# **DIE CASTING**



Technology, products, process, service and brand.
Five dimensionalities to be a world-class molding equipment solution provider.

The YIZUMI Magazine for Customers

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#### Making YIZUMI NEXT<sup>2</sup>:

#### The Road to a 2-Platen Die Casting Machine

#### **Heated Market**

The competition in the new energy vehicle (NEV) industry has reached a fever pitch, with integrated die casting of automotive structural parts emerging as a pivotal battleground. This intense rivalry pushes upstream suppliers, particularly die casting machine manufacturers, to engage in fierce competition, driving continuous advancements in locking force, performance, and precision of die casting machines. However, the combination of equipment size shifts and the development of new processes, as well as the sometimes unpredictable demands caused by the shift from ICE (internal combustion engine) to EV (electric vehicle) technology, will pose a significant challenge to many die casting companies in the next few years. Yet, the large re-adjustment phase in the global die casting market lies immense opportunity for agile companies like YIZUMI.

01

#### **Two-Platen Machines: Prospects and Challenges** in Development

The prevalent die casting machines in China are mainly of the three-platen variety. The main difference between two-platen and three-platen die casting machines lies in their locking units. Specifically, two-platen machines include only a moveable platen and a fixed platen, in contrast to the three-platen machines, which have an additional back seat platen.

Compared with three-platen die casting machines, two-platen die casting machines have many unique technical advantages. According to Mr. Stefan Fritsche, Deputy General Manager and CSO of YIZUMI Die Casting Machine Division, a seasoned European expert in the die casting industry with 35 years of experience, "From a performance standpoint, two-platen die casting machines offer superior repeatability and production efficiency, more balanced locking

development (R&D) and production of two-platen — Richard Yan

force, and enhanced consistency and quality stability of die casting parts. They are particularly well-suited for manufacturing large thin-walled structural parts. Additionally, two-platen machines are more compact in length and weight, allowing for convenient and rapid adjustments to mold thickness, thereby conserving floor space and offering significant advantages in terms of material usage, maintenance costs, and energy conservation."

Despite these apparent benefits, the research and development (R&D) and production of two-platen die casting machines present numerous technical challenges. In an interview, Mr. Richard Yan, Chairman and CEO of YIZUMI, noted, "The origins of two-platen

die casting machine technology can be traced back to Europe, where industry leaders continue to dominate the key technologies. To extricate ourselves from this situation, technological accumulation and R&D are crucial goals for domestic die casting machine manufacturers, as well as a key focus for advancing the domestic die casting industry. Currently, many manufacturers face significant technical hurdles in mastering two-platen die casting machine technologies, with several challenges yet to be fully resolved. Even top-tier European machines have certain technical constraints, which have impeded the widespread adoption of two-platen die casting machines in China."



Richard Yan Chairman and CEO of YIZUMI





■ YIZUMI NEXT<sup>2</sup> 2-Platen Die Casting Machine R&D Team

#### Embracing Innovation to Achieve the Challenging but Right Path

The "two-platen configuration" marks a significant advancement in the die casting machine industry, posing a severe challenge to Chinese die casting companies to achieve groundbreaking progress. YIZUMI views this as a demanding yet right pursuit. Its journey into the R&D of two-platen die casting machines began as early as 2017. However, YIZUMI has consistently taken a cautious approach to product launches, resisting the urge to sacrifice quality or shorten the timeline merely to meet market deadlines.

"We are committed to investing additional time and resources to deliver a two-platen die casting machine of better quality and user experience. While this path is undoubtedly challenging, it is the right direction," asserted Mr. Stefan Fritsche. "Our vision is to build a machine that not only rivals, but surpasses the world's leading die casting machines by integrating European technological expertise with China's most cost-effective supply chain. This synergy enables us

to offer unparalleled value to our global customers."

The success of the LEAP series. developed by the Sino-Europe technology platform in 2021, has greatly bolstered YIZUMI's confidence. In recent years, YIZUMI has invested heavily in technological innovation initiatives, establishing its Global Innovation Center and Research Center for Advanced Processing Technologies (Germany), as well as an experienced international team. YIZUMI has also established a three-tier R&D innovation system to better leverage global wisdom, greatly enhancing its technological capabilities and strengthening its resolve to explore the realm of two-platen die casting machines.

Interestingly, YIZUMI named the new 2-platen die casting machine "NEXT2". Mr. Stefan Fritsche explained: "The word 'NEXT' means 'next', which symbolizes the company's firm pursuit of technological innovation and product upgrading, as well as its vision to lead the industry; while '2' (i.e. two times) represents the multiplication and comprehensive improvement of technology and performance, implying that this machine has achieved innovation and breakthrough in many aspects."



Stefan Fritsche
Deputy General Manager and
Chief Strategy Officer of YIZUMI
Die Casting Machine Division

Our vision is to build a machine that not only rivals, but surpasses the world's leading die casting machines by integrating European technological expertise with China's most cost-effective supply chain.

— Stefan Fritsch

#### Technological Innovations Exceeding the World's Top Die Casting Machines

As a next-generation machine, the NEXT<sup>2</sup> series 2-platen die casting machine introduces several cuttina -edge die casting technologies to the industry. It is also the result of the experienced Sino-European technical team with a worldwide perspective. Proven core technologies, such as the Yi-Cast injection unit, which have been successful in the LEAP series machines, will also be utilized in the NEXT<sup>2</sup> series 2-platen die casting machines. Furthermore, based on the ORCA control system of the LEAP series machines, our technical team has developed the new Dolphin intelligent and easy-to-use control system to better suit the new NEXT2 series machines.

Additionally, the NEXT<sup>2</sup> series machine incorporates numerous technical patents independently developed by YIZUMI. These include independent centrifugal pump station technology, variable speed control of the centrifugal pump to ensure the main pump's oil port pressure, and features to minimize air suction and cavitation. It also offers independent hydraulic oil functions, such as preheating, cooling, filtering, and an oil replenishment function for the tightening system, ensuring oil cleanliness.

The locking unit of the NEXT<sup>2</sup> series machine has received both Chinese and international patents. The innovative RAPTOR multi-cylinder locking unit utilizes several cylinders to offer a more even locking force.

The moveable platen structure's high rigidity allows the machine to maintain highest stability and reduce deviation during operation, which is critical for ensuring the precision and quality required of the die casting parts.

"We believe that these advanced technologies will provide us with four key advantages: precision, agility, smartness, and economy, all of which will enable the NEXT<sup>2</sup> series machine to better empower our customers," said Ethan Han, the Product Manager for Two-Platen Machines of YIZUMI Die Casting Machine Division.

- The innovative RAPTOR multi-cylinder clamping system, which has both Chinese and international patents, combines plunger and piston cylinders;
- The piston cylinders provide extra power for mold opening (especially when the parts with deeper cavities cause increased force during mold opening);
- By providing more precise control, it can effectively avoid issues like vibration during mold opening;
- Smaller floor space lowers maintenance costs.



#### Embracing Challenges to Engage Customers Through Innovation

Mr. Richard Yan deeply understands that core technologies determine corporate competitiveness at any time. He noted, "It is the accumulation of these core technologies that enables century-old enterprises to withstand the challenges of fierce market competition. At YIZUMI, we remain steadfast in our commitment to technological R&D, confronting challenges head on and fostering close relationships with our customers through technical innovation."

The NEXT<sup>2</sup> series 2-platen die casting machine is meticulously crafted to meet the global demand for higher precision, energy efficiency, and

performance in die casting. It will assist numerous automotive manufacturers in improving their production processes of new energy vehicles.

Guided by evolving market needs, YIZUMI adeptly harnesses global resources and integrates the strengths of its Sino-European technical platform with cutting-edge die casting innovations. This synergy enables YIZUMI to offer higher-quality services and more valuable metal molding solutions, thereby elevating its contribution to global customers.

**NE**XT<sup>2</sup>





 $\hbox{$^*$ The data are obtained from YIZUMI's I aboratory test, and the final interpretation right belongs to YIZUMI.}\\$ 

#### Hello, NEXT<sup>2</sup> Series 2-Platen Die Casting Machine

#### NEXT<sup>2</sup>: Pioneering a New Era of 2-Platen Die Casting Machines Globally

In the realm of die casting machine manufacturing, every technological innovation signals a shift in the market and shapes the future direction of the industry.

On September 25, YIZUMI introduced the NEXT² series 2-platen die casting machine, a groundbreaking product, showcasing its keen market insight and extensive technical expertise. The launch of this machine not only marks another significant leap forward for YIZUMI in die casting machine manufacturing but also sets a new milestone in the development of global die casting technologies.

#### Market Insight: Targeting the Future Global Market

YIZUMI aims to secure a position among the top three in the global die casting machine market by offering customers worldwide optimal cost solutions. It focuses not only on current market demands but also on future developments to achieve this goal. Meanwhile, it is committed to innovating technologies, exploring global markets, focusing on customer needs across diverse industries, and developing application technologies with competitive edges.

The rapid growth of the new energy vehicle industry, particularly the demand for lightweight and highstrength materials in electric vehicles, presents unparalleled opportunities for the die casting industry. YIZUMI keeps pace with market demands by introducing the NEXT2 series 2-platen die casting machine, aiming to

capitalize on this opportunity and provide customers with more efficient and environment-friendly solutions.

In this regard, Mr. Richard Yan, Chairman and CEO of YIZUMI, stated, "YIZUMI will continue to strive to offer customers a competitive Overall Equipment Effectiveness (OEE). We are confident that NEXT2 models will set a new trend in the global die casting machine market through its technological innovation and superior product performance."

#### Next-Generation Leap: Ushering in the New Era of Die Casting

The name of the NEXT<sup>2</sup> series 2-platen die casting machine holds profound significance. The term "NEXT" symbolizes the company's unwavering commitment to technological innovation and product enhancement, alongside its ambitious goal of leading industry development. The "2" (denoting the power of 2) represents not only the essence of 2-platen machinery but also signifies dual multiplication and holistic advancement in technology and performance, suggesting groundbreaking innovations and breakthroughs in various aspects.

Mr. Richard Yan emphasized, "While other 2-platen machines may be considered 'current-generation' in today's market, YIZUMI's NEXT<sup>2</sup> series models undoubtedly represents the forefront of 'next-generation machines.' It redefines the benchmark for 2-platen die casting

machines and showcases the distinctive allure of next-generation technology."

The NEXT<sup>2</sup> series model advances technological innovation, superior performance, pioneering design, and value creation—testifying to YIZUMI's deep expertise in die casting technology as well as its unique foresight and exceptional innovation capabilities.

As a trailblazer of "next-generation machines", the NEXT<sup>2</sup> series model stands out in the new era of the die casting industry, signifying its role in ushering the industry into a new chapter and facilitating a monumental leap in die casting technology.



#### Technological Breakthrough: Shattering Technical Barriers With Multiple Patents

YIZUMI's groundbreaking advancement in die casting machine was not achieved overnight. As early as 2017, the company embarked on a R&D journey focused on 2-platen die casting machines. After years of relentless dedication and sustained investment, YIZUMI has achieved a significant technological breakthrough.

The NEXT<sup>2</sup> series 2-platen die casting machine is a high-quality product developed with LEAP technology and integrated with China-Europe advanced technologies. It incorporates several patented technologies, breaking the technical barriers and offering more competitive solutions for customers worldwide. To date, YIZUMI has applied for and received multiple Chinese and international patents, cementing its prominent position in the global market.

The NEXT² series models are set to feature locking forces ranging from 18,000 to 200,000kN, targeting high-end automotive parts manufacturers and precision casting in the electronics and household appliance sectors. YIZUMI's proprietary RAPTOR multi-cylinder locking unit, Dolphin intelligent and easy-to-use control system, and Yi-Cast high-speed injection unit all contribute to the models' core competitiveness, ensuring product precision and quality while significantly enhancing production efficiency.

#### Appearance Innovation: Reshaping the Industrial Aesthetic Benchmark

The YIZUMI NEXT<sup>2</sup> series 2-platen die casting machine sets a new standard for the aesthetics of industrial machines with its innovative exterior design, ergonomic features, and 24-inch screen interface.

The NEXT<sup>2</sup> series model merges sleek lines with modern industrial design elements to achieve a minimalist yet functional appearance. Focusing on ergonomics, the design team has thoroughly analyzed operators' habits, optimizing the control panel's height and angle to accommodate users of various heights comfortably. Additionally, the use of large buttons and touch screens enhances operational convenience and precision.

The introduction of the large screen not only offers a clear interface but also streamlines operation with intuitive icons and a user-friendly menu structure, making tasks more intuitive and efficient. The design philosophy of the NEXT<sup>2</sup> series model greatly combines industrial practicality with artistic aesthetics, delivering a fresh operating experience and establishing a new benchmark in industrial design.



Simplicity meets Excellence



The data are obtained from VI7LIMI's Laboratory test, and the final interpretation right helpings to VI7LIMI

#### Value Advantages: Four Core Advantages Empower Global Customers

YIZUMI is committed to developing a world-class 2-platen die casting machine that seamlessly integrates advanced European technology with China's efficient cost supply chain, resulting in unmatched quality.

The four core strengths of the NEXT<sup>2</sup> series 2-platen die casting machine are particularly noteworthy:

#### 1. Agile

The machine's modular design efficiently meets the diverse needs of customers. Whether catering to the requirements of large auto part manufacturers or precision casting producers in the electronics and household appliances industries, it fulfills the customized demands of various customers.

# YIZUMI NE XT 2

NE)XT2

#### 3. Precise

The patented RAPTOR multi-cylinder locking unit ensures a highly balanced locking force with a deviation of less than 1%. The unique Yi-Cast high-speed injection technology improves injection performance by up to 49%. These innovative technologies greatly improve product precision and quality, enabling customers to produce more exceptional and reliable outputs.

#### 2. Smart

With the Dolphin intelligent and easy-to-use control system, the machine achieves exceptional real-time monitoring and automatic optimization capabilities. This advancement significantly enhances production efficiency and product quality, offering customers extreme convenience and efficiency.

#### \_

The two-platen structural design reduces the footprint by 10% and overall energy consumption by 50%. This provides substantial economic and environmental benefits to customers, making the machine a more environmentally friendly and sustainable model in die casting machines. Furthermore, the machine's energy consumption level can reach up to level one, highlighting its exceptional capability and leading position in the field of energy efficiency management.

(Note: The primary energy consumption evaluation standard is based on the die casting machine parameters set in The Test Method of Energy Consumption for Die Casting Machines (GB/T 39962-2021) and the energy consumption grades I to V determined in Die Casting Machine Energy Efficiency Rating and Evaluation Method (GB/T 39962-2021)

The combination of these core strengths makes the NEXT<sup>2</sup> series 2-platen die casting machine uniquely distinctive in the stiff competition. According to Mr. Ethan Han, Product Manager for Two-Platen Die Casting Machine in the Product & Marketing Management Department of YIZUMI Die Casting Machine Division, "The machine is destined to provide customers with an unprecedented value experience due to its unique structural design and the four core advantages showcased by technological innovation."

Broad Prospects: Leading the Industrial
Development and Co-creating Better Future

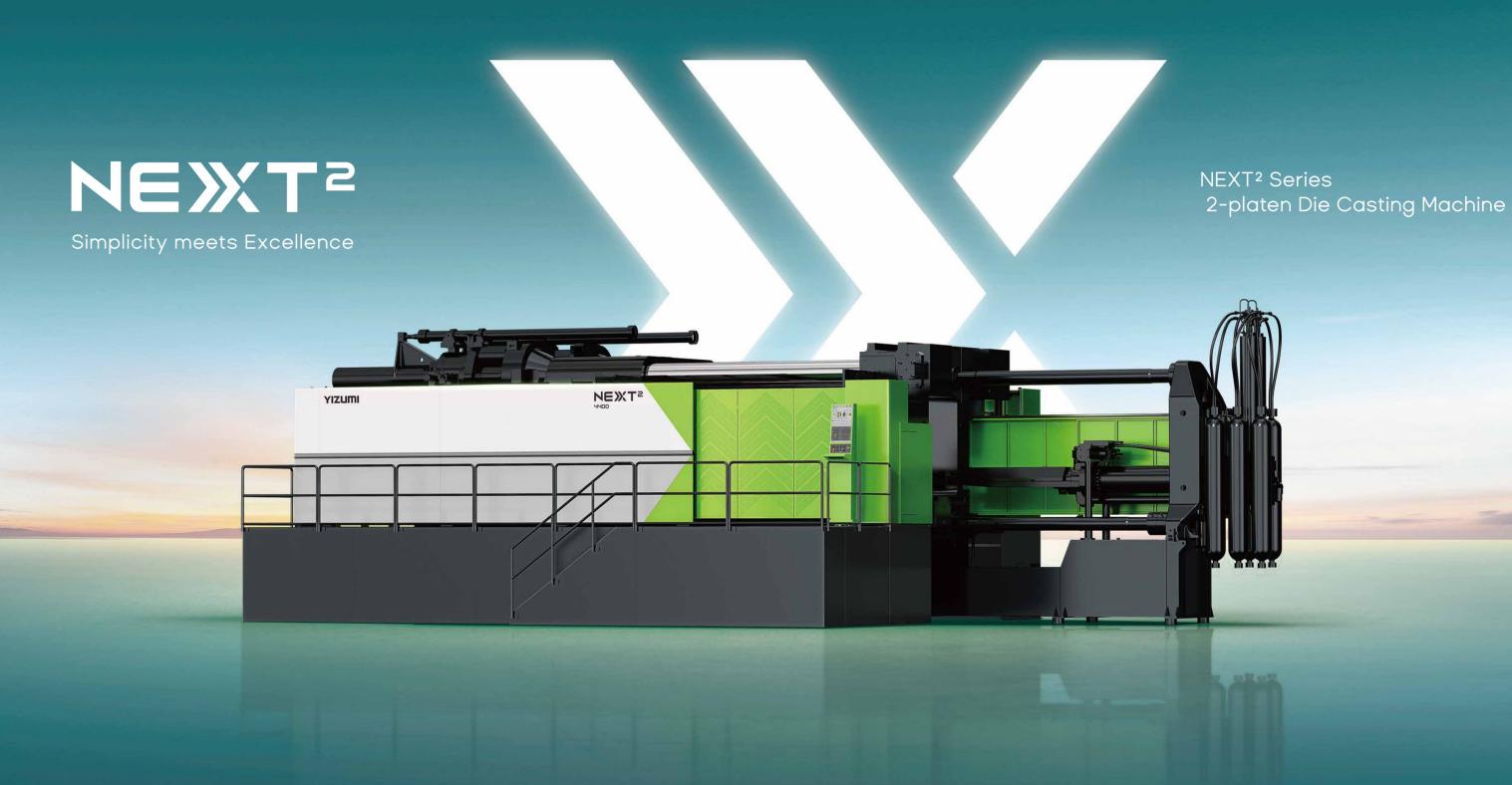
With the prosperity of the global manufacturing industry, demand for die casting parts has surged in industries such as automotive, telecommunications, power, and automation. YIZUMI's innovative products not only meet the automotive industry's needs for high-precision and high-strength materials, but also facilitate the development of electric vehicles and autonomous driving technology. They also satisfy the demanding requirements for die casting parts in the telecommunications and power industries.

Mr. Richard Yan remarked, "The two-platen die casting machine holds huge market potential, similar to the transformation that occurred in the injection molding machine industry a decade ago. At that time, the core technologies were dominated by a few top manufacturers. However, after more than a decade of diligent efforts, more and more manufacturers have achieved technological breakthroughs, progressing from initially following to running in parallel and ultimately leading."

In the future, the NEXT² series 2-platen die casting machine will adhere to the tagline of "Simplicity meets Excellence" to promote technological innovation and provide customers with efficient, intelligent and eco-friendly die casting solutions. YIZUMI looks forward to exploring new frontiers in die casting technology with global partners and creating a better future for the manufacturing industry.

 $<sup>\</sup>hbox{$^*$ The data are obtained from YIZUMI's I aboratory test, and the final interpretation right belongs to YIZUMI.}\\$ 

### **YIZUMI**



**RAPTOR** Multi-Cylinder Locking Unit

**Dolphin**Intelligent and Easy-to-Use Control System

Yi-Cast High-Speed Injection Unit

#### YIZUMI HALF-YEAR REPORT 2024

On August 23 the release of the YIZUMI half-year Report 2024 highlights strategic progress in customer acquisition and market positioning "as well as product technology innovation and operational efficiency resulting" in 20.82% revenue increase to 2.37 billion CNY.

Stock code: **300415** 

**Financial Performance** 

Unit:CNY ■ Operating Revenue 2.37 Billion YoY Growth 20.82% YoY Growth ■ Net Profit Attributable to Shareholders of the Company 19.04% 299 Million 2023 H1 2024 H1 Cash Flow from Operations YoY Growth 174<sub>Million</sub>

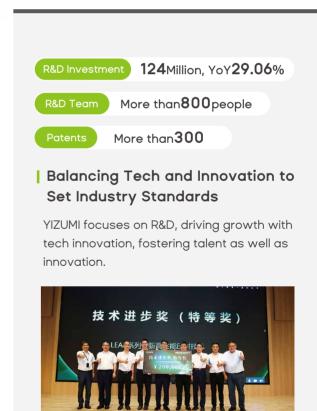
02\_ **Main Business** 

Unit:CNY Revenue: 1.708Billion 16.29% 🕈 Injection Molding Machines Revenue: 417<sub>Million</sub> 35.30% Die Casting Machines Revenue: 96.39 Million 22.55% 🕈

03\_

**R&D Boosts** Innovation

Unit:CNY



04\_

# Strategic Products Enhance Customer Value

YIZUMI drives innovation, targeting global industry needs with competitive technologies and solutions, advancing high-end, intelligent, and sustainable products to consistently add value for customers.

YIZUMI Test and
Application Center
has passed CNAS
accreditation.



YIZUMI collaborates with Sinyuan ZM on the development of the 5000T Thixomolding machine.



The assembly flow-line for medium and small die casting machines is put into operation.



05\_

#### **Expanding our Global Footprint**

YIZUMI supports its customers worldwide.

In the first half of 2024, YIZUMI targeted strategic advancements and global expansion.

In future, we will fortify our market presence and sales network while maintaining a competitive edge in technology and product quality in China.

Internationally we will expand into strategic markets and grow our dealer network which now covers over 70 key countries including Thailand, Mexico and Türkiye.

Tech Helps Nature
Driving Green Industry Growth

Going forward, YIZUMI is dedicated to enhancing core strength and governance around strategic customer themes as well as product and operational upgrades to support market stability and confidence.





#### YIZUMI Offers Million Yuan Rewards to Innovative Technical Teams

On July 18-19, YIZUMI launched its first Science & Technology Festival, awarding over a million Yuan to teams and individuals who have made important contributions. This action not only displays YIZUMI's focus on technological innovation, but also reflects the company's commitment to its strategic development that includes both soft and hard power.

Mr. Richard Yan, Chairman and CEO of YIZUMI, stated at the event that innovation includes technological innovation, talent cultivation and growth.

It requires long-term commitment, patience and a high regard for talent. The big rewards are a powerful interpretation of the company's engineer culture and technology-driven philosophy. YIZUMI knows that talent is the source of innovation and the most important resource for business development.



to achieve more and more innovative projects and results, and has made breakthroughs in multiple application fields. Such as the 8500T ultra-large injection molding machine, the LEAP9000 die casting machine, the UN3200MG II Thixomolding machine and other advanced high-end equipment that competes with international brands.

This corporate culture inspires YIZUMI

These projects and results not only involve traditional technical fields like software development and hardware manufacturing, but also involve product design, process optimization, and other innovation areas. They are successfully applied in actual manufacturing, significantly increasing market competitiveness and market share while also establishing a strong technological advantage/edge for YIZUMI.

YIZUMI has set the precedent in the industry by investing over a million Yuan to honor its R&D teams, which will surely boost its innovation vitality and create a better innovation environment, propelling the industry's technological progress and development

In addition to the million-dollar rewards, YIZUMI has implemented a series of practical measures, including establishing high R&D bonuses, launching the Excellent Engineer Training Program, expanding career development opportunities for outstanding technical personnel, and providing a superior R&D environment and resource support. All of these actions certainly offer solid guarantees for the technical team's innovative efforts.





#### YIZUMI Science & Technology Festival

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#### Encouraging Innovation and Tolerating Failure Million Yuan Rewards to Innovative Technical Teams

In recent years, YIZUMI has been continuously investing on four areas: technological innovation system, core technology research, talent cultivation, and industry influence. It has also actively promoted a corporate culture that encourages innovation and tolerates failure, allowing engineers to freely explore new technologies and develop new projects.



The data are obtained from YIZUMI's I aboratory test, and the final interpretation right belongs to YIZUMI.

#### Over 400 Technology Patents Breaking Through the Technical Bottlenecks

Several outstanding innovative results and technologies were highlighted at the festival. The worth mentioning one is the new high-performance injection technology of the LEAP series that won the grand award, which is a high praise for the innovation ability of the technical team. The LEAP series encompasses specialized servo valve technology and injection structure technology with independently-developed injection speed and pressure control algorithms, creating a technical gap for the company.

This technological innovation features a new low center of gravity injection unit that not only overcomes the technical bottlenecks of traditional die casting machines in ultra-large structural parts and complex thin-walled parts, but also provides more advanced production solutions to industry customers, allowing them to better control costs and improve efficiency. All of these benefits are the results of YIZUMI's support of technological innovation.

YIZUMI is well aware that these benefits are tremendous and immeasurable. As a result, it has always regarded technological innovation as a crucial lifeline for corporate development. It integrates both soft ware and hard ware and invests more than 200 million Yuan in R&D every year. As of December 2023, it held over 400 technology patents in injection molding, die casting, rubber injection molding, robot automation, 3D printing, digital factories, Thixomolding, and other fields, placing it among the top in the global industry. These figures not only show the company's focus on technological innovation, but also highlight its great potential in future market competition.

At the same time, YIZUMI has built a three-tier R&D innovation system of "the Global Innovation Center to Technical Centers of the Business Divisions to Technical Departments" to better connect with advanced global technologies. It concludes 174 core & key technologies, sets the Technology Roadmap 1.0, prioritizing on Premiumization, Intelligentization & Environment friendly technology, making a clear plan for the company's future product and technology development. Furthermore, employs many global talents to develop new technologies, processes, and materials, allowing the company to better serve worldwide customers.

#### Industry Collaborations Improving Technological Innovation Capability

YIZUMI values exchanges and collaborations with the industry with an open and win-win attitude. In recent years, it has actively engaged in diverse technology forums, seminars, and exhibitions to discuss and explore cutting-edge technologies with industry experts, scholars, and leading companies. It constantly learns the latest technology dynamics and development trend of the industry through different exchanges and collaborations, providing solid support for the company's technological innovation.

For example, YIZUMI has formed a non-binding "Integrated Die Casting" Industrial Chain Collaborative Innovation Alliance with over ten companies, universities, and research institutes, including FAW, Changan, Baosteel, and Sciveda Machinery, to take the lead in integrated die casting technology.

Through the alliance, YIZUMI strengthens the integration of all resources, promotes scientific innovation collaboration in the industry, unifies mold and process design, evolves into an industrial chain cluster, and finally quickly provides customers with turnkey solutions, promoting the overall development of the integrated die casting industry and the industrial applications.

This open and cooperative attitude has allowed YIZUMI to maintain its technological innovation leadership and set a positive example in the industry, earning the trust and support from more partners and customers.

#### Brief Summary

YIZUMI's effort to organize a science & technology festival and invest millions of Yuan to honor the technical team consolidates its engineer culture, and effectively promotes its technological innovation strategy. In recent years, YIZUMI has achieved great breakthroughs in technological research and innovation. In the future, YIZUMI will stick to the tagline "Think Tech Forward" and develop with technological innovation to consistently promote company progress and sustained industry development.

# YIZUMI Science Festival

Technology











 $<sup>^</sup>st$  The data are obtained from YIZUMI's I aboratory test, and the final interpretation right belongs to YIZUMI.

#### **CCTV Unveils New Feature of Automobile**

Manufacturing: YIZUMI LEAP7000 Boosts Changan Auto's Smart Production

On July 26, China Central Television News Channel's program "Live News" aired a special report titled "Inside the Whole Process of Intelligent Vehicle Manufacturing: Empowering New Quality Productive Forces with Digital and Intelligent Strength." The report delved deeply into the production line of Changan Auto, unveiling the secrets behind its industrial growth. A key highlight of this report was the YIZUMI LEAP7000 ultra-large die casting machine, which plays a crucial role in Changan Auto's intelligent production processes.

According to the report, the YIZUMI LEAP7000 ultra-large die casting machine, with its high-performance injection technology, can cast multiple automotive parts simultaneously, completing the production of the front

compartment and rear floor in just 60 seconds. Compared with the traditional process, this innovative approach reduces the number of solder joints by over 1,500 and decreases the vehicle's body weight by more than 30%, significantly enhancing production efficiency and product quality.









As a key partner of Changan Auto, YIZUMI offers robust support for Changan Auto's intelligent production with its integrated die casting machines. This collaboration not only demonstrates YIZUMI's prowess in technological innovation and product research and development (R&D) but also advances the high-quality development of China's manufacturing industry.

Looking forward, YIZUMI will remain committed to technological innovation and product R&D, delivering intelligent and efficient solutions across various industries. Meanwhile, YIZUMI will sustain its close partnerships with leading automakers like Changan Auto to jointly explore new segments in automotive manufacturing, ultimately providing customers with higher quality and smarter automotive products.

 $\hbox{$^*$ The data are obtained from YIZUMI's I aboratory test, and the final interpretation right belongs to YIZUMI.}\\$ 

#### Dr. Zhou Jun

# Committed to Innovation, Aiming to Be a Leading Global Forming Equipment Company

In the realm of global forming equipment, YIZUMI is steadily establishing its place among the world's leading enterprises.

On September 25, the launch of the NEXT<sup>2</sup> series 2-platen die casting machine will make a significant impact on the industry, introducing the "next generation" of die casting machinery to the world through this exemplary innovation.

This groundbreaking machine sets new industry standards for 2-platen die casting machines, offering unmatched technological advancements, exceptional performance, and substantial value creation.

Reflecting on this achievement, Dr. Zhou Jun, Deputy Managing Director and CTO of YIZUMI, and General Manager of YIZUMI Die Casting Machine Division, stated, "We firmly believe that through relentless pursuit and thorough exploration of technology, we can position ourselves at the pinnacle of the global enterprise echelon and guide the industry's future direction."

#### Taking Innovation as the Wing, Soaring to a New Height in Global Manufacturing Industry

Currently, a new wave of scientific and technological revolution, coupled with industrial transformation, is deepening, with technological innovation entering an unprecedented period of dynamism. Concurrently, the world is undergoing seismic changes not seen in a century. The realm of high technology has emerged as the forefront and principal arena of international competition.

Innovation and operational efficiency will undoubtedly become the pivotal momentum for future development.

Riding this global tech tidal wave, YIZUMI Die Casting Machine Division keeps pace with the times, proactively championing technological advancement concepts that are energy-efficient, eco-friendly, efficient, economical, and user-friendly, showcasing a visionary strategic perspective and market positioning.

In 2022, YIZUMI took a strategic step forward by establishing the Global Innovation Center, creating an initial three-tier technological development system, launching the IPD2.0 product R&D process optimization, enhancing the technology R&D management, and consistently presenting its technology roadmap. Over two years of evolution, YIZUMI's technological innovation ecosystem has progressively taken shape, marked by a steady stream of technological achievements.

Furthermore, YIZUMI Die Casting Machine Division has steadfastly pursued the development goals of "high-end orientation, digital intelligence, and greening," continually achieving breakthroughs through ongoing technological innovation and product upgrade. Notably, the introduction of new products like the LEAP series high-end intelligent die casting machines, NEXT<sup>2</sup> series 2-platen die casting machines, and MG series Thixomolding machines consistently meets diverse market demands, reinforcing YIZUMI's leading position in the industry.

At the same time, YIZUMI recognizes that nurturing talent and team development are the fountains of continuous innovation for any company. Consequently, it has attracted and retained groups of elites, highly skilled professionals by establishing a robust talent development system and incentive schemes, ensuring a solid foundation for its sustainable growth.



■ YIZUMI Technical Committee



Dr. Zhou Jun emphasized, "Innovation-driven development is not only the key to building a world-class enterprise at YIZUMI but also the best way for us to keep pace with the times and navigate the industry's future. Moving forward, we are committed to increasing our investment in technological innovation, delving deeper into technology research and talent development, and continuously enhancing our core competitiveness and market influence."

#### Adjusting the Product Structure and Striving to Expand Market Share

"Think Tech Forward" is not just the tagline for YIZUMI's brand evolution. It also serves as the driving force behind the division's relentless pursuit of overcoming technical challenges and fostering independent innovation.

Dr. Zhou Jun explained that in terms of product strategy realignment, we have meticulously focused on multiple areas, including new product R&D, efficiency enhancement, quality control, and top-tier core technologies. By adopting a lean production management approach, building a preventative quality governance system, and consistently increasing investment in technological research

and development, YIZUMI has strengthened and expanded its market competitive edge and product share.

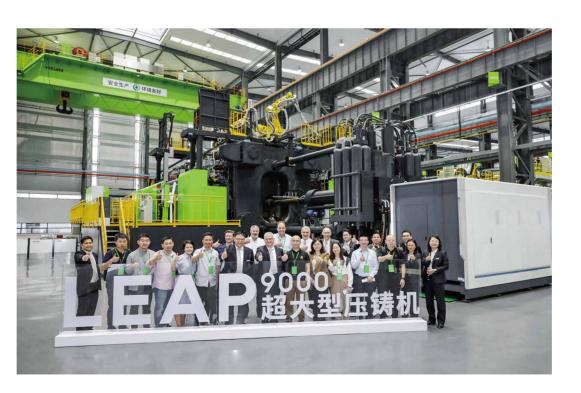
In the field of metal molding, YIZUMI has an extensive collection of application examples and exceptional expertise, establishing strong cooperative relationships with numerous globally well-known enterprises. Additionally, YIZUMI focuses on technological innovation and industry trends in high-end equipment for the intelligent molding of light alloy materials. By working with key technology partners and customers in Europe and worldwide, YIZUMI aims to innovate and drive continuous advancement and growth in the sector

Currently, the rapid rise of new energy vehicles (NEVs) and the widespread adoption of integrated die casting technology are causing significant shifts in market dynamics. As the market competition heats up, clients are increasingly prioritizing the optimal configuration of the entire production chain. This trend is particularly evident with the growing size of castings and the complexity of process sequences, which demand enhanced capabilities from die casting machinery.



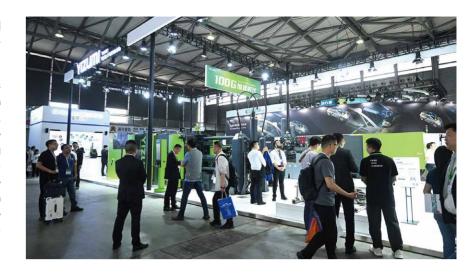
As a market-oriented enterprise, YIZUMI closely aligns with market demands, continuously innovating to meet evolving needs. The NEXT<sup>2</sup> series 2-platen die casting machine is not only a forward-looking result to the die casting market but also a testament to YIZUMI's commitment to providing greater value for its customers.

"We can offer our customers a wide range of options, from the LEAP series and H II series 3-platen machines to the 2-platen die casting machines, effectively meeting complex and varied production requirements," said Dr. Zhou Jun. He further explained that the 2-platen die casting machine, with its compact design, enhanced stability, improved efficiency, and simplified maintenance, will increasingly become a key player in the large die casting machine market, securing its place as a preferred choice among customers.



#### Embracing the Industry Trend and Deploying Global Development Strategy

Currently, the global NEV market is booming, with an 18% penetration rate that continues to rise steadily. The three core markets of China, the United States, and Europe are leading the charge in the widespread adoption of new energy vehicles. At the same time, emerging markets such as Thailand, India, and Indonesia are demonstrating robust growth potential.



Amid the rapid expansion of the global NEV market, Chinese companies have keenly seized the opportunities of this era, accelerating their strategic transformation from simply "exporting" to "going global". This shift is particularly evident in the automobile industry and its related upstream and downstream industrial chains, where Chinese companies are diligently working to expand their brand influence and establish a presence in the global market.

YIZUMI, a leading equipment provider for the automotive sector, is aligning with this trend by actively participating in the global competition. It is committed to assembling an international professional team composed of global talents. These experts bring technical expertise that extends beyond China and Europe, embodying global knowledge.

Dr. Zhou Jun stated, "Currently, YIZUMI is experiencing an increase in the proportion of foreign experts within its ranks. They hold key positions at our headquarters in China, and in Germany, the United States, India, and other

countries, performing essential tasks such as high-end research and development, management, sales,

YIZUMI is a leader in the globalization layout. Domestically, it has upgraded its die casting capabilities in its factories in Gaoli and Wusha, Shunde. On the international front, YIZUMI has built a production base and service center in India, an R&D center in Germany, and subsidiaries in North America, Mexico, Vietnam, Thailand, Türkiye, and other regions, crafting a global industrial footprint.

YIZUMI is dedicated to creating greater value for the global manufacturing industry by exploring key overseas markets and promoting the growth of its customers and market segments. At the same time, it is actively transitioning from traditional manufacturing to Industry 4.0 by advancing toward a smart and lighthouse factory. This initiative contributes valuable insights and support to the rapid development of the global NEV market.

#### **Christoph Wernz:**

# Elevating YIZUMI's Die Casting Machines to New Heights

In the world of engineering and die casting, Christoph Wernz stands as a beacon of expertise and profession. With a career spanning over 30 years, he has carved a path through the intricate landscape of machine tool development, supply chain management, and manufacturing excellence. His story is one of passion, dedication, and the pursuit of quality—a story that is deeply intertwined with the growth and success of YIZUMI.

#### A Journey of Growth and Discovery

Christoph's journey began with a master's degree in Engineering from Germany, swiftly transitioning into a research role at the prestigious University of Stuttgart. His early fascination with the dynamic behavior of machine tools laid the groundwork for a career that would see him rise through the ranks of several international machine tool companies. However, it was his tenure in China, establishing a machine tool factory from the ground up, that would prove to be a defining moment in his career.



Christoph Wernz

Deputy General Manager and Chief Quality Officer of YIZUMI Die Casting Machine Division

"The job I liked the most in this career was in 2013-2017, building up a machine tool factory on the green field in Jiangsu province, China," he reminisces. This period not only honed his skills but also ignited a deep appreciation for the challenges and rewards of die casting machines, which he describes as producing "the raw materials, which later machine tools process for finished parts."

#### Innovation and Quality: The YIZUMI Way

At YIZUMI, Christoph has been instrumental in implementing innovative practices and embracing new technologies in quality control of die casting machines. The company focuses on machine quality through rigorous incoming and outgoing inspections, with an aim to develop

towards total quality control by adding more quality gates and collecting data for root cause analysis and preventive action.

YIZUMI's die casting machines are benchmarked against world-class brands to ensure high delivery quality and reliability. Christoph emphasizes the importance of constant improvement, driven by trust. "Because business is based on trust and on the international market, you need to perform on the same level or even better as the market leaders in order to gain market shares," he asserts.

# Embracing Digital Transformation and Environmental Management

Christoph's vision extends beyond traditional manufacturing practices. He champions the digital transforma-

tion of production lines, utilizing statistical methods to evaluate supplier performance and implementing flow lines for efficient production. "Our small and medium sized machines are produced on a flow line, which makes it easy to implement internal quality gates, to collect and analyze data, and to continuously improve the quality."





At the same time, environmental sustainability becomes a key issue in the industry. YIZUMI gives great focus on environmentally friendly assembly. The Chinese government continues to tighten legal restrictions on waste collection and greenhouse gas emissions. For environmental management, he speaks of YIZUMI's efforts, "For energy consumption, we have almost reached the carbon neutral level in our factory, because on the roofs, PV-cells produce enough electricity over the year."

#### Navigating Cultural Differences and Leadership Philosophy

In global manufacturing industry, leadership is not just about managing tasks—it's about managing people. For Christoph Wernz, this means bridging cultural gaps and fostering an environment that thrives on collaboration and mutual respect. His leadership philosophy is deeply rooted in the recognition of cultural diversity. "No doubt, there are cultural differences. Some make my job even easier, like the working attitude." he acknowledges. One of the cultural aspects that Christoph particularly



■ Assembly Line for Small and Medium-sized Die Casting Machines

appreciates is the work ethic he has observed in his Chinese colleagues. "The people here are hardworking," he says. "If extra effort is required to keep the delivery promise to a customer, people will work overtime, even on the weekend. This attitude is a major key to why we are fast in China."

Christoph will also face challenges, one of which is defining the process in order to achieve the required quality. But He sees every challenge as an opportunity for learning and growth.

"It is allowed to make mistakes," he asserts. "But we need to discuss them openly and avoid them the next time for constantly and fast improvement"

#### Mentoring for the Future: to YIZUMI's Young Engineers

From a R&D manager at EMAG in Germany to the Deputy General Manager in YIZUMI Die Casting Machine Division, Christoph's career is a tapestry of pivotal moments and successes. He is not just a leader; he is a mentor for the young engineers at YIZUMI. His advice is not just about technical skills but about the broader aspects of career development and personal growth.

Every opportunity is a stepping stone to a successful career. YIZUMI is a fasting-growing company with an open culture for job rotation. He encourages young engineers to take advantage of this culture, to explore different roles within the company, and to broaden their skills and perspectives. "To develop your own engineering skills, there is great chance by career and by changing the department within the Division or within the YIZUMI group," Christoph advises. He sees these opportunities as essential for personal and professional growth, allowing engineers to gain a comprehensive understanding of the industry and to develop a well-rounded skill set.

Christoph Wernz's journey with YIZUMI is more than a tale of profession; it is a narrative of cultural convergence, of

the fusion of Eastern diligence with Western innovation. His leadership has been a bridge, connecting not just departments but continents, fostering an environment where diversity is not merely tolerated but celebrated as a crucible of creativity.

As we conclude his insights, it is evident that his influence on YIZUMI and the die casting machine industry at large is profound and enduring. His leadership has not only propelled the company to new heights of technological advancement and market competitiveness but has also fostered a culture of innovation and excellence that will continue to inspire and drive progress for years to come.





#### YIZUMI Goes Global:

#### New Subsidiaries Launched in Thailand and Mexico



In the midst of globalization, YIZUMI is rapidly expanding its international presence. Following the grand opening of YIZUMI Precision Machinery (Thailand) Co., Ltd. (YIZUMI Thailand) on June 12th, YIZUMI Precision Machinery (Mexico) Co., Ltd. (YIZUMI Mexico) hosted an open day to celebrate its opening on August 15th. Their establishment marks a significant step forward in YIZUMI's globalization.

At the opening ceremony of YIZUMI Thailand, industry experts, customers, partners, and YIZUMI Thailand staff gathered to celebrate this historic moment. Ms. Karen Yu, Deputy General Manager of YIZUMI Injection Molding Machine Division, emphasized in her speech that the establishment of YIZUMI Thailand

indicates YIZUMI's willingness to strengthen international cooperation and expand its overseas market, as well as an important part of its development strategy.

She also stated that YIZUMI will make every effort to support the operation and expansion of YIZUMI Thailand, including providing top technologies and excellent after-sales service. At the same time, she eagerly anticipated that YIZUMI Thailand will become a flagship of YIZUMI in Southeast Asia.

The opening ceremony for YIZUMI Mexico was just as exciting. Mr. James Zhang, Deputy Managing Director of YIZUMI and General Manager of YIZUMI Injection Molding Machine Division, Mr. Raul Lizarriturri, President of Queretaro's Automotive Cluster, and Mr. Luciano Diorio, CEO of Group Hi-Tec, attended the ceremony and delivered speeches. They all agreed that the establishment of YIZUMI Mexico will provide strong support for the company's entry into the North American market and improvement of its global service capabilities, as well as providing local customers with more convenient and efficient services and advanced technological solutions.



YIZUMI demonstrated its profound strength and outstanding innovation capabilities in injection molding, die casting, and rubber molding technologies at the two opening ceremonies. The excellent sharing of technical experts enabled attendees to obtain a better grasp of YIZUMI's latest technologies and applications in the field of molding equipment, thereby strengthening the company's brand influence in the global market.

In addition to technology display, YIZUMI arranged visits and exchange activities for guests to personally experience its advanced manufacturing processes and machinery. Guests highly praised YIZUMI's machine craftsmanship and brand strength, and expressed their willing to create more value with it in the future.

YIZUMI is rapidly expanding its global presence. It provides comprehensive support to its overseas subsidiaries by integrating domestic and foreign resources, such as market expansion, talent selection and training, supply chain optimization, finance allocation, and brand marketing. YIZUMI is confident in establishing subsidiaries in Thailand and Mexico as vital business hubs for the company in Southeast Asia and North America, thereby contributing to the company's globalization.

In the future, YIZUMI will continue to adhere to its globalization strategy and continuously improve its brand image and delivery capabilities. It will increase its empowerment and cultivation efforts for partners, provide localized support, and collaborate with all parties to create brilliance!









#### Smart Die Casting Solutions:

#### **Pioneering Foundries Towards Future Innovations**

With the continuous promotion of Industry 4.0, intelligent manufacturing has become an important trend in the development of the manufacturina industry. As a metal forming process, die casting is widely applied in various fields such as automotive, 3C, and electronics. However, traditional die casting production processes face problems such as information silos, low production efficiency, and unstable quality control.

The smart die casting solution has emerged to bring revolutionary changes to the foundry industry by integrating advanced technologies such as the Internet of Things (IoT), cloud computing, big data analytics, and artificial intelligence (AI). This innovative solution enables intelligent management of foundries, significantly enhancing production efficiency and product quality while effectively reducing production costs.

#### 01

#### **Equipment Networking and** Information-based Production: Building the Cornerstone for Digital **Factories**

The primary step of the smart die casting solution is to achieve equipment networking and comprehensive informatization of production processes. To this end, we have introduced Yi-CMS (Equipment Networking and Condition Monitoring System) and Yi-MES (Manufacturing Execution System). These two systems enable enterprises to production scheduling, management oversight, quality assurance protocols, warehousing and logistics, personnel management, and equipment data collection and maintenance management. The core value of this module lies in making the production process transparent and enabling real-time monitoring, which lays essential foundation for subsequent data analysis and intelligent optimization.

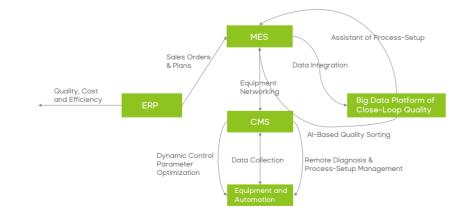
#### 1.1 YIZUMI Condition Monitoring System (Yi-CMS)

Yi-CMS is a key bridge connecting the production lines with automated equipment alongside other physical entities to MES system. It undertakes the collection of vital production data, comprehensive monitoring of operational workflows, and strict control

over production quality. The MES system enables real-time collection of diverse datasets from on-site providing strong, accurate information support for production decision-making.

#### 1.2 YIZUMI Manufacturing Execution System (Yi-MES)

Yi-MES is an integral framework governing both control and management of the entire production workflow by meticulously monitoring output generation, task allocation, and progress tracking at each stage of manufacturing. By leveraging MES system, enterprises can achieve refined management of the production process, enhancing production efficiency and response speed.





Plug and Play State Monitoring System





MES System for Molding Workshop





Order

Management



Production





State

Equipment

02

#### Die Casting Data Analysis Platform: Uncovering Data Value

Building upon equipment networking and information-based production, the smart die casting solution further establishes a closed-loop data analysis platform for die casting quality. With big data technology at its core, this platform efficiently completes the cleaning, processing, and feature extraction of process big data by integrating data resources from the Yi-CMS and Yi-MES systems. On this basis, we have developed digital models and data analysis tools for the processes, providing robust data support for process optimization and quality control.

#### 2.1 Process Data Cleansing and Processing

Big data is the cornerstone of intelligent manufacturing. A vast amount of data is generated in the die casting production process, including equipment operating data,

production process data, and quality inspection data. However, these data often contain a large amount of noise and outliers, necessitating advanced data cleaning and processing technologies to extract valuable information.

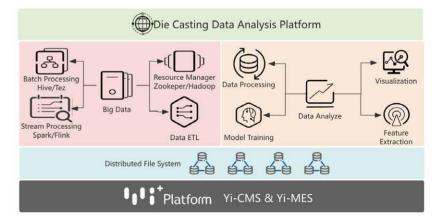
#### 2.2 Digital Model of Process

The process digital model is fundamental for achieving process optimization and quality control. By analyzing the characteristics and patterns of the die casting processes, we have constructed a precise mathematical model for the process. This model can simulate and predict various complex situations in the

production process, providing a solid theoretical basis for optimizing process parameters, and helping enterprises achieve more efficient production and stricter quality control.

#### 2.3 Data Analysis Tools

Digital analysis tools are key to achieving process optimization and quality control. By developing and applying various data analysis algorithms and tools, we can delve into production data and uncover potential patterns and problems in the production process, thus providing scientific evidence for production decision-making.



■ Die Casting Data Analysis Platform

#### 03

#### Intelligent Process-aided Commissioning: Innovation of Process Management

Intelligent process-aided commissioning is an integral part of the smart die casting solution. Leveraging a big data platform, it utilizes process knowledge mining technology and an intelligent process optimization assistant to provide comprehensive digital and intelligent commissioning services for remote process distribution and diagnosis. Implementing this module enhances the accuracy and efficiency of process adjustments, significantly minimizing the impact of human factors on production and improving the consistency and stability of products.

#### 3.1 Process Knowledge Mining Technology

Process knowledge plays a key role in the die casting production. With the assistance of process knowledge mining technology, we extract process patterns and practical experience from massive production data and establish a process knowledge base. The knowledge helps guide the setting and adjustment of process parameters and improve process stability and product qualification rate.

#### 3.2 Intelligent Process Optimization Assistant

The intelligent process optimization assistant is essential for achieving process intelligence. It automatically adjusts process parameters and

optimizes processes based on the established rules and models within the process knowledge base. Additionally, it can dynamically modify these parameters in response to real-time data feedback during production, ensuring the stability of the entire production.

#### 3.3 Remote Process Distribution and Diagnosis

Remote process distribution and diagnosis are vital components for

realizing process intelligence. The remote process distribution system enables the transmission of optimized process parameters directly to the production site, enhancing the efficiency of process adjustments. The remote diagnosis system allows for real-time monitoring of the production process and timely detection and resolution of any issues that may arise.



#### 04\_

#### Model-based Quality Sorting: Improving Process Management Efficiency

Quality is the backbone of the manufacturing industry. The smart die casting solution implements a model-based quality sorting mechanism by integrating machine learning

to provide abnormal quality alerts, intelligent sorting of defective products, and root cause analysis. The module leverages big data analyses and machine learning algorithms to monitor and analyze quality data in real time during the production process. It enables the rapid detection and effective resolution of quality issues, and enhances the efficiency of product quality inspections while reducing inspection costs.

#### 4.1 Abnormal Quality Alerts

Abnormal quality alerts serve as the first step in the quality sorting process. The system can predict and identify potential quality defects through real-time monitoring of quality data during the production process and in-depth analysis of quality data using machine learning algorithms. Upon finding a defect, the system promptly issues an alert, allowing enterprises to implement measures and avoid the production of batches of defective product

#### 4.2 Sorting of Defective Products

The sorting of defective products is a critical step of quality control. Utilizing advanced technologies like image recognition and machine vision, the system can automatically and accurately identify and sort out defective products, significantly enhancing the efficiency and precision of quality control.

#### 4.3 Quality Root Cause Analysis

Quality root cause analysis plays a vital role in improving product quality. By thoroughly analyzing the underlying causes of quality issues, we can address them at their source, thereby enhancing product reliability and stability and ensuring continuous product quality optimization.

#### 05

#### Dynamic Optimization of Control Parameters: Pursuing Extreme Accuracy

Optimizing control parameters is vital in the die casting production process. The smart die casting solution offers dynamic optimization of these parameters through technologies such as intelligent locking force and mold opening and closing. This module can automatically and accurately adjust various die casting machine control parameters based on real-time production data and comprehensive historical data analysis, ensuring production process stability and high-accuracy product output.

#### Conclusion

The smart die casting solution integrates five core modules to realize digital, intelligent, and automated die casting production. The solution not only enhances production efficiency and product quality, but also effectively reduces production costs and energy consumption, providing essential technical support for the sustainable development of enterprises. As technology continues to advance and be used in practical sectors, smart die casting solutions are poised to play an increasingly vital role in the future of the manufacturing industry.



<sup>\*</sup> The data are obtained from YIZUMI's I aboratory test, and the final interpretation right belongs to YIZUMI.

# YIZUMI and Sinyuan ZM Collaborate on 5000T Thixomolding Machine

The highly anticipated CHINA DIECAST-ING and CHINA NONFERROUS 2024 officially opened at the SNIEC on July 10th. They brought together world-leading die casting technologies, showed the latest products, and explored the industry's future development trends.

YIZUMI signed a strategic cooperation agreement with Ningbo Sinyuan ZM Technology Co., Ltd. (Sinyuan ZM) at the booth (Hall N1-A22) to order a 5000T Thixomolding machine.

This is another significant collaboration between Sinyuan ZM and YIZUMI, following the signing of a deal in June 2023 to order a 3200T Thixomolding machine, which was successfully delivered this year. Our close partnership fully indicates our mutual trust and understanding, as well as a progress towards higher and deeper levels.

At the exhibition, Mr. Qiu Zhuoxiong, Chairman and General Manager of Sinyuan ZM, and Dr. Zhou Jun, Deputy Managing Director and CTO of YIZUMI, and General Manager of YIZUMI Die Casting Machine Division, participated in the ceremony and signed a cooperation agreement. Many industry experts and representatives were also invited to share this historic occasion.

Sinyuan ZM is an industry leader in the lightweighting of magnesium alloy die casting parts for various applications, including automobiles and electronics. It has extensive experience in the development and production of precision magnesium alloy die casting products, as well as a number of core technologies.





YIZUMI, a pioneer in Thixomolding technology, has been actively involved in this industry since 2009. Its equipment has been widely employed by high-end customers in many countries, including China, Germany, and the United States, to aid in the production of lightweight components.

Furthermore, the 5000T Thixomolding machine, which integrates YIZUMI's patented technologies, will improve product quality, production stability, and efficiency, allowing Sinyuan ZM to better meet market demands.

We are confident that our cooperation will promote the application and promotion of large magnesium alloy parts in new energy vehicles, electronics, and other industries, as well as open up new markets and development opportunities for us. For

example, in the field of automotive integrated die casting, aluminum alloy integrated die casting products weigh 60 kilograms with a mold weight of 100 kilograms, whereas Thixomolding products weigh only 40 kilograms with a mold weight of 50 kilograms.

In the future, we will strengthen our collaboration to jointly explore more possibilities for Thixomolding technology, lead the industry trend toward integrated forming of magnesium alloys, and contribute to the solving of environmental and metallic mineral resource issues.

















 $<sup>\</sup>label{thm:linear_problem} The \ data \ are \ obtained \ from \ YIZUMI's \ I \ aboratory \ test, \ and \ the \ final \ interpretation \ right \ belongs \ to \ YIZUMI.$ 

#### YIZUMI Celebrates a New Exciting Milestone of LEAP Series Models

On July 10th, YIZUMI also held a ceremony to celebrate its new milestone of exceeding 600 million Yuan in sales of the LEAP series die casting machines at CHINA DIECASTING & CHINA NONFERROUS 2024.

This result not only indicates YIZUMI's superiority in the field of high-end die casting machines, but also boosts industry confidence and market vitality.

#### **New Milestone**

#### Sales of the LEAP Series Die **Casting Machines Have** Exceeded 600 Million Yuan

In the meticulously organized venue, YIZUMI's senior executives and important customer representatives joined the ceremony to share the company's excitement and future prospects.

Mr. Richard Yan, Chairman and CEO of YIZUMI, delivered a speech at the ceremony, expressing his heartfelt gratitude to the customers who have



long supported the company's development and describing the unique advantages of the LEAP series die casting machines in technological innovation, market presence and customer service.

He emphasized that sales of the LEAP series machines exceeding 600 million Yuan are an important milestone and a successful example of YIZUMI's long-standing commitment to "Think Tech Forward".

The LEAP series has been widely employed and appreciated in a variety of industries, including new energy vehicles, 3C electronics, and home appliances, thanks to its powerful dynamic injection capacity, ultra-high locking force, and intelligent operating system.

Its sales of over 600 million Yuan indicate YIZUMI's leadership in high-end die casting equipment, as well as its significant contribution to the transformation, upgrading, and high-quality development of the global die casting industry.



#### Propelling the Industry's **Continuous Progress and** Development

At the exhibition, YIZUMI signed a procurement agreement with Guangdong Tayo Motorcycle Technology Co., Ltd (Tayo) to order a LEAP3200 die casting machine.



Tayo, a well-known motorcycle stand out in a competitive market,

innovative technology for humankind", launching more high-performance and high-quality molding equipment and solutions to meet the diverse market and customer needs. At the same time, YIZUMI will strengthen communication and cooperation with global partners to promote the industry's continuous progress and development.

In the future, YIZUMI will continue to

follow its principle of "Sustainable,

and the final interpretation right belongs to YIZUMI.







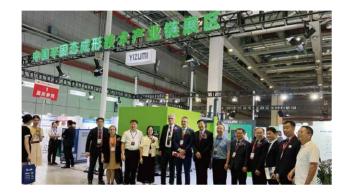






# YIZUMI Worked with Universities to Drive Thixomolding Technology

On July 5<sup>th</sup>, YIZUMI signed a cooperation agreement with Shanghai Jiao Tong University and Hebei University of Technology respectively at the National Exhibition and Convention Center (NECC) in Shanghai to jointly push the development of Thixomolding technologies.



## To Breakthrough on Materials with Hebei University of Technology

In the morning, YIZUMI and Hebei University of Technology signed a strategic cooperation agreement at the YIZUMI booth, indicating our close collaboration in the field of high-performance magnesium alloys and efficient molding technologies.



Because of their lightweight and high strength, high performance magnesium alloys have a wide range of industrial applications, including new energy vehicles, 3C electronics, and drones. Thixomolding technology, in particular, is increasingly emerging as a new trend in the manufacturing of magnesium alloy components due to its unique forming benefits.

However, the current market is relatively deficient in Thixomolding materials, and the shortcomings of existing materials such as Mg Al series (AZ91D, AM60B, AM50A, etc.) magnesium alloys in terms of strength, toughness, and corrosion resistance have become technological bottlenecks that limit their future application.

Owing to their extensive experience in magnesium alloy research and market demand, the advanced light alloys group at Hebei University of Technology and Jilin University has steadily increased their investment in Thixomolding development and achieved significant research results. They have employed blank composite deformation production technolo-

gy, achieving continuous and controllable production of high-quality blank particles and laying a solid foundation for the future development and application of Thixomolding.

In this cooperation, YIZUMI will work with Hebei University of Technology to solve technological challenges in the magnesium alloy molding process and construct the YIZUMI North China Thixomolding Experiment Base. Based on our respective Thixomolding technical advantages, we will deepen our cooperation in equipment, molds, processes, and other aspects to drive the development of new materials and technologies.



#### To Achieve New Technical Results with Shanghai Jiao Tong University

In the afternoon, YIZUMI signed a cooperation agreement with Shanghai Jiao Tong University for the development and application of Thixomolding technologies.



Magnesium alloy, a lightweight and high-strength metal material, finds wide applications in aviation, automotive, electronics, and other industries. However, conventional Thixomolding technology is hard to completely eradicate casting defects such as porosity, cold flow, and oxide surface, limiting the future development and application of magnesium alloy products. To solve this technological bottleneck, YIZUMI collaborates with Shanghai Jiao Tong University to develop the Thixomolding technology.

YIZUMI, an industry leader in Thixomolding technologies with deep technological accumulation and market insights, believes that by combining the extensive research capabilities of Shanghai Jiao Tong University's Light Alloy Net Forming National Engineering Research Center, we will achieve new technical results in Thixomolding development and applications.

Shanghai Jiao Tong University concentrates on the development of high-strength magnesium alloy materials, and the innovation of molding technology, particularly in response to the problem that current technologies cannot be effectively applied to castings with significant wall thickness differences. It also puts forward and works hard on innovative solutions such as second intensification. With YIZUMI's expertise in equipment design and manufacturing, we will work closely to promote the development of new Thixomolding equipment with a second intensification function.

And now, the first project of the two parties' collaboration, the research and development of screw and barrel sets for the Thixomolding machine, has been successfully launched.

In this partnership, we reach a consensus on the future develop-

ment trend of Thixomolding technology. In the future, we will deepen our cooperation in technological research, equipment innovation, market expansion, etc. to propel Thixomolding technology to become a driving force in the transformation and upgrading of the manufacturing industry, ushering in a new era of lightweight material application.

We firmly believe that with the continuous efforts of YIZUMI, Shanghai Jiao Tong University, and Hebei University of Technology, Thixomolding technology will open up new development opportunities and usher in a new era for the use of lightweight materials.







# YIZUMI Partners with DRB-HICOM Group (HICOM Diecastings)

In August 2024, YIZUMI held a historic delivery ceremony at its China Wusha No.3 Factory. The LEAP2000U die casting machine was officially delivered to HICOM Diecastings Sdn. Bhd. (HICOM Diecastings), a professional die casting company owned by Malaysian industrial giant DRB-HICOM Group (DRB-HICOM).

The delivery not only strengthens YIZUMI's influence in the global intelligent manufacturing field, but also brings new vitality into HICOM Diecastings' automotive industry development.

Senior executives from both sides attended the ceremony, including Dr. Zhou Jun, Deputy Managing Director and CTO of YIZUMI, and General Manager of YIZUMI Die Casting Machine Division, Mr. Stefan Fritsche, Deputy General Manager and CSO of YIZUMI Die Casting Machine Division, Mr. Michael Mai, Overseas Marketing Department Director of YIZUMI Die Casting Machine Division, as well as Mr. Zawawi Aman, Chief Operating Officer of HICOM Diecastings with his teams.

#### Factory Tour Celebrating the Delivery of LEAP2000U

Before the ceremony, the HICOM Diecastings delegation visited YIZUMI's Global Innovation Center and China Wusha No.3 Factory, gaining a thorough grasp of the company's extensive history and strength.

At the ceremony, Dr. Zhou Jun stated in his speech, "The LEAP2000U die casting machine is not only an innovative result for YIZUMI, but also the result of YIZUMI's close cooperation with HICOM Diecastings."

He underlined the LEAP2000U's importance in increasing HICOM Diecastings' production efficiency and product quality. Meanwhile, YIZUMI hoped to expand its collaboration with HICOM Diecastings to boost the growth of intelligent manufacturing in Malaysia and Southeast Asia.

The LEAP2000U die casting machine delivered is currently Malaysia's largest by tonnage. Mr. Nanthakumaran Muniandy, Head of Business Development of HICOM Diecastings, highly praised this delivery, saying, "When selecting business partners, HICOM Diecastings primarily considers technological leadership, product quality, innovation capability, and service support. YIZUMI excels in all these aspects. Their die castina machines and technologies are leading, the product quality is reliable and the service support is also in place. These factors make YIZUMI our ideal partner."









#### Approaching Industry Challenges

#### LEAP Series Machine Shows Exceptional Performance

In recent years, the die casting industry has faced new transformation and upgrading challenges as new technologies and processes have emerged. The rapid development of new energy vehicles, 5G products, and other industries has led to stricter demand for die casting processes, as well as complex thin-walled and ultra-large die casting structural parts. For this, YIZUMI successfully launched the LEAP series die casting machine in 2021.

The LEAP series die casting machine has improved in terms of intelligent die casting cells, mold design, and die casting processes, etc. resulting in an international advanced level of key performance. It achieves high overall equipment effectiveness (OEE) by improving product availability, process repeatability, and accuracy. We recently celebrated the sales of LEAP series machines exceeding 600 million Yuan.

To ensure the smooth delivery of the LEAP2000U die casting machine,

engineers from both sides worked hard to commission the equipment and ensure that it operates well. In addition, YIZUMI has offered several training courses on operation instructions and techniques to assist HICOM Diecastings' engineers in mastering the equipment, and they have shown remarkable learning capacity and adaptability.

#### Deepening International Cooperation

#### The Southeast Asian Market Drives New Development

As a critical part of its development strategy, YIZUMI has established a subsidiary in Thailand in June of this year, indicating the company's firm determination to strengthen international collaboration in advanced technologies and expand its overseas market layout.

Southeast Asia's manufacturing industry is experiencing rapid growth, particularly in the field of new energy vehicles. According to KPMG, exports of new energy vehicles, lithium batteries, and photovoltaic devices from China to Southeast Asia surged by up to 89.3% year on year in 2023, outpacing the global market.

YIZUMI, a global molding equipment system and turnkey solution provider, offers injection molding, die casting, and rubber molding equipment that can be widely employed in the manufacturing of diverse parts for new energy vehicles. The successful delivery of LEAP2000U not only affirms the recognition of the LEAP series die casting machines in the Southeast Asian market, but also proves YIZUMI's commitment to provide cutting-edge die casting technologies to customers worldwide.

With the blooming new energy vehicle industry, YIZUMI is expected to have bigger development potential in Southeast Asia and even the global market, contributing more to regional economic prosperity and industrial advancement.



#### YIZUMI Continues to Build a Lasting Global Presence

YIZUMI has always closely followed its three development guidelines of "product, operation and globalization" to steadily consolidate and improve its core competitiveness and brand influence.

YIZUMI is well aware that exhibitions serve as the industry's "barometer" in the era of globalization. They are not only an essential platform for presenting the latest technologies and products, but they also provide a valuable window into industry trends and market pulse. As a result, YIZUMI has been actively involved in exhibitions, demonstrating its vigor and strength.

In 2024, YIZUMI has already participated in more than 10 influential and prominent exhibitions and industry seminars across the world, such as EUROGUSS in Germany, SIMTOS in South Korea, the SEA Die Casting Congress in Thailand, and CHINA DIECASTING & CHINA NONFERROUS.

At these exhibitions, YIZUMI has displayed its latest technological achievements and product solutions while engaging in in-depth discussions and collaboration with global partners and customers, boosting its visibility and influence in the global market.

Despite facing numerous challenges, such as approval, organizational resources, professional quality, cultural differences, market competition, and intellectual property issues, YIZUMI has successfully participated in global exhibitions and actively displayed on the international stage.

For this, Dr. Zhou Jun, the deputy managing director and CTO of YIZUMI, and general manager of YIZUMI Die Casting Machine Division, said, "YIZUMI is committed to promoting the globalization strategy. Participating in international exhibitions allows us to not only display our latest technologies and products, but also obtain a thorough grasp of market demand and industry trends, providing new fuel for our continuous development."

To further explore overseas markets, YIZUMI develops tailored products that meet customer demands based on local market demand and industry development. Meanwhile, it is dedicated to offering timely, high-quality services and technical support in the global market.

In recent years, YIZUMI has increased its investment in strategic overseas market by establishing overseas subsidiaries, factories, and regional technical service centers, and improving its ability to deliver products and spare parts to local customers while providing comprehensive technical support. Furthermore, it continues to invest more resources to make significant advances and improvements in the establishment of

digital customer service systems and high-level technical service teams, as well as localized market and industry expansion capabilities.

The globalization of YIZUMI not only illustrates the strength and responsibility of Chinese companies, but also sets a new example for the rise of Chinese manufacturing in the global market. In the future, YIZUMI will follow the tagline of "Think Tech Forward" and devote itself to building a comprehensive ecosystem in the advanced molding field to better meet the needs of global customers and different industries for high-accuracy, high-efficiency and high-stability metal casting equipment and automated die casting solutions, and build a lasting global presence.



■ EURODUSS 2024

More information about YIZUMI at the upcoming overseas exhibitions:



#### 2024 Die Casting Congress & Exposition

Date: September 30 - October 2, 2024

Venue: Indiana Convention Center,

Indianapolis, Indiana

Rooth No.: 924

Booth No.: 824 Exhibit: LEAP920U

#### Exhibition Introduction

The Die Casting Congress & Exposition, held by the North American Die Casting Association (NADCA), is North America's largest and most professional annual trade show for casting technologies and the die casting industry. It provides an extensive platform for displaying and exchanging ideas in the die casting industry, with the goal of promoting innovation and development of die casting technologies, as well as facilitating trade and cooperation.



#### **FUNDIEXPO 2024**

Date: October 16-18, 2024

Venue: Centro Citibanamex,

Mexico City

Booth No.: 1601

Exhibit: LEAP530U

#### **Exhibition Introduction**

FUNDIEXPO, organized by the Mexican Foundry Society in collaboration with GIFA Mexico, is one of the most important foundry events in Mexico and Latin America. It aims to provide a platform for global foundry companies to showcase their latest technologies, equipment, and solutions, as well as to propel industry exchanges and cooperation.







■ SEA Die Casting Congress



■ CHINA DIECASTING & CHINA NONFERROUS