



Change Goldroc prints using Bobst rotary gravure presses

China's tobacco market rolling with the times

Kevin Liu visited Changde Goldroc Co., Ltd in China to learn more about how the country's tobacco package printing industry is benefitting by transitioning from sheet-fed to roll-to-roll production.

In late June, Swiss manufacturer Pantec GS Systems and Beijing Spande Co., Ltd, its distributor in China, held an Open Day at Chinese tobacco package printing company Changde Goldroc Co., Ltd, to showcase roll-to-roll hot foiling and the potential this offers the country's tobacco packaging producers.

Changde Goldroc was founded in 1995 as a small company with only one sheet-fed offset press, and in less than two decades has developed into a large tobacco packaging printing operation running four Bobst rotary gravure printing presses with annual sales of more than 2 billion RMB (around US\$32.6 million).

Since 2003, the tobacco industry in China has experienced a significant adjustment under government intervention. As a result, many small-scale tobacco factories closed and several large tobacco groups were formed with new big brands.

One example is Furongwang, a tobacco brand of China Tobacco Hunan Industrial Corporation. In 2011, the sales of this brand were over 1.1 million boxes, which means a big volume of packaging and printing, as well as big challenges for post-printing processes, especially hot foil stamping.

Cai Huabiao, deputy general manager of Changde Goldroc, says that along with the consolidation of the country's tobacco industry and creation of new brands, the tobacco packaging printing industry is being asked to deliver higher production volumes.

It was in this climate that Changde Goldroc bought four e-pack 850 roll-fed foil stamping units from Pantec GS Systems. This caused a stir in the market when the sale of the four units, featuring the Cheetah rotary hot stamping process, was confirmed in autumn 2012 as a means for Changde Goldroc to make efficiency gains.

It was these units that formed the

basis of the Changde Goldroc Open Day in June, and attracted more than 200 guests from the Chinese tobacco packaging industry and label printing industry.

The on-site demonstration highlighted the foil stamping speed of the systems up to 120m/min, which equates to more than 14,000sph, while the speed of the flatbed equipment used previously by Changde Goldroc was 5,000sph.

Huabiao says: 'We've been updating our printing equipment and post-printing equipment to meet the increased production demands. The e-pack roll-fed stamping machines can fulfill our requirements on speed and precision as well as our future development.'

For a roll-to-roll high-speed stamping machine, companies want to know that overlay accuracy can be guaranteed at such speeds.

Peter Frei, chief executive officer of Pantec GS Systems, explains that the Cheetah hot stamping process



Changde Goldroc has installed four e-pack 850 units

actually delivers higher overprinting accuracy than sheet-fed technology. The tolerance of a Cheetah rotary roll-to-roll machine is +/- 0.10mm.

Frei says: 'We have been aware of the demand on high precision and speed foil stamping machines from the Chinese tobacco packaging and printing industry. The Cheetah roll-fed foil stamping technology is able to fulfill this demand.'

Changde Goldroc is not the only Chinese tobacco packaging printer to have made a recent investment in roll-to-roll production, with Yunnan Qiaotong Package Printing Co., Ltd adding two units to its printing process.

This investment was made, says Frei, also in pursuit of work efficiency gains and to improve overprinting precision.

'Changde Goldroc is very satisfied with the significantly higher performance of Cheetah in our e-pack reel-to-reel lines,' says Frei. 'The company's enthusiasm has persuaded other firms following a similar strategy to substitute sheet-fed systems by web-fed. We believe other similar companies will follow this road in the future.'

Cost-saving

For Changde Goldroc, the conversion from sheet-fed to roll-to-roll technology has not only increased its production capacity, but brought about significant cost savings. Steven Ye, the representative of Pantec in China, says seamless integration between the roll-to-roll gravure printing machine, die-cutting unit and hot foil stamping equipment is achieved, and saves material wastage at the gripper edge compared to traditional sheet-fed printing.

A servo-driven foil saver results in further waste reduction during roll changes. Changde Goldroc has estimated that this technology saves as much as RMB 10 million in material losses.

In the case of Changde Goldroc, even though the Cheetah process was a more expensive initial outlay than a sheet-fed stamping machine, the final cost is lower when the economic benefits are factored in.

Other markets

The Cheetah rotary technology can be used both off-line and in-line, and besides the tobacco packaging and printing industry, the rotary hot foil stamping machine presents opportunities in other packaging

markets and applications.

Frei highlights confectionery packaging in Europe, which is similar in nature to Chinese tobacco packaging in that it requires large volumes and high quality printing and converting. This represents, Frei says, a huge potential market for rotary stamping technology.

At the same time, the Pantec Rhino system, targeted at the label printing market, has a range of applications in narrow web rotary hot stamping.

'In France and Australia, several cases show how this technology is used for wine labels. We believe the Chinese label printing industry will join us.'

Frei concludes: 'The amount of hot foil in chocolate packaging, combined with the volumes of these products, shows a similar potential to tobacco packages in China.'

'For visionary people who care about the strategy of a company, it's definitely worth watching what's going in China and start thinking about production philosophies in the future.'



The Chinese tobacco packaging and label printing industries came out in numbers to find out about roll-to-roll hot foil stamping from Changde Goldroc