

NEWS FROM HAITIAN INTERNATIONAL
ADVANTAGE

Plastics News from Haitian International | Issue 24



COMMUNICATION. INNOVATION. EFFICIENCY.
TECHNOLOGY TO THE POINT



NEW:
1000 mm/sec



THE NEW MA/K SERIES
EFFICIENT AND ULTRA HIGH SPEED
INJECTION MOLDING

SMART TECHNOLOGY & FLEXIBLE SOLUTIONS.
APPLIED FOR FUTURE LIFE.

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LATEST NEWS

智能装备产业基地启动仪式

2021年3月18日 佛山·顺德



Haitian Group starts construction of Smart Factory in South China

Haitian celebrates the official ground-breaking in Shunde Country, near Foshan City in Guangdong Province, for the construction of a Smart Factory for advanced component and machinery manufacturing.



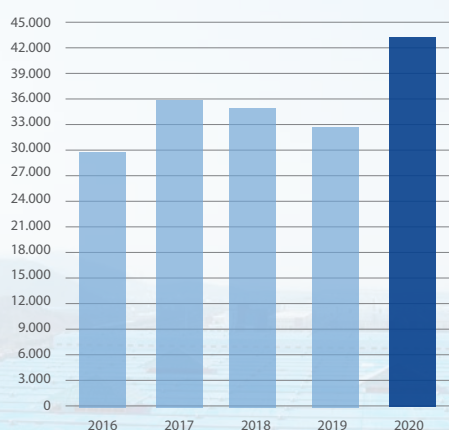
The participants of the groundbreaking ceremony were high-ranking, first of all Mr. He Rong, Advisor of the Ministry of Industry and Information Technology of Guangdong Province and Mr. Zhu Wei, Mayor of the 7-million-metropolis Foshan as well as well-known representatives of the local and regional party committees. For Haitian, Chairman Zhang Jingzhang of Haitian Group, President Zhang Jianming and President Zhang Jianfeng of Haitian Plastics Machinery and Vice President Zhang Bin of Haitian Group, as well as well-known representatives of the plastics industry were present. Together, they witnessed the historic moment that will take future cooperation between Haitian and the emerging region to a new level.

For Haitian, the ceremony marks the beginning of a new chapter in the smart manufacturing industry; for Shunde District, it is seen as a pioneering step to



continued on the next page >

Sold injection molding machines



COMPANY REPORT

The entire global economy was severely shaken by the outbreak of the Covid 19 virus and its rapid spread into a rampant worldwide pandemic. Nearly every country and all major economies in the world are still reeling from the effects today.

In 2020, the Covid 19 virus outbreak and its rapid spread into a pandemic severely shook the entire global economy. Many countries adopted tough, sometimes rigorous, measures to deal with the acute situation and keep epidemiological risks at bay. The ongoing development and release of new vaccines against the virus is fuelling hopes worldwide of a return to normality in the near future. Nevertheless, the constant resurgence of the epidemic is dampening expectations for economic recovery.

China's economy benefited from strict preventive and control measures, and was soon able to report positive growth and return to normal economic operations. Thanks to this rapid recovery in the domestic economic situation, the entire Group experienced strong, growing demand.

As a result, Haitian International posted a new sales record for the completed 2020 fiscal year, with well over 43,000 machines sold. This represents total sales of RMB 11,800.1 million and a year-on-year increase in sales of 20.3%.

Export increase due to global network

Due to the profound impact of the pandemic, the global economy has been slow to recover. And even though sales in some overseas markets were severely affected, Haitian recorded an increase in export sales thanks to the continuous expansion of its strong global network. Sales thereby increased by 2.1% to RMB 3,518.5 million despite the pandemic.

Due to the strong demand for mass medical products and packaging in the first half of the year, there was a new sales record of Haitian Mars Series with more than 37,000 machines sold. As a result, the 2020 annual sales of the best-selling Series increased by 28.6% year-on-year to RMB 8,214.5 million. The household goods and automotive markets also saw growth in 2020, despite Corona. This mainly benefited the electric Zhafir Series and the Haitian Jupiter Series with two-platen technology. Here, sales increased by 6.8% to RMB 1,439.9 million and by 3.2% to RMB 1,303.0 million, respectively.



Outlook and future strategy

Haitian International formulated a general overview of its five-year plan strategy at the beginning of 2021. The company's key objectives include strengthening its global market presence, expanding market share in various industries, and improving competitiveness in high-end markets. Of particular importance in this context is the digitalization of Haitian's plants, especially in terms of product development, technology development, digital system integration and process control.

Apart from this, Haitian will continue to focus on standardized production of our core components and reliably meet individual customer requirements in their various market segments. With intelligent technologies and flexible system solutions. Fit for the future and to the point.



wards the realization of high-end industrial projects as part of the region's urban and economic development. The ceremony symbolizes mutual trust and benefit across times and regions to form a win-win cooperation. The local environment will be fully involved in the company's upstream and downstream value chain, helping to root Haitian in southern China. Going forward, Haitian will work with the local manufacturing industry and regional governments to share urban development opportunities, promote the modernization and transformation of the manufacturing industry, and create new opportunities in the field of "digital intelligence."

With the foundation stone in South China, more momentum will come to Haitian's future development, and will open up new fields in the area of high-end intelligent machining. The new high-end industrial facility is not only an important strategic step in Haitian's 14th Five-Year Plan but will also act as the second pillar of the company's "Double Center" strategy. A second, autonomous headquarters within China that will completely supply the South China market.

With a total investment for the entire industrial park of nearly 10 billion RMB, the first phase of construction will mainly be for the production and manufacturing of intelligent injection molding machines on an area of around 300,000 square meters. Later, they will be complemented by CNC machine tools, robotics and automation and intelligent manufacturing systems to form an ecological and intelligent R&D and manufacturing park of Haitian. Mr. Zhang Jianming, President of Haitian Group, said in his speech, "With intelligent technologies and digital platforms as the basis, and through mindful, proactive management of the flexible production line, we will build this plant into a model of intelligent manufacturing."



3rd GENERATION TECHNOLOGY

Productivity and flexibility are still the key factors in plastics processing. Injection molding machines from Haitian and Zhafir take them to a new level. With optimized and newly formed machine technologies "to the point", they increase production efficiency, reduce resource consumption, increase application diversity and, at the bottom line, always pursue the same goal: the best possible utilization of all production capacities - for maximum success.



SMART TECHNOLOGY



Whether servo-hydraulic, electric-hybrid or fully electric: digital networking sets the pace in smart manufacturing. 3rd generation machines combine sophisticated hardware components with intelligent system technologies. Including open platform and extremely fast learning software. "Motion Plus" is the bundling of established and new developments around intelligent motion control. This opens up numerous possibilities for the user to use modern manufacturing systems even more dynamically. Performance meets the future.



Outlook 2021

Our future focus is on the standardization of machine components to further increase efficiency, especially in the optimization of technologies as well as smart manufacturing.

We will continue to improve manufacturing processes and production capabilities in terms of flexibility and intelligence. Through internal planning and control along the entire process chain, annually investments

of around 10 million RMB in state-of-the-art plant and process technologies, we will permanently optimize and reduce the environmental impact of our solutions. Within the entire Haitian Group we will continue to work hard to grow and develop successfully together with customers, employees and business partners around the globe.



FLEXIBLE SOLUTIONS

Smart technology solutions are always a few steps ahead of current demands and options, embodying readiness in all directions. Haitian and Zhafir solutions feature open OPC-UA standards (system architecture, communication, data transfer) and support the integration of pinpoint technology and system solutions as needed. "Connectivity Plus" enables Smart Manufacturing via flexible integration of automation, MES, interantion in real time and more.



Visit us
AT BOOTH
12D11



APPLIED TO FUTURE LIFE

For a world worth living in in the future, new, long-term viable and sustainable solutions will be required. Applications and the way of how we approach manufacturing will change. Whatever the future may demand, our application technologies will be prepared - with flexible solutions, high productivity, great

energy efficiency and digital freedom in process design. All while continuously having an eye on costs. Current core objectives of our environmental management are reductions in material consumption, reduction of CO2 emissions, avoidance of pollutants in production and the worldwide implementation of our own water treatment plants.





SPEED VANTAGE



GREEN VANTAGE

ULTRA THINWALL PARTS

Haitian Mars K Series

The trend towards ever thinner-walled packaging materials is increasing, especially the demand for even more efficient and material saving solutions. Haitian Plastics Machinery introduces the servo-hydraulic ultra high speed "MA/K" with injection speed of up to 1,000 mm/s.

Based on the servo-hydraulic world bestseller Mars Series, the MA/K offers excellent price-performance ratio and proven product quality. With high speed injection the MA/K masters extremely thin walled products, especially for high-cavity & thin-walled packaging solutions.

Machine type MA5500K/1300

Screw 65 mm
 Application field Thin-wall parts
 Application Medical container
 Cavities 4
 Part weight 48 g
 Material PP
 Cycle time 8.2 s
 Specials Ultra high injection speed

ULTRA HIGH INJECTION SPEED

Single cylinder, built-in accumulator, ultra-high injection speed up to 1,000 mm/s

INDEPENDENT DOSING:

Independent electric dosing to improve accuracy and save energy

CUSTOMIZED PLASTICIZING COMPONENTS:

Dedicated and highly efficient plasticizing components

REDESIGNED CLAMPING COMPONENTS:

Accurate control and extremely short dry cycles, improved durability of clamping unit

HIGH PERFORMANCE DRIVE:

Innovative drive technology to achieve high overload capacity, response time control within 18ms



PACKAGING



MEDICAL

LIVE PERFORMANCE:
 A MA5500/K produces a medical container made of PP.


ZHAFIR
 PLASTICS MACHINERY


MEDICAL

Zhafir Venus III Series

The all-electric Venus Series combines system solutions for almost all medical application areas, from high-tech to mass-produced items. Through cleanliness, documentation and precision, it not only meets the industry's high production standards and strict health regulations, Zhafirs turnkey cleanroom solutions guarantee manufacturers a fast time to market.

- Production and product quality well suited for medical products
- Anti-static painting and clamping structure to ensure cleanliness
- Higher production efficiency for high-cavity molds
- Closed production space, machine layout according to medical industry standards
- Production management & information for traceability of production data and quality of medical products

Machine type VE1500III-210h

Screw 32 mm
 Application field Medical
 Application Pipette tips
 Cavities 32
 Part weight 0.33 g
 Material PP
 Cycle time 8 s
 Specials High cavities



LIVE PERFORMANCE:
 A VE1500III medical
 produces pipette tips
 made of PP.



MULTI COMPONENTS

Zhafir Zeres Multi Series

Multi-component solution with dual injection units for outstanding precision. Due to the modular machine concept and its high compatibility, the Zeres WM demonstrates enormous flexibility when integrated into automated up- and downstream production processes. On top of that it offers all the advantages of electric injection. Multi solution - multi benefits.

- Electrical injection units with precision up to ± 0.01 mm
- Modular flexibility enables a variety of injection unit layouts and combinations
- Servo-driven rotary table, precise & fast response, accurate positioning
- Flexible and open integration, compatible with various universal interfaces
- Large application diversity and possibilities, for example for LSR and other material mixtures

Machine type ZE2300WM-300/160

Screw 36 mm/28 mm
 Application field Multi
 Application Cup
 Cavities 2
 Part weight 23 g+6 g
 Material LSR
 Cycle time 60 s
 Specials LSR 2K



CONSUMER GOODS

LIVE PERFORMANCE:
 A ZE2300WM produces
 a cup made of LSR.



Photo / Qizhi Precision Manufacturing Factory

Chenghai toys, requires high “quality” and “precision intelligence”

Interview with Shantou Big Tree Toys Co., Ltd.

Shantou Big Tree Toys Co., (hereafter referred to as Big Tree) was established in 2004. Their dedication to toy export trade, R&D, manufacturing, brand licensing and other trade business, lead them to more than 6,000 customers, products sold to 100 countries and regions in the world and a total annual sales of \$100 million.

While many assumed that Big Tree would rely on their market position and status quo and strictly pursue the toy trade business, Big Tree stepped out of their comfort zone and established Open Mind Co., Ltd. Precision Manufacturing Company to advance in the field of toy precision manufacturing.



“Global toys industry relies on China, Chinese toys is associated with Guangdong, and Guangdong toys represented by Chenghai.” Chenghai offers a broad variety of toys with good quality at low prices, which is well appreciated by domestic and foreign consumers. However, Chenghai, known as “China’s toy capital”, faced the issue that products are difficult to extend to the high-end market.

How will Chenghai toys address this issue in the future? With this question, we visited the leader of the toy industry in Chenghai - Big Tree Toys Co.

Haitian International: In the past, Big Tree was mainly focused on trade business. What drove you to establish the “Open Mind” physical intelligent factory?

Lin Wei: In the process of customer service, we realized that large international customers rarely produce their high-end toys in Chenghai but choose the Pearl River Delta or Hong Kong. Because of Chenghai’s little



Photo / Qizhi Intelligent Factory Solution



"Our fully automated and modern precision injection molding line would not have been possible without Haitian's holistic service and technical support".

Photo / Lin Wei, Chairman of Big Tree Toys

knowledge in precision manufacturing, the production process cannot reach the high-level requirements. Toy enterprises need to make changes in order to adapt to the high-end market.

After discovering the problem, Big Tree made up his mind to invest in the "Qizhi Precision Manufacturing" factory. We invested 200 million RMB in the first phase, purchasing 60 Zhafir precision electric injection molding machines as well as Haitian Smart Solutions intelligent material supply, automation products and other auxiliary equipment. In terms of mold manufacturing, we purchased top precision mold processing equipment and introduced professional R&D and management teams. At present, the equipment configuration of the factory can be said to be one of the highest-end factories among the toy processing factories in Chenghai, and we are determined to build up an advanced precision injection molding factory for the toy brands.

Haitian International: What kinds of toys does Qizhi Precision Manufacturing mainly produce?

Lin Wei: For now we focus on high-end play bricks. They are amongst the category that need precise injection molding technology. The introduction of Zhafir's electric injection molding machines enables high injection precision and repeatability, good stability and are very energy-efficient on top of that. The demands in production of play bricks such as flexibility, durability and dimensional accuracy can be all achieved and elevated Chenghai play brick industry to an international top level.

Haitian International: What is your initial reason for choosing Zhafir?

Lin Wei: Firstly, Haitian is a national brand in China, and we want to have a strong cooperation with Chinese intelligent manufacturing. Second, as the industry leader, Haitian provides a strong service network. Big tree from basically nothing to having a fully automated modern precision injection molding line, cannot be achieved without Haitian's wholistic service and technical support. As a high-end brand of Haitian International, Zhafir Plastics Machinery has many years of technical experience and achievements, making it one of the global leaders in sales. We believe that Zhafir's equipment is well developed, and its service is excellent, which is why it has won the recognition of so many customers. Thirdly, when I visited Zhafir, I witnessed the dedicated work ethics of the Zhafir staff, and I believe that we will get twice the result with half the effort when we work with such a team.





Photo / Workshop

The new MAIII Technology enhances precision molding of small home appliances

Since its introduction in 2006, Haitian's MA Series has sold more than 300,000 times, which makes it the best-selling servo-hydraulic energy-saving injection molding machine in the world and the main model of Haitian International.

With the 3. Generation Technology the new Mars Series combines various innovations in the field of hardware and software, for example the new optimized high-drive servo-hydraulic power system combined with intelligent motion control technology to enable full closed-loop control of the injection process, improving injection accuracy and making the machine even more efficient.

Xinzhihong Electric Co., Ltd.

Due to the remarkable energy-saving efficiency and stable characteristics of the MAIII Series, as well as the greatly improved intelligence of the machine, it has been widely appreciated by customers. In particular, it has shown excellent performance in the production of small home appliance parts. Xinzhihong, a manufacturer of small home appliances, is a loyal user of Haitian MAIII.

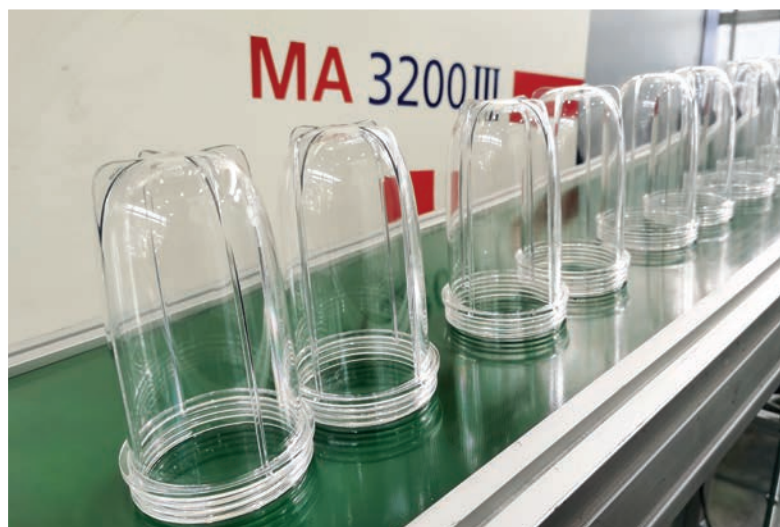
Since its establishment in 2013, Xinzhihong Electric Co., Ltd. has always been dedicated to the manufacturing of household appliances and parts. It is the main plastic parts supplier of Bo Ling Electric and other major European and American first-tier home appliance brands. Its product line covers many fields such as soy-bean milk machines, coffee machines and blenders.

From the persistent pursuit of quality and efficiency, Xinzhihong Electric has been developing remarkably fast. From 15 machines in the beginning to 95 machines in the whole line now, the development momentum cannot be underestimated. Today, 240 million plastic parts are assembled every month in the factory of Xinzhihong Electric.

This year, in order to accelerate the expansion of market share and improve product quality, Xinzhihong Electric has purchased 45 MAIII machines from Haitian Plastics Machinery making it their main model. Equipped with servo manipulators and dehumidification drying automatic feeding system, the injection molding workshop for small household appliances of Xinzhihong has realized efficient production.

Talking about the advantages of MAIII, the supervisor in charge of Xinzhihong said, "The MAIII shows super high intelligent performance! At the same time, it still maintains high efficiency and energy savings, especially the upgrading options from universal to quick automation interface, make the operation very easy. After integrating the MAIII in our production automation, our output rate has greatly improved while the return on investment has been substantially increased."

Read the full story in our
ONLINE MAGAZINE



New sales record of Mars Series in 2020



Sales volume
RMB 8,214.5 million
28.6% increase compared to 2019

Units sold
43,150 machines
34.9% increase compared to 2019

MA

In 2020
the cumulative sales of the Haitian MA Series have exceeded

300,000 units
making it by far the best-selling
injection molding machine worldwide



INTERSURGICAL CHINA

Clear focus on environmental protection, safety, versatility

INTERSURGICAL China is a wholly owned subsidiary of INTERSURGICAL Medical Group, headquartered in the United Kingdom, was established in 1982 and specializes in the manufacture and sale of disposable medical devices and consumables for respiratory anesthesia. Today, the company is a leader in this industry and has numerous offices around the world.

Environmental protection, safety, versatility

All INTERSURGICAL product materials are environmentally friendly and safe. Mainly TPE and PP without plasticizers. Only products that use 100% new raw material can guarantee the high product quality.

The masks produced by INTERSURGICAL are suitable for a wide range of people, with ergonomic design and reduced features. The breathing mask has a reinforced ribbed construction and is very light. The product is positioned in the professional, high-quality category. The filter masks can filter up to 99.99% - very effective for corona patients.

In 2008 INTERSURGICAL entered the Chinese market with its high-quality disposable respiratory anesthesia products and finally established a production base in China in 2016. How did this decision come about?

Li Lingjun, general manager of INTERSURGICAL Changzhou, explains: China has a good investment

environment and is the largest market in the world. Investments in China not only cover the Chinese market, but also radiate to the production, storage and logistics centers in the Asia-Pacific region.

What are the main products that INTERSURGICAL currently offers on the Chinese market and what are the main competitive advantages over other competitors?

Mr. Li: Our main product areas are throat airway management, anesthesia products, critical care products, oxygen nebulization products. INTERSURGICAL focuses primarily on the high quality of its products rather than a price war. All products are 100% tested. Quality always comes first, using 100% raw materials and strictly enforcing quality standards. In China there are more PVC oxygen masks, but we use environmentally friendly PP+TPE material to ensure the high quality of our products.

Has there been any impact on the company's production and sales since the outbreak of the new corona virus? If so, what are the main aspects?

Mr. Li: The impact of the epidemic on production has been relatively small, and in response to the epidemic, production has concentrated human and material resources on several product categories. Products that were urgently needed to meet the surge in demand. The surge in demand for respiratory products also ex-



Photo / Workshop at INTERSURGICAL CHINA

“At present, mainly electrical machines are used for the production of breathing filters and injection molded parts on nasal oxygen tubes, such as small joints etc.”

Li Lingjun, General Manager of INTERSURGICAL Changzhou



Photo / Respiratory anesthesia mask

erted more pressure on production. INTERSURGICAL is actively working with the government to resume production, recruit new employees and actively meet production requirements. The current capacity of similar nasal oxygen tubes and oxygen therapy products has been doubled.

Localized production for maximum flexibility and efficiency

As a multinational company, foreign brands may generally be preferred, but INTERSURGICAL began buying electric injection molding machines as early as 2013. The factory in China built with a view to localized production. China is a large manufacturing country and has many equipment manufacturers; consider the advantages of localization.

Why did you choose the Zhafir Venus Series?

Mr. Li: INTERSURGICAL needed a small machine because the process control of the motor is very accurate, and the consistency of the molded products are very satisfying. Then a fully electric machine is clean, energy-saving and environmentally friendly. As a Haitian brand of electric injection molding machines, Zhafir is known for its professional character, which is why we chose it in the first place. The VE 900 kN and VE 1500 kN were bought first.

What is the operating condition of the Venus Series, which has been in operation at INTERSURGICAL for seven years?

Yan Guofeng, manufacturing manager of INTERSURGICAL Changzhou: The Venus Series is currently running stable, with relatively few malfunctions. For some minor issues, the appropriate services were available to meet our expected needs. On the whole, we are more satisfied with the accuracy of the equipment, the energy saving effect etc. The quality of the product was good, so we built our own factory and bought additional equipment from CDFA. At present, mainly electrical machines are used for the production of breathing filters and injection molded parts on nasal oxygen tubes, such as small joints etc.

Are topics like “intelligent manufacturing” or “Industry 4.0” an issue for your company?

Mr. Li: The core of intelligent manufacturing is to realize the computerization and automation of manufacturing companies to achieve the goal of lean, flexible, autonomous, networked and intelligent manufacturing. INTERSURGICAL is also working hard to promote the automation of the assembly process and the digitalization of the production process of components and finally to integrate the whole process.

WE CREATE AND EXTEND ADVANTAGE.

Worldwide.

9

SUBSIDIARIES

GLOBAL

80

PARTNERS FOR

SALES &
SERVICE

FOR OVER

30,000

CUSTOMERS

WORLDWIDE CONTACT:

CHINA

EUROPE

ASIA

AFRICA

AMERICA

AUSTRALIA



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