now in charge of Silicon Steel Technology and Mr. Paul-Henri Picard (picard@drever.be) who is already responsible for Stainless Steel Technology takes the responsibility of the Plate Heat Treatment with Mr. Youzi Rosen (rosen@drever.be) and the Tubes Annealing Technology with Mr. Guy Raymond (raymond@drever.be).

With this organization, Drever reinforces its technical oriented strategy proposing in priority the most reliable and efficient solutions.

A presence throughout the world

Today, Drever International is a member of the SMS Siemag AG Group, renowned for the design of integrated production plants. Its head office is located in Liège, Belgium and employs more than 1,700 people.

Drever International can respond to customers’ 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.

On December 2nd 2011, Guanghan Tiancheng Stainless Steel Products Co., Ltd. (TCSS) placed an order to Drever for the furnace and cooling section of their first Annealing and Pickling Line for cold rolled stainless steel strip.

TCSS is located in Guanghan Economic Development Zone in Western China’s Sichuan Province. The line will reach a production capacity of 200,000 t/y of high quality 28 Finish from 200s to 300s and 400s grades. Most of the local portion will be performed by Drever Metallurgical Technology Shanghai (DMT), the rest being managed by Drever International.
Grand Ceremony for the Start-Up of 600,000 t/y Annealing and Pickling Line Held at Zhenshi Group Easter Special Steel Co., Ltd.

The combined Hot and Cold Stainless Steel Annealing and Pickling Line has successfully started production in September 2011. The line has a designed annual capacity of 600,000 tons and is more dedicated to special steel products such as Duplex, heat-resistant and super stainless steel grades (Refer to DOL No.4). The construction involves renowned suppliers from both international and domestic like DMS, Drever, DSA, Guild, PPH and Antime.

After the ceremony which was held in Jiaxing on November 8th, we had an exclusive interview with Mr. Gu Pei Song, the Technical Leader of the project and here are the discussions.

What is your feeling after having reached the goal to start the production?

To manage such a big project where most of the equipments are coming from the local market is not an easy job. It is really a huge work to coordinate all parties and have all the equipments erected and commissioned on time. It was tough but now we can see the result of all parties’ efforts. I would like to express my gratitude to all the suppliers involved in this project.

What about the product quality?

As a privately owned stainless producer, the start up of this line has a big influence in China. Immediately after the coming out of the first coil, I got the congratulations from many key players on the Chinese steel market. At the beginning of the production, we reached the quality level of the top Chinese producers and we even increased our prices on the market by 300CNY/t. This is really a miracle to reach such a quality level after only a few weeks of production. There are still some tunings to be done but we are gradually stepping up to higher grades and we are already able to process 2205 material which is produced only by very few Chinese producers.

How do you explain this success?

From the beginning of the project, our management realized the importance of the technology and the use of top quality talents. We also invested a lot in research and development to be able to produce these special grades. After this success, I still believe that Drever was the best choice and is the best furnace supplier. Even with the young operators team, we reached the quality and the productivity of the best steel producers in China. It is really out of my expectation that everything started so smoothly.

What do you think about the ceramic fiber furnace insulation?

Fiber insulation proves it is indeed an ideal solution for APL furnace. I had experience before with many brick wall furnaces and operating with fiber lining is quite different. It has the benefits of fast responding and better flexibility. Besides the erection time was greatly reduced.

Fig. 1: Horizontal furnace in an annealing and coating line for NGO electrical sheet

Fig. 2: The strip is cooled down in a controlled manner in the cooling tube section

Thermal process engineering for electrical steel strip.

ArcelorMittal orders Drever furnace for annealing and coating line.

With a new annealing and coating line, ArcelorMittal St-Chély d’Apcher, France, is drastically increasing its production capacity of high-grade non-grain-oriented electrical steel strip (NGO). The order to supply the horizontal furnaces for the new line was awarded to Drever International on 13 May 2011. The line is scheduled to be commissioned already in December 2012.

Non-Grain-Oriented Electrical Steel Strip

Due to its electrical and magnetic properties, non-grain-oriented electrical steel strip (also referred to as silicon steel strip) is predominantly used in electrical engineering for the manufacture of cores for electrical machines. Since the orientation of the ferrite grains (texture) is randomly distributed, the material has largely isotropic mechanical and magnetic properties and is used chiefly in rotatory machines with alternating field orientation. The material produced on the new line can also be used in hybrid or full electrical vehicles.

Annealing and Coating Line

In the annealing and coating line, the internal microstructure of the 0.18 to 1.5 mm thick strip is adjusted during the annealing process. The material, of a width between 800 and 1,350 mm, is then provided with an insulating layer depending on requirements. The new line will be the third annealing and coating line in the ArcelorMittal works at St-Chély d’Apcher.

Horizontal Annealing Furnace

In the horizontal annealing furnace the strip is heated > 1000°C, with the thermal energy being introduced by means of inductors and electrical heating elements. The furnace atmosphere comprises a nitrogen-hydrogen mix. This is a new ACL furnace that can be operated with a very high hydrogen content. This reducing atmosphere enables a particularly oxide-free and clean strip surface to be achieved, which is important for a high-quality material grade.

Furthermore, a careful and slow cooling of the material is important for the microstructure. For this reason, the strip is first cooled down at very accurate cooling rate in the slow-cooling section and then in the quick-cooling section. A particular feature is the heat-recovery system in the cooling section, which makes it possible to utilize the heat at other locations in the works. The remaining heat, though, is also intended for other purposes, for example for heating the local swimming pool by means of distance heating.

Inauguration of a Pilot Plant for a Roll Regenerative Furnace: an achievement of a successful collaboration between Drever and IVK.

Zhangjiagang Yangzi River Cold Rolling Co., Ltd., a newly founded subsidiary of Jiangsu Shagang Group has officially launched 1420 mm cold rolling project on December 8th, 2011, symbolizing the implementation of the group’s developing strategy, to optimize products structure, further extend business area and emphasize on value added cold rolled strip production.

Largest Privately Owned Steel Producer Goes for Value Added Cold Rolled Products.

Headquartered in Yangtze River delta’s Zhangjiagang City Shagang Group is the largest private steel enterprise in China. Once a small steel work, founded in 1975 Shagang is now among top 5 gigantic Chinese steel complexes with annual output of 31 million tons. Their products include heavy plate, hot rolled coil, bar, high speed wire & rod, stainless hot and cold rolled strips. The techno-economic level of Shagang Group remains at the highest in the industry. In 2006 Drever International built a large production stainless HAPL in its joint-venture ZPS5.

The new 2.6 million t/y cold rolling plant will cover mostly valued added products on the market such as tin-plate, cold rolled coil, galvanized and galvalumned strip as well as NGO silicon steel sheet. The total investment is about 4.3 billion RMB and the project construction expects to complete in 2 years. On October 29th, a plain signing ceremony was held between Shagang Group and members of SMS Siemag Group for the three major processing lines of the cold rolling mill.