

# Just in time for SMARTTECH

SMARTTECH – the name may not ring a bell for many, including this writer. But most people would have heard of the Danyang Plant in China, owned by the Dare Wood Based Panel Group. The Danyang Plant is the first factory to adopt SMARTTECH's technologies in the Chinese market.

By Wendy Wei

**A**s a leading manufacturer of MDF (medium density fibreboard), Dare Wood Based Panel Group has always been ahead of the pack when it comes to procuring high-end technology and equipment. For the past 15 years, its MDF production line has witnessed many memorable moments – from the installation of Siempelkamp's forming and press line, to Andritz's refiner and IMAL's glue mixer – bringing its production line's designated annual capacity to 200,000 cubic metres. By continuing to cooperate with many international first-line equipment brands, Dare's actual annual capacity now reaches more than 300,000 cubic metres.

For someone who has visited many board manufacturers, this writer thinks that it is not hard to see Dare as an industry benchmark, one that has its every move closely watched by its competitors.

Wax is one of the main material used in wood-based panel production, in order to achieve good waterproof performance, the amount of wax added should be taken into consideration during production to ensure that the wax can be evenly absorbed and distributed onto the fibre surface, so that the finished board complies with the waterproof specifications. Dare's Danyang Plant, for example, consumes over RMB 10 million worth of wax every year, a substantial amount of spending.

In 2017, Dare was first introduced

to SmartWAX<sup>Sys</sup>, a new and unique innovation created by SMARTTECH, and was deeply fascinated by this technology from Israel. SMARTTECH's The Industry Pivot (TIP) provides game-changing solutions that shift the way traditional manufacturing works. SMARTTECH's established innovation methodology overcomes technological challenges and focuses on "making the impossible possible".

The unique SmartWAX<sup>Sys</sup> technology is the first innovative technology which can treat wax and turn it into tiny droplets, reducing the total amount of wax used in wax

suspension per unit, while improving wax distribution significantly. This suspension system can also work with any type of wax such as slack, wax, tallow; replace both solid or slack wax; replace emulsion operations so that there is no need to add chemicals or transport water.

In the same year, Dare started collaborating with SMARTTECH and received a SmartWAX<sup>Sys</sup> that is customised to the capacity specifications of Dare in the first half of the following year. Without needing a large-scale shutdown, it took only a few hours for the SMARTTECH technicians to plan and connect the new



Within a few hours, SMARTTECH's wax suspension system can be installed between the existing wax system and the refiner in the plant. It does not require any additional labour to operate.

system to the manufacturing line, before installing the SmartWAX<sup>Sys</sup> successfully. Since its inception, SmartWAX<sup>Sys</sup> has brought 37 per cent savings to Dare Danyang Plant's wax consumption, just as planned. Subsequently, SMARTECH will assist Dare to further reduce production costs by introducing additional smart technological solutions.

### A PROFESSIONAL, MULTI-DISCIPLINARY TEAM OF EXPERTS

Mr Hansjorg Prettnner, Director of SMARTECH APAC & Europe, has been in the wood-based panels industry for more than 10 years. Prettnner has known Dare for a long time, having had a business relationship with Dare while he was still holding a key position in an equipment business. On why he joined SMARTECH, Prettnner's eyes lit up. "This team is born to create new ideas. Being here expands my mind, I am curious about everything."

The number of employees in the company has been doubling yearly over the past four years as SmartWax systems are spread globally and SMARTECH is expanding with the addition of new technologies. Members of SMARTECH teams are experts in an array of technological areas so SMARTECH can deliver exceptional solutions for cost reduction in the manufacturing sector.

"SMARTECH creates teams and in each of them, interpersonal relationships are simpler, everyone can focus and work hard towards the same goal."

Throughout the installation and initial operation of the SmartWAX<sup>Sys</sup> at Dare Danyang Plant, SMARTECH supported the operation and escorted the plant team throughout the implementation and handover of the system as much as required.

To Prettnner, such commitment is a given, and he was matter-of-factly about it. What mattered more was that



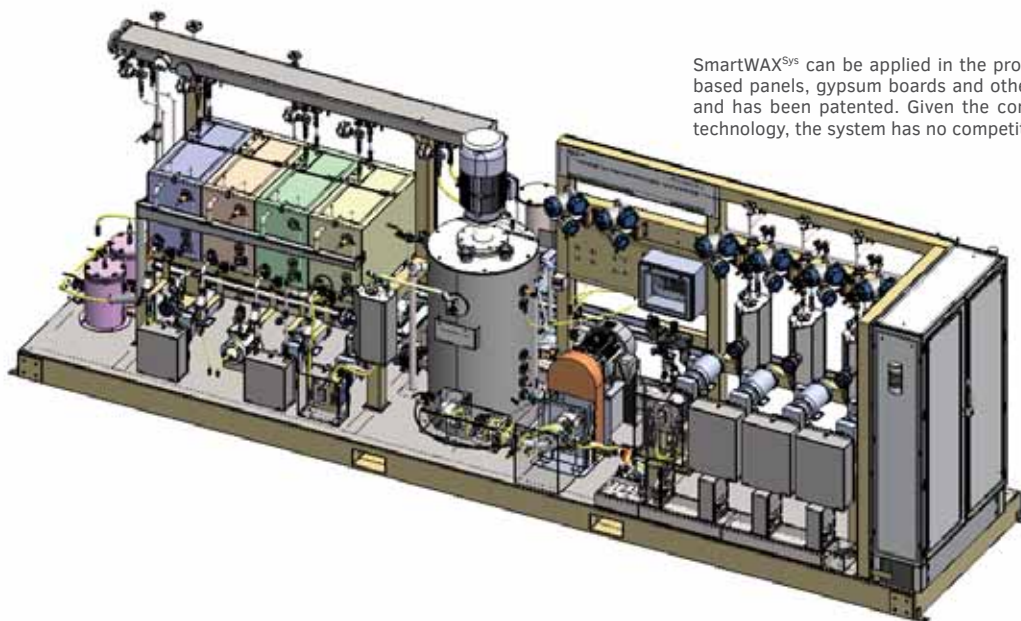
Mr Hansjorg Prettnner, Director of SMARTECH APAC & Europe (right) and their liaison Mr Yang Jun in China



Dare and Smartech-TIP signing ceremony for the project of strategic cooperation in December 2017



The operation of SmartWAX<sup>Sys</sup> can be controlled online and monitored in real time



SmartWAX<sup>Sys</sup> can be applied in the production of all wood-based panels, gypsum boards and other building materials and has been patented. Given the complexity of the core technology, the system has no competitors in the industry.

the wood-based panel manufacturing industry has become fiercely competitive – material costs, including wax and processing fees, keep surging especially with the increasingly strict domestic environmental control – and controlling costs is now a major pain point. SMARTECH is simply providing solutions to tackle the pain point head-on and smoothen the path for the plant to increase its profits.

"It always depends on how far they want to go and what they want to try. We are always open to challenges," said Prettner.

### LEADING CHANGE IN THE INDUSTRY

While SMARTECH's wax suspension system is still relatively new to the Chinese wood-based panel market, it is establishing a strong presence in the Northern American and Canadian market since its entrance five years ago.

The European region that Prettner is also in charge of is now producing a new system for an Egger plant, which is well known for manufacturing high-end particleboard.

In Europe, environmental protection is no longer as simple as dealing

with pollution. It is moving towards sustainable manufacturing which seeks to minimise or eliminate production wastes through improving the efficiency of existing practices or adopting new technologies, in order to reduce overall carbon emissions. It is no coincidence that the approach of SMARTECH is in line with this paradigm shift.

At present, SMARTECH is developing new technologies, on top of developing wax suspension systems for small production lines. It will continue to offer transformative solutions to other parts of

the production lines, deepen its reach into the industry and open up related markets.

"In 2019, we plan to put more systems in China and we are talking to several plants. In fact, many wood-based panels factories in Europe, Turkey and Southeast Asia have sent us enquiries as our goal is to save costs for our customers," Prettner said.

The Dare plant is SMARTECH's first step towards entering the Chinese market, and a bigger strategic plan awaits on its chessboard. Who knows, SmartWAX<sup>Sys</sup> may just transform the industry? ©



Leading companies like Dare are seeking new solutions in the face of increasingly strong competition in the market