

FCS TODAY

FU CHUN SHIN MACHINERY MANUFACTURE CO., LTD.

Breaking
News

**Branch
out into
the Medical
Industry**

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FOCUS

► FCS Show Review of the 1st Half of 2015

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Branch out into the Medical Industry

Reported by PMO

In Jia County of Henan Province, China, a new joint-venture enterprise, Pingdingshan Fu Chun Shin Plastic Machinery Manufacture Co. (FCS Henan) which is managed by FCS Group of Taiwan and Sheng- Guang Group of China, has had a ground-breaking ceremony on November 16th 2014. The floor space of FCS Henan is about 50,000 square meters and will build a brand new production line for medical devices, injection molding machines (IMMs) and molds for medical use. Its capacity is estimated to achieve 500 sets of medical IMM per year within 3 years.

FCS Group focuses on developing and manufacturing various types of IMM, and has the largest export amount in the industry. In 2014, FCS was also ranked fourth in the Top 10 IMMs of China. In addition, Sheng- Guang Group owns two core industries: medical supplies and medical logistics, and the annual value of production exceed RMB 5.1 billion. The cooperation between FCS Group and Sheng- Guang Group will accelerate the development of medical equipment industry and open the broader foreground for the industry.

Combining FCS' experience in injection molding technology and Sheng- Guang's resource in medical industry, FCS Henan will be able to develop more efficient, high-precision, energy-saving, and international standard of medical equipment, IMMs and molds. Based on this cooperation, FCS positively looks forward to not only bringing more business opportunities and investment to Jia County, but also contributing the prosperity for this business area.

FCS Group has been trying to connect its whole marketing network in great China, such as the establishment of FCS Dongguan for Southern area; the FCS Ningbo for Eastern part, and now it covers the Northern China with FCS Henan. This step would be expected to lead FCS to enhance the brand awareness and the market share, and to achieve the goal of "Ten Billions in Ten Years".



Fast Response · Customer Oriented · Service Differentiation

FCS Show Review of the 1st Half of 2015

NPE Mar.23-27



The crowds of attendees and the clamor of working equipment that filled the giant exhibit halls at NPE 2015 which took place in Orlando, Florida, told the story better than numbers. SPI president and CEO William R. (Bill) Carteaux acclaimed "What made NPE 2015 a milestone in the 69-year history of NPE was not only its size and international diversity, but also the richness of its offerings to attendees."

Since 2011, FCS Group has been in cooperation with MARUKA Machinery as the North American distributor, and immediately issued the HA series models for the US market. FCS, together with MARUKA, focus on plastic commodities and food packaging, exhibiting 3 systems namely Two-Platen Injection Molding Machine (IMM), Two-Component IMM, and In Mold Labeling Turnkey Solution.

Specification	A-PACK Series	FB Series	LM Series
Machine Model	AF-200	FB-160RV	LM-900SV
Clamping Force	200 ton	160 ton	900 ton
Features	■ High Accuracy ■ High Respond ■ High Injection Speed	■ Less Rotary Time ■ Accurate Positioning ■ Energy-Saving	■ High Efficiency ■ Footprint Reduced ■ Long Opening Stroke
Part	Yogurt Box	Brush	Stool
Weight	10g/pcs Thickness:0.45mm	47g/pcs	620g/pcs
Material	PP	PP+PP	PP
Cycle Time	4.5 sec	35 sec	35 sec

Though MARUKA exhibited TOYO's all electric IMM, FCS was able to highlight the advantages and developments in hydraulic IMM. Not only was FCS able to garner praise from visitors but also potential orders by giving priority to the needs of the American market: A fast responding, customer oriented, and service differentiated company.

Source: SPI (Society of Plastics Industry)



CHINAPLAS May.20-23



The Asia's No.1 and world's No.2 plastics industry trade show, CHINAPLAS 2015, grandly took place in China Import & Export Fair Complex, Pazhou, Guangzhou. The 4-days mega trade show of CHINAPLAS 2015 ended with great success, with compliments from both exhibitors and visitors, and the total number of visitors reached 128,264. This is a trading platform that effectively promotes the technique of the plastic industry and the understanding of the market trends.

This show, FCS displayed its Horizontal Rotary Table Two-Component IMM and Servo Power-Saving Multi-Component IMM. These models contain highly technical and innovative concept which also reflect FCS' specialization in systems integration.

Specification	FB Series	HB-R Series
Machine Model	FB-280RV	HB-350RV
Clamping Force	280 ton	350 ton
Features	■ Less Rotary Time ■ Accurate Positioning ■ Energy-Saving	■ Horizontal Rotary Platen ■ Larger Loading Capacity ■ Single and Dual Component
Part	Dual Colored Bowl	Dual Colored Tray
Weight	130g/pcs	410g/pcs
Material	PS	PC
Cycle Time	30 sec	110 sec

Once again, FCS has built a new image of IMM Industry in CHINAPLAS. The most inspiring result is that FCS has sold two HB-1900R IMM after the show. Obviously, the royal visitors of FCS are looking forward to seeing any new surprises in next CHINAPLAS 2016, Shanghai.

Source: Adsale Exhibition Services Ltd.



工业企业三十强

宁波市江北区人民政府
二〇一五年二月

FCS Ningbo Awarded the Top 30 Industrial Enterprises

Reported by
FCS Ningbo



In April, Jerry Wang, the General Manager of FCS Ningbo, was invited to join "The 2015 Urban Industrial Development Conference", the most important annual conference in Jiangbei District, Ningbo City. During the meeting, the Mayor of Jiangbei District, Ding-Xiao-Fang made a report of "Urban industrial development". The theme is about the important strategy of how to accelerate the industrial development in Jiangbei District. In the next few years, it could be expected that "building urban industry" will be the focus of Jiangbei District, Ningbo City. This policy would promote the equipment manufacturing to step further in their development.

Meanwhile, in the conference, FCS Ningbo won three awards. One is the "Top 30 industry enterprises" in Jiangbei District, Ningbo City, this is the second time that FCS Ningbo obtains this award; the other two prizes were "Little Giant Enterprises" and "Breakthrough Award of 10 Million Tax" of 2014 in Jiangbei District. Based on the efforts from all the employees, FCS Ningbo finally overcomes the unfavorable factors under the slow growth of economy, through positive reinforcement on the innovation of products, and constant enhancement of the managing efficiency. These awards thank to the efforts of the FCS Ningbo family. In the near future, FCS Ningbo will be continuously striving for the innovation and revolution, to make greater contribution to the economy.

Reported by R&D

In order to achieve requirement of quality, appearance, precision in the injection molding process, the machine must have good control in velocity and pressure. This study presents the technical feasibility of nonlinear control servo-hydraulic control of the applied, including PID, fuzzy and self-adaptive control technology.

The figure consists of two parts. The left part is a schematic diagram of the pressure control system. It shows a 'Controller' block sending a 'P/Qcmd' signal to a 'PQ board' block. The 'PQ board' sends a signal to an 'EFBG' block. The 'EFBG' block outputs '80% Controlled hydraulic fluid' and '20% Superfluous' fluid. A motor 'M' is connected to a pump, which is labeled '100% of output'. The right part is a graph titled '(EFBG of pressure control result)'. The y-axis is labeled 'Pressure' and ranges from 0 to 100. The x-axis is labeled 'Time' and ranges from 3.5 to 6.5. The graph shows two curves: 'Commanded Pressure' (black line) and 'Sensed Pressure' (red line). The 'Commanded Pressure' curve is a step function that rises from 0 to 80 at time 4.5, stays at 80 until time 6.0, and then falls back to 0. The 'Sensed Pressure' curve follows the 'Commanded Pressure' curve closely, with a slight delay and overshoot during the rise and fall phases.

System specification :
 IPM motor : 60kW
 Single pump : 400 L/min or more

Gain Scheduling

Fuzzy Control

Adaptive Control

Comparison of the results of nonlinear pressure control

Single PID

Nonlinear controller

significant, therefore, power system (including power above 50kW motor, 100kW power drive above) has get a lot of attention on the key components. Therefore, IMM manufacturing industry will enter the new level of a new generation; holding key components in the intelligent control development will be competitive of next generation.

Marketing Column

Reported by PMO

FCS Global Exhibitions Preview - the 2nd Half of 2015

FCS Groups has been 40 years and set the global headquarters in Taiwan and two factories in China, Dongguan and Ningbo. Based on the principle of being the leader of injection molding technology, FCS has been doing the best efforts to keep our group growing and aiming to be the global Top 10 plastic machinery manufacturers.

In 2015, with the strategy of globalization and diversification, FCS has been giving service to more customers and challenging the higher performance. Moreover, with the prescient thought, FCS participates positively in the global exhibitions of plastic machinery and sincerely invites you to visit our stand.

China

Exhibition	APPLAS	China Advanced Manufacturing Machinery and Equipment	CMI-PLAS	ICMD	China Plastics Expo	SWOP
Location	Shanghai	Zhuhai	Chongqing	Wuhan	Yuyao	Shanghai
Duration	Aug/31~Sep/2	Sep/9~11	Sep/22~25	Oct/18~21	Oct/24~26	Nov/17~20

Overseas

Exhibition	M'sia-Plas	Vietnam Manufacturing EXPO	Indoplas	Plast Eurasia Istanbul
Location	Kuala Lumpur, Malaysia	Hanoi, Vietnam	Jakarta, Indonesian	Istanbul, Turkey
Duration	Jul/28~Aug/1	Sep/10~12	Nov/19~22	Dec/3~6

Marketing Channel Update

In order to accelerate the customer service, FCS set up three sales & service offices in Indonesia, Vietnam and Philippines. Based on the brand new service purpose, FCS not only offers the commercial agents for immediately technical support, but also gives training courses and customer service. Wherever your business venture is, FCS will always be with you and provide the most professional service.

Indonesia : Branch Office Established

Except the current agent, FCS intends to set up a new branch in Jakarta this Sept. and arrange a senior services manager there. According to the market share of Indonesia, FCS will be able to accelerate the service, not to mention the delivery to the Southeast Asia.

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Address : Jl.Suktan Hasanudin No.263-265,Tambun City, Blok D3,Bekasi, Java Barat, Indonesia.

Vietnam : Expanding Sales Network

FCS is looking for commercial agents in Northern Vietnam, to compose a complete sales & services networks in Vietnam with the current agent in Hochiminh city. Please join us!

Agent Name : CONG TY TNHH TM-DV PHU VINH HUNG
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Philippines : Reinforce Service System

FCS has set up a service center in Manila in order to provide the immediate service and professional advice, and is also recruiting more service engineers to complete the greater system. Welcome for any inquiry, after service, or cooperation requirement.

Branch Name : FCS SERVICE CENTER, PHILIPPINE BRANCH
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FCS CLUBS - Raising Members

Reported by PMO

On our 40th anniversary, FCS promised: To dedicate ourselves to become an enterprise of happy and satisfied workers; a partner that our suppliers and customers trust; and a social enterprise with a well-known international brand. In order to practice the oath to happiness, FCS starts to carry out the club activities in this year, by offering the budget subsidy, to encourage the employees to get together for the same interests. It not only makes FCS people dedicate themselves into their work, but also help

them enjoy the leisure after work. Until now, there are 4 clubs "Softball", "Table Tennis", "Bowling" and "Photography" established. In the near future, FCS also encourages everyone to organize more clubs for self-learning or relax purpose.

The chief of each club has been planning a lot of attractive objectives and activities, don't hesitate to join them!



Bowling Club



Table Tennis Club



Softball Club



Photography Club