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YIZUMI Customer Magazine

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SpaceA-Industrial Pellet 3d Printing
SIMPLE. FAST. COMPETITIVE.

P07 Enterprise

Brand-new Design
YIZUMI Electric Injection
Molding Machine is Entering
the European Market

P09 YIZUMI Online Open Week 2020

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More than 1,000 Guests Witnessed
the Technical Iteration

YIZUMI Online Open Week 2020

Connect China and Europe
Smarter Future



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More R&D Investment for Prosperous Future

The machinery equipment industry has been facing unprecedented challenges and lots of uncertainty in 2020 due to the COVID-19 pandemic and unpredictable global political situation.

For YIZUMI, many changes and adjustments underwent in 2020. In any case, the strategic objective “To be the industry’s best cost-effective solution provider with leading technology” has guided YIZUMI along the way. Since the beginning of this year, YIZUMI follows strategic direction and new investment in terms of R&D innovation, digitalization, and global layout is carried out.

According to the third-quarter financial report, the total operating income of YIZUMI increased by 15.88% year on year to CNY 1.878 billion, and the net profit attributable to shareholders increased by 21.73% over the previous year to CNY 217 million. Among them, the operating income in the third quarter reached CNY 808 million, and the net profit attributable to shareholders achieved CNY 116 million, both hitting records high for a single quarter.

Most importantly, YIZUMI continued to maintain high investment in R&D in the reported financial period. Taking up 5.27% of the total operating income, YIZUMI R&D investment is about 99 million CNY, a 36.8% increase year on year, which reflects YIZUMI’s confidence in future development. Moreover, the “YIZUMI Global Innovation Center”, in which we plan to invest around CNY 100 million, was topped out in May. With the estimated completed time at the end of 2021, it will provide a global platform for not only new material testing and new processing technology, but also R&D of our latest products, which lead YIZUMI towards deeper and broader innovation in the future.

Besides that, YIZUMI also expands its investment in the aspect of quality, efficiency, and capacity improvement. This year, the construction of YIZUMI new intelligent factory in Shunde was launched. It will be our number 3 factory in Wusha, Shunde -an intelligent factory that runs 24 hours a day in the future which IT technology will facilitate order processing, product design, production, logistics, final assembly, delivery, etc. We will adopt the assembly line production similar to that in the automobile industry to produce machines.

2020 is about to come to an end. YIZUMI has experienced many challenges but also have plenty of opportunities. Looking ahead, there may be many uncertainties in the global economy and related industry. However, YIZUMI has great confidence and determination to overcome those difficulties. We insist in long-term development concept strategy and will continue to strengthen our technical competitiveness through R&D investment in order to provide the best cost-effective solutions to our global customers.

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Nicolai Lammert
Product Manager of YIZUMI Germany
Additive Manufacturing Center

Quote:
"As long as manufacturers of plastic components do not distribute their manufactured components at trade fairs - because they are too expensive - we are not talking about industrial mass production using additive manufacturing" – N.Lammert

SpaceA–Industrial Pellet 3D Printing

SIMPLE. FAST. COMPETITIVE.



Additive manufacturing processes are characterized by three-dimensional components that can be manufactured directly on the basis of CAD data without the need for tools. Accordingly, plastic-based additive manufacturing is already widely used in prototype construction. In the future, additive manufacturing processes should also be able to replace the previously tool-bound and thus cost-intensive individual or small series production. However, if additive manufacturing is to be used in an industrial environment, it is absolutely necessary to make economic calculations and design components, systems and processes accordingly.

underlying screw-based technology platform enables the processing of thermoplastic granulates (amorphous and semi-crystalline, filled and unfilled). The innovative lightweight extruder allows scaling of the output quantity in a wide throughput range (5 to 20 g/ min, 10 to 60 g/min). Due to its low weight of less than 7.5 kg, the extruder can also be operated with small robotics. This is a central aspect to reduce plant costs in relation to component size, as the positioning system is the most important cost factor in an additive production plant.

Low Material Costs in Additive Manufacturing

The robot-based additive manufacturing system of the SpaceA product family with direct processing of certified thermoplastics in granulate form at low material costs offers the necessary high productivity in terms of material, machine and work performance as well as the use of established materials qualified for series production (Fig. 1). The



Fig. 1: YIZUMI's machine design to combine the advantages of standard machine designs and automation cells.



Weight and Cost Saving Potential using SpaceA-Technology

To illustrate the production potential of the SpaceA technology, the frame of the YIZUMI bicycle has already been manufactured using additive production and will be presented to the public for the first time at Formnext in Frankfurt in 2019. The bicycle is assembled in cooperation with the Aachen Centre for Lightweight Technologies (AZL) (Fig. 2). With the 0.7 kg lightweight plastic AM frame, the original 1.2 kg aluminum frame has been successfully replaced with a weight saving of 42 %. You can use the same potential for other structural components in the construction or automotive industry. The frame could be produced in less than 1:45 hours and has a manufacturing cost of less

than 8 € (including compressed air, energy, working time, amortization and material costs). This is only possible by an adapted geometry of the bicycle frame. Special attention must be paid to the later function but also to the manufacturing process. Only a design suitable for production enables the use of all process advantages. The possibility of manufacturing thick-walled structural components is impressive. Here, one is not limited to the usual injection molding restrictions regarding a minimized wall thickness. At the same time, the melt undergoes strong shear during processing, which causes fibers and molecules to be strongly oriented, so that higher mechanical properties can be achieved in the deposition direction than in injection molding. If this anisotropic behavior is exploited, not only the weight of the part is reduced. The

production time is also reduced. A wide range of plastics, such as thermoplastic elastomers, polyamides, polyolefins, aromatic polyamides, PMMA, ABS and polycarbonate have already been processed on the five test facilities in Aachen, Germany, in Suzhou, China and Shunde, China. The plants are available for customer trials at any time.

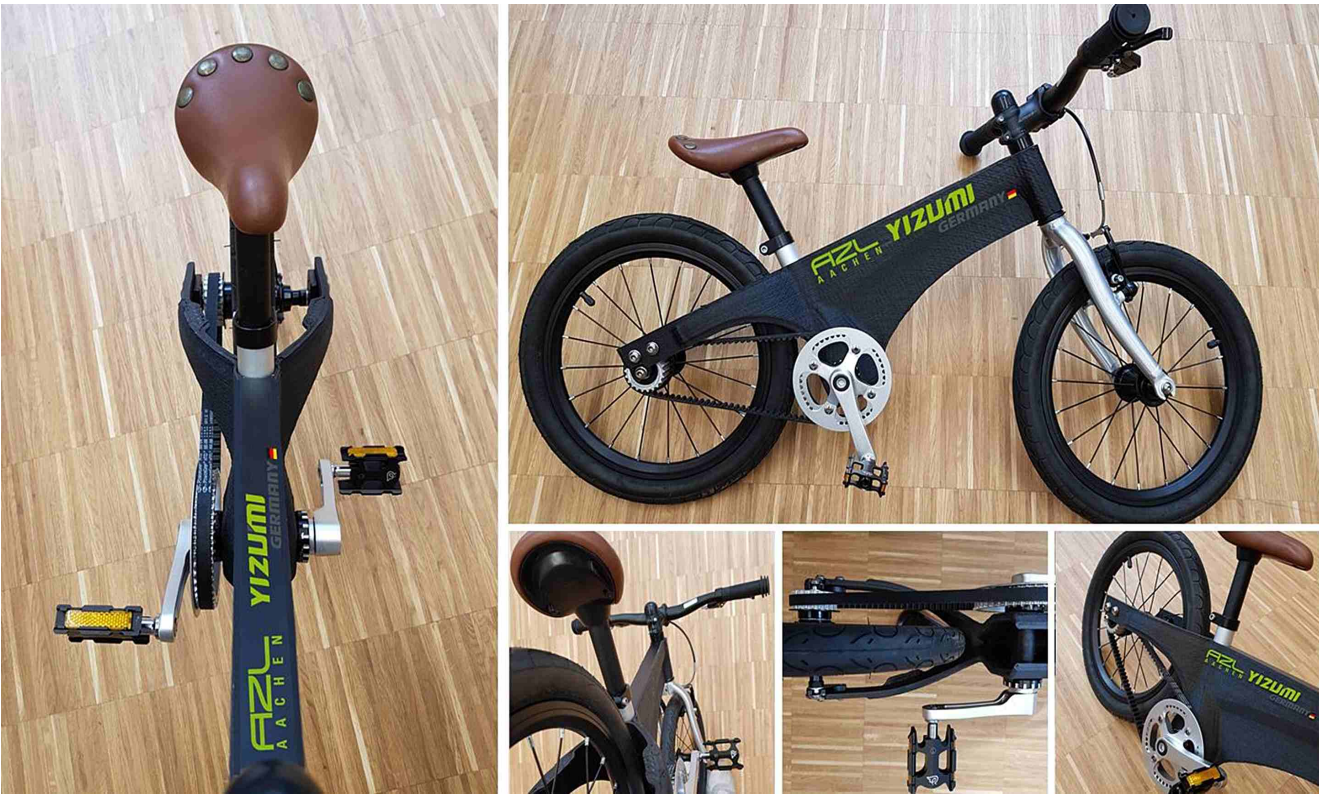


Fig. 2: YIZUMI bicycle with printed framework. Saving around of 42 % weight for structural parts.



Industrial Control Standard enables Process Chain Connection

With the product expansion into robot-based additive manufacturing, YIZUMI can offer alternative solutions to primary molding processes not only in the area of plastics processing, thus closing the gap in the low to medium volume range (up to approximately 20,000 components per year) for customers. The necessary know-how in the field of automation also allows the possibility of designing and implementing complete turnkey systems. Accordingly, the SpaceA product family is based on a flexible automation approach. It is based on a standard construction cost. The modularity of the SpaceA systems allows stand-alone operation as well as integration into existing production chains. The specially developed Serenity control system offers all the functionalities of a plastics processing production plant, such as protocol function, digital interface mapping, process data monitoring, live component temperature control or a material pre-treatment. Experienced plastic molders do not have to

go along without any known feature here. For that YIZUMI already showed several applications to overprint molded structures like a Polyamide Engine Cover or a Polycarbonate Raspberry Pie Housing. For that YIZUMI showed, together with well-known partners, two completely automated turnkey manufacturing cells on CE-standard to functionalize the molded parts with an additional soft rubber (TPE) component (Fig. 3).

The use of industrial robots as a positioning system offers advantages over conventional Cartesian positioning systems, particularly with regard to installation space scaling and integration in production chains. Thus, manufacturing processes such as primary forming processes, SpaceA technology and machining can be easily combined. This ensures the economic use of the individual manufacturing processes. At the same time, the 6 available axes also allow traditional restrictions in the design of the positioning system to be overcome.



Fig. 3: Small SpaceA Printer inside of an automated manufacturing cell to functionalise a moulded part – your cost-efficient way in the business of Multi-Material Part Production



SpaceA



Brand-new Design YIZUMI Electric Injection Molding Machine is the Entering European Market



European electric injection molding market has a new competitor—— an electric injection molding machine with advantages of high precision, high efficiency, but low energy consumption and less pollution is entering the market. Its high-cost performance could greatly satisfy the higher requirements of the European market.

This new FF series electric injection molding machine comes from YIZUMI——the second best company in Chinese injection molding machine industry. In recent years, relying on its Germany R&D Center, YIZUMI connects the European market rapidly and realizes the update of product and technology. Now, it has become one of the most competitive equipment providers in the European market.

Annual Output of Electric IMM Reaches 500 Units

In the past few years, YIZUMI’ s equipment such as two-platen machine, high speed packaging system, A5 Series Standard High-end Servo Injection Molding Machine are welcomed in the European market. Their sales and market shares grow rapidly, businesses now have covered Germany, France, Spain, Portugal, Poland, Czech, and other main European countries, among which are big-scale international customers.

It’ s an essential measure for YIZUMI to promote electric injection molding machines to the European market. After several years’ development, YIZUMI launched FE Series Electric Injection Molding Machine, FF Series Electric Injection Molding Machine, HE Series Hybrid Power Injection Molding Machine and individual electric injection units that could be flexibly applied in multi-component products.

Zhang Tao, YIZUMI’ s Deputy Managing Director, General Manager of IMM division pointed that: “All these products and technologies are independently developed by YIZUMI, having their own intellectual properties.”

In electric injection molding field, YIZUMI has mastered core technologies like precision control of electric injection, electric plasticization and the opening and closing mold, injection and compression forming process, which are YIZUMI’ s core advantages. The flexible product configuration solutions provide solutions for different industries. At present, YIZIMI electric injection molding technologies and products are widely applied in industries such as precision electronic, medical, packaging, automobile spare part, etc.

YIZUMI has set up a special electric injection molding machine workshop in Chinese production base to ensure product’ s scale production, which could realize an annual output of 500 unites electric Injection molding machines.



Zhang Tao
Deputy Managing Director of Guangdong Yizumi Precision Machinery Co.,Ltd., General Manager of Injection Molding Machine division



■ 《PLAST》



New Generation Electric IMM Meeting the European Market Demand

The leading role pushing into the European market this time is YIZUMI new generation product——FF Series Electric Injection Molding Machine, of which the clamping force ranges from 90Ton to 460Ton, and its theoretical injection capacity is 44cm³-2460cm³.

FF series adopts a modularization design concept that clamping units and various injection units could be combined flexibly. With around 200mm/s injection speed, the position accuracy of injection and mold closing & opening is within 0.05mm, its advantages of high precision, high efficiency, low energy consumption, and less pollution could satisfy the higher requirements of the European market to the maximum extent.

“We done a lot of design to reduce failure rate under the premise of guaranteeing equipment performances, hoped to improve spare parts service time and equipment reliability as much as possible.”

In the aspect of the software, YIZUMI develops control software independently that ensures all the controlling processes of equipment correspond to the final product performance requirements. Besides, the operation interface is more user-friendly, supporting multiple languages.

“According to European, German standards, the designs satisfy the European customers’ demands toward injection molding equipment with high precision, high efficiency, high stability, and solutions including automation for different industries as well.” Zhang Tao said.

Connecting European Technologies and Market

Catching European customers’ demand is not an easy thing. As early as 2017, YIZUMI began to plan to connect European

technologies. Located near Germany RWTH Aachen University, YIZUMI Germany R&D Center provides technical innovation, which allows YIZUMI researchers to keep close to European customers, understand precisely about their technical demands, and offer targeted solutions. At the same time, it is beneficial for YIZUMI to master advanced technologies during development, speed up technical innovation, and promote these technologies toward the global market.

Nowadays, YIZUMI Chinese and European technical team has jointly developed several products meeting the European market, such as FoamPro, DirectPro long fiber direct injection molding process, DCIM process, in-mold PU decoration process, SpaceA Industrial Pellet 3D Printing, etc.

Simultaneously, YIZUMI actively arranges European product sales and service network. In 2018, YIZUMI European Spare Parts Center was set up. In the second half of 2019, YIZUMI Germany Sales and Service Company was founded in Nuremberg, Germany. The company provides services of product sales and display, equipment installation and adjustment, customers’ tooling test, training, spare parts warehouse, etc.

YIZUMI places high expectations for Germany Sales and Services Company. Zhang Tao explained that: “The new company can not only provide services for the Germany market but also provide services and technical support for other European agents and customers. It will become an important base for connecting the whole European market.”

Overall, YIZUMI is more confident of electric injection molding machine entering the European market. Zhang Tao added: “Not just products and technologies innovation, our customer-servicing capacity is also improving. We always commit to building up a long-term and win-win partnership with customers with the concept of “Provide high-quality products and services for global customers.”



■ Application: IMD 5G Mobile Back Frame



■ Application: Medical Devices



■ Application: Cabin LED light guide strip



YIZUMI FF Series Electric Injection Molding Machine



YIZUMI Online Open Week 2020

Y I Z U M I O N L I N E O P E N W E E K 2 0 2 0

YIZUMI Online Open Week

More than 1,000 Guests Witnessed the Technical Iteration



On September 13-18, the YIZUMI Online Open Week 2020 with the theme of “Connect China and Europe, Smarter Future” was held at Wujiang Factory. More than 1,000 guests from customers, partner companies, and media attended the on-site event. The synchronous online activities also attracted the attention of the industry with over 10,000 views.

In 2020, while the pandemic continues raging, customers around the world

participated in this YIZUMI event through online or offline means, witnessing YIZUMI’s confidence and determination to become the provider of the most cost-effective solutions.

Introduction of 12 major solutions

During this event, YIZUMI Wujiang factory exhibited more than 12 technical solutions, including microcellular foaming, multi-

component, in-mold decoration, automation integration, industrial interconnection, and other cutting-edge technologies covering automotive, medical, 3C, household items, and other fields. Equipment displayed includes two-platen machine, all-electric machines, multi-component machines, high-speed packaging system, etc.



“The solutions displayed go beyond the host equipment itself. They come with some peripherals as well as automation solutions,” said Tao Zhang, deputy managing director of YIZUMI and general manager of the Injection Molding Machine Division. “One of the common pain points in the industry today is rising labor costs, which brings increasing pressure on manufacturing costs. Due to customer’s increasing demand on automation, reducing manpower and boosting efficiency is the primary motivation for us to develop system solutions.”

Press release: The injection molding machine monthly production capacity will exceed 1000 units

At the media conference during the event, Tao Zhang introduced the three-year

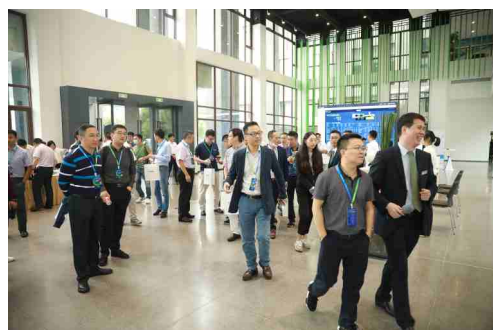
development plan of YIZUMI injection molding machine division in terms of products, globalization and operation.

According to the report, YIZUMI’s current injection molding machine monthly production capacity can exceed 1000 units, which indicates that the injection molding machine products in the global market share remains a steady rise. “YIZUMI has put three-platen machine, two-platen machine, all-electric machine, and multi-component machine into production. It can meet the demand of more than 95% of customers. The largest tonnage has reached 4000 tons.”

While making continuous progress in the development of host equipment, new technologies and new processes, YIZUMI is also actively working on the deployment of intelligent manufacturing platform. “This year, we have developed a number of functional modules around intelligent

machines, including closed-loop management technology, online control technology, intelligent control mode, so on so forth. In terms of intelligent production, YIZUMI’s YiCMS and YiMES system have been introduced in market to promote the entire Chinese injection molding industry towards information intelligence.”





9 Sessions of Online Technology Seminar

This event also carried out bountiful online activities. Customers around the world were able to visit the YIZUMI Wujiang factory online to enjoy 12 technical solutions introduction videos at zero distance. They could also attend 9 sessions of online seminars and interact with YIZUMI's technical team. Online seminars bring together topics such as automotive light weighting, IMD processes, and multi-component applications. Together with the downstream market demand and application case studies, the seminars revealed considerable amount of solid information to the customers.

Dedicated Auto Industry Information Sharing Meeting

On September 18, nearly 300 entrepreneurs and experts from the auto parts industry nationwide participated in the Online Open Week session - a special information sharing

meeting held for professionals in the automotive industry. YIZUMI joined hands with Pan Asia Technical Automotive Center, Bensley, Synventive, and French Plastic Omnium to share the cutting-edge technologies in the automotive industry with the participants.

As Jitao Du, chairman of the Maxmould said, the new equipment and new technologies displayed on site at the YIZUMI's Open Week event reflect YIZUMI's active efforts when facing the industry challenges. It strives for innovations in response to the technological iterations in the automotive industry. We also see the continuous upgrade of YIZUMI's product integration R&D management model.



QR code for YIZUMI Online Open Week webpage

Two Years of Enterprise Transformation

YIZUMI Wujiang Factory: Fulfill CNY 500 Million of Two-platen Machine Production Capacity



YIZUMI Online Open Week 2020 was held at YIZUMI Wujiang Factory in China. During the event, more than 1,000 customers visited the site. The factory with an all new layout and the high-tech innovative application experience zone made a great impression on the visitors.

Wujiang factory was put into operation with the production of automated equipment in 2013. In 2018, since the moving of the entire two-platen injection molding machine production line from Shunde factory to Wujiang, its production capacity has been steadily improving. Now in 2020, the factory is making its first public appearance with an all new look. Throughout the entire development history of Wujiang factory, what has the factory brought to the customers around the world in addition to its brand-new outlook?

Steady increase in production capacity: CNY 500 million of two-platen machine

Located in Wujiang Economic Development Zone of Suzhou, Jiangsu Province, YIZUMI Wujiang factory occupies an area of 33,000 m2 and is specialized in the manufacturing of two-platen injection molding machines, robot automation system, and additive manufacturing, etc.

Besides the original robot automation system production workshop, after two years of deployment and construction, the two-platen machine section now has a factory area of about 26,000 square meters, which can offer design, production, testing, inspection and other functions. The factory has 90 machine installation positions, 130 installation technicians, a designing team consisting of 30 professionals, and can fulfill CNY 500 million production capacity.

“We relocated the two-platen production lines to the Wujiang factory because it is a concentration area of China’s automobile industry and home appliance industry. Our factory can provide better service for the customers in east and northern China.” said Tao Zhang, the deputy managing director of YIZUMI and general manager of injection molding division.

500T-4000T: Several popular two-platen machines in Wujiang

The two-platen machine product lines at YIZUMI Wujiang factory possess a number of star machines like DP series, D1 series, Multipro multi-component injection molding machines, which could meet customers’ production needs under different operating conditions. One of the largest models offers up to 4000T clamping force. The tremendous

clamping force and larger mold opening stroke can accommodate products that has large dimensions and requires deep cavity. The smallest model provides 500T clamping force and can be customized to meet the different needs of customers.



In order to improve logistics efficiency, the logistics layout of the current factory is designed in accordance with the production process: parts processing -> inspection -> logistics -> components installation -> spray -> assembly -> delivery. Links of the process are closely connected, to achieve the efficiency through the shortest handling distance and the fastest material issuance response.

User-oriented service brings support to customers. In addition to locating production base closer to the market, YIZUMI Wujiang factory will also bring European technologies, especially the advanced molding technology, new processing technology, and new material technology of the machinery industry to customers in East and North China for a mutual win.

Innovative Application Experience Zone: Tell you the story of YIZUMI’s innovation journey

Debuted together with the two-platen production line at the YIZUMI Online Open Week 2020 is the new complex of Wujiang factory. The new building houses the company’s marketing, R&D, public services, and other functional departments.

It is worth noting that the complex has added a YIZUMI (Wujiang) Application Innovation Experience Zone, which mainly showcases YIZUMI’s innovations and some R&D achievements.

The Innovation Experience Zone consists of a number of sections to introduce the various aspects of YIZUMI. Customers will have a better understanding of YIZUMI through its enterprise development overview and strategic vision. The innovation section mainly introduces the trajectory and outcome of YIZUMI’s recent development endeavors to continue its innovation legend and connect China and Europe. For example, it displays FoamPro Microcellular Foaming Process, DecoPro in-mold Decoration, ReactPro polyurethane and injection molding integration and other iterative optimization in the Pro family, witnessing the progress YIZUMI has made.

In the polymer molding and metal molding display section, the exhibition unfolds the solutions for die-casting applications, robot automation system, Thixomolding in the forms of both physical exhibits and video introductions. There is also window display of YIZUMI Yi+Intelligent manufacturing platform, showing YIZUMI’s path of digital transformation.



Visit YIZUMI Wujiang factory online



YIZUMI Wujiang factory VR

UN3200DP Two-platen Injection Molding Machine: Bumper Forming Automation Integrated Solution



The automobile industry affected deeply by Industry 4.0 has been promoting intelligent transformation in recent years. Among them, the automation production line for bumper that approaching to high efficiency, high automation and information has become an important investment project for first-class auto part factories.

YIZUMI invested heavily to develop the Bumper Forming Automation Integrated Solution. Based on UN3200DP two-platen injection molding machine, the complete solution covering an area of 245 square meters is equipped with feeding system, molds, auxiliary automatic equipment, robots as well as YIMES Manufactory Execution System. It could complete the whole automatic production from raw materials to molding, open flame deflashing, spure cutter, weighting, and laser marking within 48s. Besides, the molds can be changed quickly. All mentioned above makes the automatic, unmanned, informational bumper production possible.

It is worth mentioning that the quick mold changing systems in this solution could automatically replace the molds in three minutes. Equipped with RFID mold recognition technology, the processing parameters and fixtures of injection molding machines, robots, and auxiliary equipment can also be replaced according to the current mold.

At present, several domestic and foreign bumper manufacturers have introduced YIZUMI's machines. For instance, in China, Changzhou Huawei and Taizhou Kaihua Mould both adopted 3400T two-platen injection molding machine for bumper trial production, meanwhile, Eurostyle Systems, one of the tier one suppliers for Renault, has been producing bumpers by YIZUMI 2700T

two-platen injection molding machine abroad.

Highlights

- ◆ Replace mold automatically (realize automatic replacement of molds, injection molding machines' parameters, robotic fixtures' parameters, and auxiliary equipment' parameters);
- ◆ Equipped with KUKA robotic automation system, this solution is able to realize various functions such as spure cutting, delivery, open flame deflashing, weighting, and marking;
- ◆ Molds pre-heating function;
- ◆ Product weight repeatability $\leq 3\%$, injection end-position repeatability $\leq \pm 0.3$;
- ◆ Energy consumption grade: reach the national Grade 1 ($\leq 0.4\text{kW}\cdot\text{h/kg}$) ;



Part: Bumper
 Model: UN3200DP
 Number of cavities:1
 Material: PP+EPDM-TD20
 Part size(LxWxH):1850x380x560 mm
 Part weight: 2000g
 Cycle time: 48s (Molding cycle is 42 seconds, if the cooling efficiency of molding is improved, the cycle time can be reduced accordingly)
 Partners: Kaihua、MICO、Qingdao Lici、KUKA、Marco、RodeRock、Rapidflame



※ 1. The Data above were acquired by testing in YIZUMI's factory, only for your reference. The specific data please refer to the actual equipment.
 2. The product pictures and content above are only for your reference. The product effects (including but not limited to appearance, color and size) may be slightly different, please refer to the actual products.

Engine Cover:

ReactPro Integrated Solution of Polyurethane and Injection Molding



ReactPro Integrated Solution of Polyurethane and Injection Molding is jointly developed by YIZUMI and FRIMO Germany, it will bring more possibilities for the premium and multifunctional surfaces in a more innovative and economical way, such as in the fields of automotive interiors, 3C and home appliances.



How ReactPro Works

YIZUMI ReactPro is a combined technology. It combines polyurethane RIM (Reaction Injection Molding) with the injection molding process. Polyurethane coating is applied to the surface of injection molding product in a closed mold. Compared with traditional PU surface spray coating process, ReactPro could achieve high-quality surface in only one step, with less procedure but high efficiency, substantially reducing production cost.



YIZUMI adopts InPUR "1+2" mould technology jointly developed with GK Concept Germany to realize more economical and efficient multi-component injection molding. Two PU moulds are directly placed on the left and right sides of the thermoplastic mould. The injection-moulded thermoplastic carrier is then transferred by a robot into one of the PU moulds to carry out PU injection molding. PU moulds operate alternately during every cycle. Compared with the horizontal and vertical rotary table in traditional way, InPUR

"1+2" mould technology works without a swivel unit. Therefore, the design is more compact, the cycle time of batch production can be greatly saved as well.

Soft-touch Polyurethane and Injection Molding One-step Approach for Prefect Surface

During the YIZUMI Online Open Week, YIZUMI ReactPro displayed one-step-molding "Soft-touch Polyurethane + injection molding solution" by producing engine cover with polyurethane surface on site. Various surface effects were available including soft-touching, self-repair, high-gloss surface, matte effect, and 3D depth. In regard of the polyurethane that widely used in automotive industry, YIZUMI ReactPro solution makes more possibilities for design: products can be transparent, can be colorful, even if there are scratches on the surface, they will disappear in few hours at room temperature.

Additive manufacturing is seamlessly integrated in the manufacturing process. SpaceA Industrial Pellet 3D Printing prints a TPU seal ring on the engine cover back, meeting the needs of large-scale production and personalized customization of enterprises at the same time.

ReactPro Value Advantages

- ◆ One-step molding "Polyurethane + injection molding", short cycle time, high efficiency and low cost;
- ◆ Multifunctional, one equipment is suitable for different polyurethane molding finishes, such as high-gloss, scratch resistance, self-repair, soft-touch, etc. It is flexible, intelligent and efficient;
- ◆ Injection molding + 3D printing, effective combination of large-scale manufacturing and customization.



Part: Engine Cover
 Model: UN500DP
 Number of cavities: 1+2
 Material: AKROMID®RM-D GF20 + Puroclear®
 Part size(LxWxH): 400 x 350 x 25mm
 Part weight: 475g
 Cycle time: 70s
 Partners: Frimo、GK Concept、SAR、Akro Liming Chemical、Ruehl



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Bumper:
UN4000DP Two-platen Injection Molding Machine



With the advantages of precision, stability, and energy efficiency, the latest YIZUMI UN4000DP two-platen injection machine can produce 1.8 kg bumpers within 45 seconds. In addition to the auto parts industry, the machine can also be used in logistics, building materials, environmental protection industries.

UN4000DP Performance Advantages:

- ◆ Precision and stability: the accuracy for the mold opening position can reach $\pm 0.2\text{mm}$ and the deviation of the product weight $\leq 3\%$;
- ◆ High efficient and energy saving: clamping unit is highly rigid. There is no contact and frictional resistance between the movable platen and tie bars so that motion becomes faster. With the diagonally-positioned high-speed cylinders, four short-stroke high pressure cylinders and synchronous locking

nut mechanism, mold closing and generation of clamping force happen in less time and dry cycle becomes very short, reducing cycle time and improving productive efficiency; By adopting high-performance servo driver combined with a piston variable pump, the driving system offers adequate power and rapid response which also meet the requirements of the national Grade 1 energy efficiency.

- ◆ Special processes: based on modular design and excellent machine structure, a variety of special processes solutions, such as injection compression molding (ICM) technology, FoamPro microcellular foam technology, precision secondary mold-open technology, secondary mold-close technology, carbon fiber-based light weighting technology, long glass fiber (LGF) injection molding technology and multi-material micro injection molding technology are available.



Part: Bumper
Model: UN4000DP
Number of cavities: 1
Material: PP+EPDM-T20
Part size (LxWxH): 1740x480x240 mm
Part weight: 1.8 kg
Cycle time: 45s



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Automotive Fan Frame:
DirectPro Long Fiber Direct Injection Molding Solution



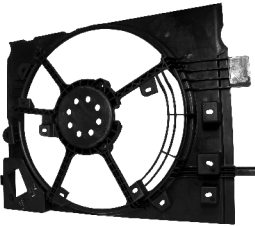
Long-fiber reinforced plastics are widely used in the automotive industry. However, the industry has been facing with problems such as high-costing granule, scarce fiber content and insufficient fiber length. YIZUMI DirectPro Long Fiber Direct Injection Molding Solution can replace fiber-reinforced engineering plastics, simplify manufacturing techniques, reduce raw material cost, and improve the product mechanical property.

During the Wujing Factory Online Open Week, DirectPro-DIM solution displayed automotive fan frame manufacturing process. The UN1000DP two-platen injection molding machine was equipped with continuous fiber metering feeding device to realize long fiber direct injection molding process:

- ◆ Fiber breakage is greatly reduced. The fiber length of finished product increases by

50% compared with those made of long fiber granule;

- ◆ Mechanical properties and strength of the product have improved. It can replace long fiber granule and reduce production cost by 30%-50%;
- ◆ Adjust fiber length (5-100mm), content (0-50%), and material combinations according to different product requirements;
- ◆ Optimization is based on the standard machine, so the technology can be applied to standard injection molding processes.



Part: Automotive Fan Frame
Model: UN1000DP
Number of cavities: 1
Material: PP(Sabic 513MNK40T) fiberglass (CPIC ER4305PM-2400)
Part size(LxWxH): 540x425x85mm
Part weight: 750g
Cycle time: 70s



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Automotive Door Panel:
FoamPro-Chem Chemical Microcellular Foam Injection Molding



YIZUMI UN1700DP two-platen injection molding machine adopted special chemical foaming plasticizing components as well as special Chemical Foaming Agent (CFA) which is environment-friendly and high performance to display automotive door panel application on site.

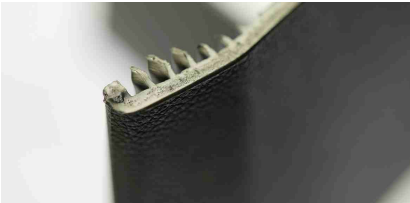
Chemical foaming refers to the process below: by adding a certain percentage of chemical foaming agent into the plastic raw material and injecting the mixture into the mold cavity after plasticizing in the injection molding machine barrel, the foaming agent will grow bubbles in the plastic under the constraint of mold to create a plastic product with a uniform internal foaming structure and a solid skin layer.

Value Advantages:

- ◆ FoamPro-Chem microcellular foam injection molding technology developed

based on the in-depth developed chemical foaming;

- ◆ It is able to realize coreback precisely tiny open technology on microfoaming with high performance SmartClamp system. With automatic correction control of platen parallelism, the response accuracy can reach $\pm 0.015\text{mm}/2\text{ms}$;
- ◆ The injection unit is equipped with the high-speed closed-loop servo system and special chemical foam injection units, achieving high-speed, high-precision injection technology;
- ◆ Product Weight can be reduced by 23%;



Part: Automotive Door Panel
Model: UN1700DP
Number of cavities: 1
Material: 4050CT10 (PP/PE-T10)
Foaming Agent: LUVOBATCH PE BA 5821
Part size (LxWxH): 800x700x100 mm
Weight: 1090g
Cycle time: 35s
Partners: LEHVOSS, WANLONG, FANYA, SWITEK



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Briefcase:
FoamPro Microcellular Foaming Injection Molding Solution



The Microcellular Foam Injection Molding Solution (physical foaming) deeply based on Mucell technology was also showcased during the Open Week. The UN1500DP two-platen injection molding machine which is equipped with the aircraft aluminum mold technology, Ceramic Coating technology and FLEXflow servo-driven hot runner system is able to reduce weight, improve raw material fluidity, promote product precision, avoid warpage, and reduce cycle time, etc. Taking the briefcase as an example, it weights 1000g under traditional process, while weights 880g under Microcellular Foam Process, and weight reduction by over 12%.

So far, YIZUMI has set up strategic cooperation with Trexel to jointly develop a new-type Mucell Screw and provide CAE simulation and analysis services based on in-depth development of Mucell. Besides, YIZUMI has offered several FoamPro solutions for customers such as Zhejiang Normal

University, Fujian University of Technology, Changchun Huatao Plastic Auto Parts Co., Ltd., Belgian Weiss & Weiss. These solutions cover FE 120 all electric injection molding machine, D1 series 900-ton and 500-ton two-platen injection molding machine, and DP series two-platen injection molding machine with clamping force of 500T, 1000T, 1700T respectively, which have been used for auto parts production of Audi, BMW, Toyota and light-weighting investigation.

Value Advantages:

- ◆ High efficiency: 4.1s dry cycle time, production efficiency is increased by 22%;
- ◆ High precision: product weight repeatability<3%, the accuracy of platen parallelism reaches $\pm 0.015\text{mm}/2\text{ms}$;
- ◆ Energy-saving: energy consumption has been dropped by 56%.



Part: Briefcase
Model: UN1500DP
Number of cavities: 1
Material: Wancom PPT2304N C2
Part size(LxWxH): 570x400x40 mm
Weight: 880g
Cycle time: 49s
Partners: SWITEK, GK CONCEPT, TREXEL



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5G Mobile Phone Back Frame: IMDPro In-mold Decoration

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Recent years, smart surface and surface with strong visual impact are more and more popular, which makes IMD in-mold decoration technology even hotter.

Compared with traditional processes, IMD technology can produce products with various colors and pattern designs in one step. Besides, it is convenient and easy to change the colors, the cost of mass production is low as well.

YIZUMI IMDPro in-mold decoration molding solution is allocated with FF series electric injection molding machine. Combined with secondary clamping technology, it could achieve higher yield rate and efficiency. Besides, the solution is equipped with automatic equipment in order to satisfy full automatic manufacturing requirements.

YIZUMI FF series electric injection molding machine features with high injection speed and injection pressure, stability as well as precision, which commendably meets the

IMD manufacturing equipment demand of no shrinkage and no flash. In addition, the machine can reduce grease and dust pollution that ensures the working environment clean and environment-friendly. Therefore, the yield rate of product can be greatly improved. Meanwhile, it is beneficial to provide intelligent operation and integrated solution.

Value Advantages:

- ◆ SmartClamp intelligent system, the precision two-stage mold opening and closing technology combined with low pressure injection function, carrying with advanced mold control technology with compression structure, IMD in-mold decoration technology;
- ◆ Precision: all-dimensions upgraded FF series electric injection molding machine, product repeatability 0.1%.



Part: Mobile Phone Back Frame
Model: FF160
Number of cavities: 1
Material: PC
Part size(L x W): 158x78 mm
Part weight: 17.7g
Wall thickness: 0.7mm
Cycle time: 25s



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Two-color Taillight Cover MultiPro-M Horizontal Rotary Table Injection Molding Solution

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On the basis of two-platen injection molding machines, YIZUMI launched MultiPro-M Horizontal Rotary Table Injection Molding Solution, which could be applied to two-platen machines ranging from 500T-3400T. Compared with the vertical rotary table, the horizontal rotary table injection molding machine has a wider range of mold using under the same tie bar spacing, which is particularly suitable for injection molds with larger dimension. It could satisfy a larger two-color product molding under the same clamping force.

During the Online Open Week, the UN900DPM-hM machine produced two-color taillight cover on site by applying the MultiPro-M solution. The product features with stable quality, high repeatability, shock resistance, and excellent transmittance.

Value Advantages:

- ◆ High efficiency: Simultaneous core pulling can be realized with opening the mold on the movable platen and the middle platen, reducing the cycle time. The flow distribution system adopts fast-changing mode to improve work efficiency;
- ◆ Function: The middle platen can realize the function of high-pressure mold opening with higher mold opening auxiliary force; Equipped with automatic central rotary union technology + electric slip ring structure and the water, electricity and gas can be transmitted simultaneously when the turntable rotates 360 degrees;
- ◆ Precision: The turntable adopts a servo system, mechanical location limit can be attained with a bolt to ensure the accuracy of rotation;



Part: BAIC Motor Taillight
Model: UN900DPM-HM
Number of cavities: 2
Material: PMMA 8N 00000 bright white & MMA 8N 33691 bright red
Part size(L x W x H): 570 x 400 x 40
Part weight: 99.5g
Cycle time: 60s



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Triple-color Insulated Water Cup In-mold Assembly Solution

Multi-component Injection Molding Solution

— NSW Series Piggyback Multi-component Injection Molding Machine



Connecting to German technology, YIZUMI launched the UN220C-NSW European standard piggyback rotary shaft multi-component injection molding machine. Equipped with hydraulic and electric hybrid structure, precise positioning technology for servo Rotary shaft, triple-color combination molding technology, in-mold assembly technology, product molding process traceability technology, etc., the machine is able to produce triple-color insulated water cup. The inner and outer layers of the cup are separated, and logos such as trademarks can be added between the two layers.

Value Advantages of W Series Piggyback Multi-component Injection Molding Machine

- ◆ High floor space utilization: it saves more space compared with the two-color injection molding machine with a L-type secondary injection unit;
- ◆ Wide range of molding application: when the secondary injection unit is not in use, the primary injection unit can be used as a single

color injection molding machine; The center distance between the primary and secondary units is adjustable to meet the molding requirements of molds with different nozzle center distances; The primary injection unit can work with a turntable or a rotary shaft mechanism or without them. It can take either a mechanical displacement or in-mold core-pull molding approach, offering a wide range of molding processes and applications.

- ◆ High ROI: oil-electric mixing mechanism; electric injection molding units for precision parts of products; reasonable optimization of investment cost;
- ◆ High efficiency: reduce labor cost and improve efficiency by using in-mold assembly technology;
- ◆ Intelligent: the traceability of product process can be achieved, providing effective information management for product quality tracking.



Part: Triple-color Insulated Water Cup
Model: UN220C-NSW
Number of cavities: 1+1
Material: PC+PC+PC
Part size(Height×Diameter): 130×75 mm
Part weight: 107.8g
Cycle time:43s



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Two-color Taillight Cover

Multipro Multi-component Molding Solution



Equipped with “smart compensation technology for molding defects”, precise positioning technology for servo turntable, and low-speed control technology, YIZUMI 750C-BTP wide-platen high-end multi-component injection molding machine is able to produce two-color taillight cover composed of red and transparent PMMA. The solution provided by YIZUMI not only eliminates the common defects of the product like flow mark and line, black spots, but also achieves a very high stability of CMK, less than 0.21%.

Value Advantages of BTP Series Multi-component Injection Molding Machine:

- ◆ Higher stability: molding stability is improved by the “molding defect intelligent compensation technology”, and the product weight repeatability is up to 1%;

- ◆ Higher turntable control accuracy: the turntable action is fast and stable, and the positioning repeatability is ± 0.001 degree;
- ◆ Better medium and low-speed control stability: the system achieves smooth injection at speeds below 5%, and the speed deviation is $\leq 5\%$, which enables the medium and low speed molded products to obtain a better molding process.



Part: Two-color Taillight Cover
Model: UN750C-BTP
Number of cavities: 2+2
Material: PMMA + PMMA
Part size(L×W×H): 252 x 158 x229mm
Part weight: 82g
Cycle time: 50s



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4+4 Stack Mold High-speed Molding Solution for Medical Round Container PACPro Thin-walled Packaging Product Molding Solution



How to improve production for thin-walled packaging product with large capacity under limited cost? YIZUMI PACPro thin-walled packaging product molding provides integrated solution for you. New-designed PAC420KP high-speed injection molding machine is equipped with 4+4 stack mold to satisfy high-speed production in need of multiple cavities and high productivity for thin-walled packaging container with large capacity. YIZUMI showcased the 1000ml medical round container solution during the YIZUMI online open week.

Aiming at the demand of thin-walled packaging products with large capacity, PAC420KP high-speed injection molding machine has upgraded its performances such as power, injection speed, precision control as well as energy consumption control, which further promoted its stability. Equipped with 4+4 stack mold, the machine is able to shape 8-cavity medical round

container in 8 second, doubling the efficiency of the conventional solution (four cavities in one shot). Furthermore, compared with other solutions on the market, YIZUMI 4+4 Stack Mold High-speed Molding Solution increases throughput with lower cost so makes our customers more competitive.

Value Advantages:

- ◆ High efficiency: 2.7s dry cycle time, production efficiency is increased by 75~85%;
- ◆ Energy-saving: lower energy consumption and higher production efficiency;
- ◆ Equipped with the newly PAC420KP machine with improved performance;



Part: Medical Round Bowl
Model: PAC420KP
Number of cavities: 4+4
Material: pp
Part volume: 1000ml
Part weight: 26g
Cycle time: 8s
Partner: SWITEK(Robot), Milliken (Raw material)



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Print Bicycle Frame SpaceA Industrial Pellet 3D Printing



Developed by Germany R&D Center, SpaceA Industrial Pellet 3D Printing debuted during the YIZUMI Online Open Week. The Additive Manufacturing Molding Solution printed 0.7kg bicycle frame in 100 minutes. Its production efficiency is about 28 times higher than the traditional FDM.

SpaceA industrial pellet 3D printing based on the YIZUMI screw extruder system, robot positing control system and modular print platform can achieve low-cost and fast additive manufacturing for large components, which is precise and efficient. Before, SpaceA has attended many international exhibitions such as German Fakuma, Formnext, and won the SPE Award for automotive innovation. So far, YIZUMI has been jointly developing related applications with customers in the automobile, medical, sports fields, etc.

Highlights:

- ◆ High efficiency: the maximum screw extrusion capacity is about 1.2kg/h, the production efficiency can be improved around 28 times than that of the traditional FDM technology;
- ◆ Intensity: higher product intensity and more stable dimension with the selection of fiber-reinforced materials;
- ◆ Cost: the cost of the granular raw material is dropped around 80% than that of the traditional FDM technology



Part: Bicycle Frame
Model: SpaceA
Material: Akro B3ICF30
Part size(LxWxH):620x150x200mm
Filling: 30%CF
Weight: 700g
Cycle time: 100min
Partner: Akro



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Connects German Technology

YIZUMI Launched WIT Water Injection Molding Solution

The “Connect China and Europe” project welcomes a new progress. YIZUMI collaborated with PME fluidtec, a German company, to launch the WIT Water Injection Molding Solution.

Water Injection Technology refers to: the injection molding machine injects liquid under high pressure into the product at the moment of injection completion to create a hydraulic cavity inside the product. After the completion of the molding, the fluid is discharged and a hollow is created. WIT reduces product weight, eliminates internal stress, and effectively lowers product's demand for clamping force. Compared with gas injection molding (GIM), WIT is more stable with better cooling effect. It renders cycle time saving to a certain extent and brings more benefits to products with thicker wall.

Based on the UN500D1 two-platen injection molding machine and PME fluidtec water-assisted machine, the WIT Water Injection Molding Solution shown on the Online Open Week could produce wheel composed of three parts. The injection molding machine completes one of the three parts of wheel hub and wheel each time. The wheel hub is completed with direct injection of PP with 50% glass fiber, the robot will extract the wheel hub and embed it into the wheel mold as the core for second injection with ordinary PP. A hollow is created in the wheel through water injection process.

Through water injection technology, the product does not have an overflow slot as excess plastic is pushed back into the barrel of injection molding machine for the next injection. Combined with the use of the hot runner, the entire production process causes no material waste and reduces the product stress effectively, resulting in better dimensional stability.

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Value Advantages:

- ◆ Dual-color embedded injection;
- ◆ Precision: product repeatability <3% ;
- ◆ Flash refluxing material pipe;
- ◆ Save 145g material every mold;

The WIT Water Injection Molding solution can be used for lightweight products in the automotive industry, such as thick-walled plastic decorative parts, automotive cooling water pipe, luggage-rack, seat etc., and can also be applied to the logistics industry such as handles of hand trucks and frames of turnover boxes, and product parts such as table legs in the furniture industry.



■ Smooth inner wall, uniform wall thickness is 5mm

Mold Order	Part Weight	Mold Order	Part Weight
①	536g	⑥	535g
②	534.5g	⑦	535.1g
③	536g	⑧	535.3g
④	534.6g	⑨	534.7g
⑤	534.4g	⑩	535.6g



Part: Wheel
Model: UN500D1
Number of cavities: 2
Material: PP、PP+50%GF
Part weight: 668g



Yi+ Intelligent Manufacturing Platform

A Digital Transformation Helper for Plastic Processing Enterprises

The hit of the COVID-19 pandemic has made digital transformation a trend in the injection molding industry. Focusing on the molding industry, Yi+ Intelligent Manufacturing Platform integrates technologies such as IOT, Cloud Computing, Dig Data and digital tools including equipment monitoring, efficiency statistic, fault Management, process parameter monitoring, tracing, and production management to effectively solve the issues of manufacture, quality, equipment, mold, etc. Besides, through the 5G+AR Digital Twin, Yi+ Intelligent Manufacturing Platform allows global customers to connect to the YIZUMI intelligent production unit.

Yi+ Intelligent Manufacturing Platform

Yi CMS (Condition Monitor System)

It is an easy-operating remote monitor system based on industrial internet platform. The users are able to acquire the information such as real-time equipment status, OEE, yield, alarm by terminal devices like mobile APP or computer. The technical difficulty can be solved, cost of construction and operation in intelligent manufacturing can be greatly reduced.



YiMES Intelligent Manufacturing Execution System

Based on industrial internet platform, YiMES provides professional tools such as order management, production management, energy management, mold management to satisfy SMEs' development requirements toward digitalization, intelligence, achieving cost reduction, quality improvement, and efficiency increase.



Yi+AR: Real-time Equipment Data Acquisition in 360-degree View

Yi+AR digital twin is a new customer experience APP based on the Yi+ YIZUMI Intelligent manufacturing platform. Global customers can connect the intelligent production unit built in YIZUMI workshop in real-time and learn about intelligent host equipment and surrounding automatic integration solutions.

3D and AR Technology Create a Virtual Workshop

Based on industrial internet real-time data collection technology, combined with 3D modeling and AR technology (for example, the AR technology independently developed by Guangdong Wizard Tech), the digital twin is able to show the entire equipment operation process in workshop through online 3D animation stimulation. It means users can clearly know about the operation process of automation equipment such as injection molding machine, robot, small-size central feeding system, peripheral. In addition, users can also remotely connect to the production unit online, which helps analyze and find out problems in production, equipment, process, assisting in production efficiency improvement.

Real-time operation data synchronization

Under the real-time mode of the digital twin, the operation situation of actual equipment in specific workshops can be shown on mobile devices. Adopting 5G gateway, users can connect industrial equipment to mobile devices by APP without any difficulty. They can monitor the real-time equipment parameters, including pressure, oil temperature, flow through mobile devices as well.

AR Scene Scanning and AR Image Identification

AR Scene Scanning: After scanning an actual scene by portable equipment at any time, a 1:1 3D model can be presented in front of the users through AR technology. What' s more, users are able to move, rotate, and zoom the model according to their needs.

AR Image Identification and Display Function: Through scanning the brochures, users can see the 3D model animation, which clearly shows the features of industrial equipment.

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YIZUMI: Implement Lean Manufacturing Method, Realize Assembly-line Production



In the injection molding machine industry, product quality depends not only on materials, configuration, most importantly depends on whether the companies have the capacity to manage and control during development as well as the batch production process.

YIZUMI introduced the lean manufacturing method in 2018 to achieve high-quality and rapid delivery. The improvement of the logistics system and the building of assembly line ensure delicacy management through the whole processing chain, from components arrival to product delivery. At present, YIZUMI injection molding machine below 320 tons has been put into flow-line production, which is able to produce a unit of injection molding machine in 20 minutes. The cycle time is significantly shortened while the product failure rate is obviously reduced.

Better quality, faster delivery, lower cost

With multiple components, complicated procedures, large floor space, high-quality requirements, and great dependence on personnel's skill levels, injection molding machine assembly is a systematic process, and it generates enormous challenge for enterprise operation when facing large orders.

YIZUMI has introduced the "continuous flow" of lean manufacturing method to the assembly procedure and built up clamping unit assembly line, electric box assembly line, injection unit assembly line as well as general assembly line. The entire production process would flow without stagnation and waiting which has shortened the delivery time, increased the product quality and output per unit.

Relying on assembly line production, the injection molding machine capacity below 320T of YIZUMI has grown by about 60% year on year in 2020 when the hardware resources and personnel did not change a lot. The transformation of assembly-line production mode has played a huge role in improving the overall operational efficiency of YIZUMI.

Above all, YIZUMI constantly pursuits better qualified rate of products in terms of quality management. In the past few years, the qualified rate of YIZUMI's components, including purchased parts and homemade parts has been steadily promoting, and the failure rate of the finished product for the customers has been continually decreased.



◆ Standardized operation, high-level skills of the employees

Assembly line production leads to more specialized, specific working procedures, the skills of every assembly specialist are gradually standardized.

YIZUMI promotes staff training and examination, paying equal attention to theories and practices. Employees' operating skills and assembly quality are significantly increased based on grading and certification.

◆ Traceability of the entire process

There are thousands of parts in a unit of injection molding machine. Any mistake caused by anyone or any process will be finally reflected in the machine. A form will record relevant information on every procedure to prevent errors and trace the problems.

Establish on-site management system, specify the responsible person to deal with the problems after they occurs. If the problems are not solved, a red sign will be presented to alarm and the next procedure could not be carried out either. This could help to supervise the responsible person to work in strict manner.

◆ Visible management

Visible Kanban management including material management Kanban, scheduling Kanban, takt time is adopted to clarify production schedule, efficiency, and quality data, ensuring real-time tracing, precise management of schedule, and quality.

◆ 20 minutes for one unit of injection molding machine

Set up general assembly lines of injection molding machines below 320T, suitable for mixed line production of injection molding machine ranging from 60T to 350T;

The average takt time is 20 minutes, cycle time has been sharply reduced;

Achieve fixed position of duties, fixed post for the materials, the on-site operating status can be improved fundamentally.



KESHUO: Intelligent Plant Solution

YIZUMI provides one-stop service, ranging from plant internal layout planning, production facilities, and peripherals to MES system.



On the shop floor of Foshan Keshuo Precision Injection Molding Co., Ltd. (hereinafter referred to as KESHUO), rows of injection molding machines almost exclusively from YIZUMI are rapidly producing products, while the manager is conducting production monitoring and order management.

That owes to the “cooperation workshop” based on the strategic agreement between KESHUO and YIZUMI for the first half of this year. Huang Wei, the General Manager of KESHUO was surprised by the present achievements and said will continue to cooperate with YIZUMI to improve the construction of the intelligent plant.

Tailor-made Turnkey Solution

KESHUO has been specializing in offering plastic parts for plastic encapsulated motors and DC motors since its inception in 2014. At present, its services have extended to the fields of air compressor, water pump, connector as well as plastic hardware. The company has its mold department, and all the molds are designed and manufactured by itself to ensure the high precision requirements of customers. Its main customers include some well-known enterprises such as Midea, Galanz, Welling, Luzhi.



■ Huang Wei, General Manager of Foshan Keshuo Precision Injection Molding Co., Ltd



■ Frame



■ Components



Due to park upgrading, KESHUO joins forces with YIZUMI this year to build a smart factory. YIZUMI provided turnkey solutions ranging from plant interior design to manufacturing facilities, peripherals, and the MES system. At present, 22 units of YIZUMI injection molding machines are planned for the new plant, including A5S series servo machines and FF series electric injection molding machines.

“YIZUMI team is extremely professional and cooperative no matter in site design or debugging.” Huang Wei said.

Today, the enterprise has realized 24-hour production. The plastic parts of encapsulated motors in greatest demand are produced by FF electric injection molding machine. Its super high injection speed along with the smart injection control system not only effectively improve the production efficiency, and increase the production efficiency by over 20%, which is cleaner and more energy-saving than the traditional hydraulic machine.

“This is what we expect from electric machines!” Huang Wei expressed that in the injection molding industry, the daily output determines their profit without compromising quality. The high precision and low energy consumption of electric machines are the main reason he considers.

They will continue investing in the future.

100% order traceability by YiMES

In the injection molding industry for more than ten years, Huang is open to new things.

“I am willing to invest anything that can create values for our enterprise. It is why we introduced YIZUMI electric molding machine and YiMES system.”

Previously, the largest challenge for KESHUO is order management. It’s difficult for the manager to trace the schedule and delivery time of every order. YIZUMI technical team from the intelligent interconnection department analyzed KESHUO workshop at the scene and provided solutions connecting to every production process. After Keshuo introduced the YiMES Intelligent Manufacturing Execution System developed by YIZUMI, the company not only ensured 100% order traceability in production but also realized 100% process monitoring as well as full-cycle monitoring. The full-cycle monitoring includes order preparation, mold, collaborative production in pre-production, quality management, defects collection in mid-production, and data report in post-production.

Nowadays, a series of information such as order status, testing condition, production

process, and qualified rate can be observed by managers through computers or mobile phones. Huang believed: “It can improve product quality as well as customers’ confidence in our quality management. Orders can be increased in this way.”

This is the first-phase fruit of KESHUO smart plant. Then, the next step will be to free workers from those repetitive tasks with peripherals such as automatic transfer, CDD vision inspector, and automatic packaging machine, for more valuable jobs.

YIZUMI team will keep perfecting the automatic solution and realize functions of energy monitoring, energy-saving reconstruction, human performance, etc. YIZUMI is devoted to achieving high customer requirements and ensuring the successful delivery of smart the plant solution.



Intelligent Plant Solution



MES

Customer's Preference! YIZUMI Prove a Hit at Marula



Situated in Durban, South Africa, Marula Plastics Company (hereinafter referred to as Marula) specializes in tailor-made plastic products. In the middle of 2019, Marula purchased three more YIZUMI injection molding machines, which have been installed in October of that year and been put into production. For over a year, the machines have been operating stably and were highly praised by the customer.

The newly purchased D1 series two-platen injection molding machine and A5 series high-end servo injection molding machine offer clamping force of 480T, 650T, 700T respectively. The YIZUMI D1 700-ton was the first two-platen injection molding machine sold in the South African market, which mainly produce crates for bread and milk, some housewares and shopping baskets. Lang, head of the enterprise said: “The productivity of YIZUMI’ s D1 700-ton injection molding machine is higher than that of previously used machines. Scrap rate is under 1.5% even with recycled material.”



Meanwhile, these three machines were ordered with YIZUMI robotic systems for part removal. Lang expressed that robotic system made a big difference in production, because robot is not only reducing the working intensity of operators but also show good stability.

Lang was so impressed with YIZUMI machine’ s performance, after-sales service and the local agent since purchasing the first YIZUMI injection molding machine in 2016. Therefore, YIZUMI has now become Marula preferred supplier for injection molding machines as well as auxiliary equipment. It is no wonder that Marula increased orders in purchasing YIZUMI machines.



So far, Marula’ s injection molding machines ranging from 60T-1100T are mainly used for producing commodity and household appliance processing and provide qualified products for customers in auto parts as well as recyclable industrial packaging industries.

YIZUMI’ s sales have increased annually in the South African market. “I base this business on service,” said Moore, YIZUMI’ s agent in South Africa. YIZUMI provides a number of solutions such as sophisticated car accessories, two-color components, cosmetic packaging, silicone molding, to meet customer needs in many ways.



YIZUMI Factory Outlet

New service standard for the industry

YIZUMI Factory Outlet (YFO), as a future-oriented global service strategy, ensures the fast response and high controllability of services. For customers, we not only guarantee their safe production, but reduce the equipment shutdown risk to a large extent so as to improve their productivity.

"From pre-sale consulting to onsite installment and commissioning, from after-sale tour-inspection to part delivery and customer training , each of us has the experience of more than 300 cases to enhance your confidence in our services." said an experienced YFO engineer.



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The worldwide part supply network ensures smooth, prompt and accurate part distribution

- China 35 part centers and warehouses
- Abroad 14 part centers in Indonesia, Malaysia, South Korea, Vietnam, Russia, Spain, France, Turkey, Israel, Poland, America, Iran, India and Brazil, etc.



Overseas service

Long-distance support: when there are complicated problems in the operation of machine, engineers of the headquarters will provide long-distance technological support for overseas agents or customers to solve the problems in time.

Pre-sales support: we have a team specialized in pre-sales technological support, and they will collect molding cases so as to provide solutions for overseas customers efficiently.

Communication: over 90% of our engineers can speak fluent English, which is conducive to solving customers' problems.



365/24	59	35,000	10	5,000m ²
The service hotline is available 24 hours a day, 7 days a week, and 365 days per year with over 100 maintenance experts on line all over the world.	The YFO covers 35 Chinese cities and 24 overseas places.	The YFO team has provided services for about 35,000 machines.	More than half of the YFO engineers have at least ten years' experience.	With a total area of 5,000 m ² , the spare part storage system covers 35 Chinese warehouses and 14 overseas part centers.

Six YFO Commitments



<p>Pre-sales support:</p> <p>1) customized solutions to machine selection 2) professional advice on plant layout 3) technology solutions before manufacturing</p>	<p>Fast distribution of spare parts</p> <p>1) The same-day delivery rate reaches 97% 2) There are more than 7,000 different spare parts in storage with a total value of over RMB 10,000,000. 3) The key spare parts are produced by Yizumi or imported and some can be used in the machine made in 2002. 4) Every quarter the Chinese headquarters will replenish the spare part warehouses of overseas agents so as to satisfy the needs of customers.</p>
<p>Focus on the improvement of customer satisfaction</p> <p>1) Promote fast response to reduce the machine shutdown risk to a large extent 2) Each service center will pay regular return visits to customers and conduct survey on customer satisfaction in order to understand their need promptly.</p>	<p>Preventive maintenance</p> <p>Onsite inspections are organized regularly and resident service will be provided in key markets and customers' to ensure prompt service.</p>
<p>High-standrad training and practice</p> <p>1) The service inspection and trainings of agents will be organized at least once a year. 2) Onsite commissioning and customer training service will be provided for Large machines (1400T and above)</p>	<p>Lifelong service</p> <p>The lifelong maintenance are guaranteed beside a 13 months' warranty on the whole system</p>

YIZUMI e-service

Delivering a real-time service system for its clients

Through YIZUMI e-service, you can have a full-day, online support, mobile and rapid remote repair and maintenance as well. Regardless of where you are, it can deliver a rapid, convenient, online after-sales service, ensuring the equipment to be maintained in the best condition for the long term.

Rapid

Reliable

Effective

Visual

Recordable

Can be evaluated

Cost effective

YIZUMI e-service can deliver the followings to you

Scanning for Repair

After-sales Engineer One-to-One Service

Maintenance Tips

Repair Enquiry

Customer Service Evaluation

After-sales engineer commits to a visit schedule

Mobile Operation: Smart Phone/Tablet/PC Multiplatform available.

Download the APP, enter equipment serial number /scan equipment QR code and the registration is completed.

IOS

Android