

## Top Stories

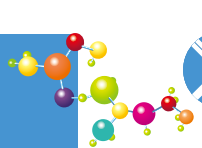
Best of 2018's Most Innovative Products

Award Winning Products

Taipei PLAS Summit

Seminar's Report

Plastics of A Tougher Kind



**TAIPEI PLAS**  
Taipei International Plastics & Rubber Industry Show

ufi  
Approved Event



**ShoeTech Taipei**  
Taipei International Shoe Making Technology Show

**AUG. 17, 2018**

# SHOW DAILY

TOTAL ACCUMULATED VISITOR  
(LOCAL + FOREIGN VISITORS)

8,410

DAY 3

## WINNERS RETURN IN 2018



### EXCELLENT PRIZE

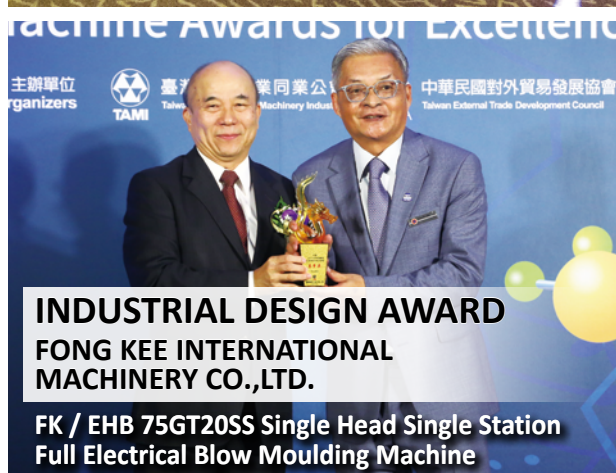
**FU CHUN SHIN MACHINERY MANUFACTURE CO.,LTD.**

Injection molding machine industry 4.0 - FA160 Adaptive control technology for viscosity variation inhibition of melt

## Totaled 15 Winning Products

2018 is another year for Taiwan "Excellence in Research & Innovation Award". Organized by TAITRA and TAMI as part of the biennial event during Taipei PLAS, a total of 27 innovative products had enrolled in the final round of contest. After rounds of evaluations, there were first and second prizes being awarded to 7 different categories. These include injection molding, extrusion, blow molding, rubber, circular system or recycling equipment, automatic intelligence plastic & rubber molding machine & auxiliary equipment and system, and other plastic & rubber machine. Also, not to forget the best products out of all machinery, which were awarded for the best industrial design, the most intelligent machine, and of course the most excellent prize.

The award has always marked as the new achievements of Taiwan-made products in plastic and rubber industry. This year, smart manufacturing category was also listed in the contest as one of the most popular categories with many applicants and their smart products. Through the contest, it has fully presented Taiwan's active participation on research and innovation toward new plastic manufacturing.



### INDUSTRIAL DESIGN AWARD

**FONG KEE INTERNATIONAL MACHINERY CO.,LTD.**

FK / EHB 75GT20SS Single Head Single Station Full Electrical Blow Moulding Machine



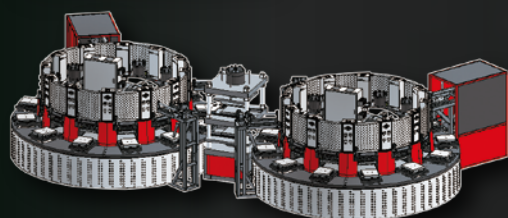
### INTELLIGENT MACHINE AWARD

**CHUMPOWER MACHINERY CORP.**

BottleViewer e-Manufacturing Real-time Execution System

## CLICK FOR YOUR FUTURE PRODUCTION

Produce Smart, and create the "Production for Future". We are specialized in delivering shoe-making machinery with visualized, High performance, and smart integrated system. Check in with Horng Chii, where you will always find your very own fully automated production line.



## HC-258CME

AUTOMATIC ROTARY RUBBER COMPRESSION MACHINE



**鴻綺機械股份有限公司**  
HORNG CHII MACHINE INDUSTRY CO., LTD.

Tel: 886-4-25627106  
Fax: 886-4-25625651  
E-mail: sales@horngchii.com.tw

42950 台灣台中市神岡區社南里中山路667巷71號  
No. 71, Lane 667, Zhongshan Rd., Shengang Dist., Taichung City, 42950 Taiwan



Organizers



**Taiwan External Trade Development Council (TAITRA)**  
plas@taitra.org.tw www.taiwantradeshow.com.tw  
www.taitra.org.tw



**TAIWAN ASSOCIATION OF MACHINERY INDUSTRY**  
tami@tami.org.tw www.tami.org.tw

Co-organizers

Taiwan Rubber & Elastomer Industries Association  
Taiwan Plastics Industry Association  
Taiwan Synthetic Resins Manufacturers Association  
Petrochemical Industry Association of Taiwan

Production



**WORLDWIDE SERVICES CO., LTD.**  
WORLDWIDE INFORMATION TECHNOLOGY, INC.  
sales@acw.com.tw www.acw.com.tw



# Best of 2018's Most Innovative Products

– Last Night at the  
Taipei Nangang Exhibition Center, Hall 1



**PLASTIC INJECTION MOLDING MACHINE**  
**FIRST PRIZE** **CHUAN LIH FA MACHINERY WORKS CO., LTD.**  
CLF-60TX Smart Injection Molding Machine  
**SECOND PRIZE** **EDEX TECHNOLOGY CO., LTD.**  
AEEZ600-ES150 All-electric Injection Molding Machine  
**CHEN HSONG MACHINERY CO., LTD.**  
SM150LSR Liquid Silicone Injection Molding Machine



**PLASTIC EXTRUSION MACHINE**  
**FIRST PRIZE** **CYKF CO., LTD.**  
CK-32HT Multi-function Twin Screw Material Testing Laboratory Extruder



**PLASTIC BLOW MOLDING MACHINE**  
**FIRST PRIZE** **FONG KEE INTERNATIONAL MACHINERY CO., LTD.**  
FK / EHB 75GT20SS Single Head Single Station Full Electrical Blow Moulding Machine  
**SECOND PRIZE** **KEENPRO INDUSTRY CORP.**  
EM08S3 Intelligent High-Speed Stretch Blow Molding Machine  
**CHUMPOWER MACHINERY CORP.**  
CPSB-LSS8 All Electric High-Speed Linear Stretch Blow Moulding Machine



**RUBBER MACHINE**  
**FIRST PRIZE** **TUNG YU HYDRAULIC MACHINERY CO., LTD.**  
TIP-1000-2RT-L-250-PCD iTungYu-efficient injection molding machine with UCRB



**CIRCULAR SYSTEM OR RECYCLING EQUIPMENT**  
**FIRST PRIZE** **GENIUS MACHINERY CO., LTD.**  
KRIEGER 85\_Cutter Compactor Plastic Recycling Machine  
**SECOND PRIZE** **POLYSTAR MACHINERY CO., LTD.**  
Repro-Air 120 Intelligent Air-Cooled Recycling Machine



**OTHER PLASTIC & RUBBER MACHINE**  
**SECOND PRIZE** **KINGTEC TECHNICAL CO., LTD.**  
K-3030 KING 3D Printer  
**YANN BANG ELECTRICAL MACHINERY CO., LTD.**  
DHM-SL-06 Micro Multi-Function Dehumidifying Dryer



**AUTOMATIC INTELLIGENCE PLASTIC & RUBBER MOLDING MACHINE, AUXILIARY EQUIPMENT AND SYSTEM**  
**FIRST PRIZE** **FU CHUN SHIN MACHINERY MANUFACTURE CO., LTD.**  
Injection Molding Machine Industry 4.0 Solution  
- intelligent ManuFactory 4.0 (iMF 4.0)  
**SECOND PRIZE** **MULTIPLAS ENGINERY CO., LTD.**  
Industrialization of Smart Machinery & IM4.0 Smart Assistant  
**HUARONG PLASTIC MACHINERY CO., LTD.**  
Intelligent Management and Triple Injection Component Molding System

## Taipei PLAS 2018 Event / Seminar Program

\* Subject to change without notice.

Time	Event/Seminar	Host/Speaker(s)	Organizer(s)	Venue	Remarks
8/17 (Fri.) 10:00   12:00	雅式與應用行業公會交流會		Polaris Creative Corp.	Room 402a, Taipei Nangang Exhibition Center, Hall 1	Emily Chen +886-4-24517070 #268
10:00   10:40	Strategies and Actions of Smart Machinery Industry Promotion in Taiwan	Huang, Jia-Hung, Secretary General, Smart Machinery Promotion Office			
10:40   11:20	How to use sensors in smart machines and develop service business opportunities	Chiou, Yii-Tay, Deputy Project Director, Smart Microsystems Technology Center, Industrial Technology Research Institute			
11:20   12:00	Single-tooth abdominal meshing measurement concept	Chiou, Chuei-yuan, Engineer, Precision Machinery Research & Development Center			
13:30   14:10	The Failure Analysis and Total solution of Polymeric Products	Chen, Ming-Kuen, Deputy Manager, Plastics Industry Development Center			
14:10   15:10	The Development of Long Fiber Reinforced Thermoplastic Composites Technology The Development and Process Optimization of Functional Fiber Materials	Chia-Hsin Tung, Ph.D., Lai, Wen-You, Research Fellow, Associate of Technology Research Dept., Plastics Industry Development Center	TAITRA TAMI	Room 402bc, Taipei Nangang Exhibition Center, Hall 1	Rita Chang +886-2-23494666 #682
15:20   16:00	The Development Trend of Microwave-resistant and Quick-Cooked Plastic Materials	Kuan-Ren Liou, Research Fellow, Technology Research Department, Plastics Industry Development Center			
16:00   16:40	New Manufacturing type – The Development of IoT and 3D Printing Elastomeric Materials Fabrication of Plastic Product Using Rapid Prototyping Process	Shih-Kai Wang, Research Fellow, Wei-Sheng Cheng, Research Fellow, Technology Research Department, Plastics Industry Development Center			
16:40   17:20	An Introduction to Taiwan Free Trade Zone and its Possible Business Models: The Key Element of a Successful Overseas Marketing Strategy	Ching-Shih Liang, Deputy Director, Port of Keelung, Taiwan International Ports Corp., Ltd.			
17:20   18:00	From General Automation to Smart Manufacturing: The Integration of Robotics to Realize Smart Manufacturing	Lion He, Manager, ABB Ltd.			
13:00   17:00	Plastic for longer life		Igus Taiwan Company Limited	Room 402a, Taipei Nangang Exhibition Center, Hall 1	Lori Hsieh +886-4-23581000 #102
13:00   16:30	Your own TPE expert: use smart and apply right		Plastics Industry Development Center	Room 403, Taipei Nangang Exhibition Center, Hall 1	Ms. Tu +886-4-23595900 #811



# Award Winning Products

## FU CHUN SHIN (FCS)

### Injection Molding Machine Industry 4.0 - Adaptive Control Technology for Viscosity Variation Inhibition of Melt

The second generation hydraulic machine is provided with melt variation adaptive control system, the injection machine masters the melt filling condition according to cavity sense signal, executes the adaptive decision on melt variation, the melt viscosity variation is depressed effectively, the consistency of product quality and production efficiency are improved. The product molding process curve and cavity curve signal characteristic are monitored instantly by the cavity sense signal, the molding quality is monitored instantly to avoid defectives getting into the market. The traditional manual quality inspection is replaced, the quality inspection labor cost is saved, and the end product quality record tracking system is built.



## CHUMPOWER

### e-Manufacturing Real-time Execution System- BottleViewer

The intelligent system, BottleViewer, provides a simpler implementation threshold for a lower budget and zero research and development expenses (in the form of monthly payments) for small and medium-sized enterprises to monitor production status and pair with faster and instant cost analysis. The advanced function also provides more Industry 4.0 production solutions: the Intelligent Predictive Maintenance (IPM) supports health alert options for machines to prevent shut-down of the production line; the Automatic Virtual Metrology (AVM) allows on-site product inspection even for high-speed productions. BottleViewer enables enterprises to monitor production status anywhere, so as to raise management effectiveness to achieve greater production efficiency.



## FONG KEE

### Single Head Single Station Full Electrical Blow Moulding Machine - FK / EHB 75GT20SS

Based on the market demand for large tonnage all-electric blow molding machines, Fong Kee started to carry out the data collection and design concept of large-ton all-electric blow molding machine in December 2016, and set the development spindle: "eBlow T20s" at the end of January 2017. With the maximum specification clamping force of 250kN, the largest product 20 liter stacking barrel, and the single clamping die table with a maximum output of 130pcs/hr, these specifications are the most close to the actual market demand, and the most economical for design and manufacturing costs.



## CHENG YIEU (CYKF)

### Multi-function Twin Screw Material Testing Laboratory Extruder- CK-32HT

CYKF has provided laboratory extruders to assist and complete in the development, testing, improvement and analysis of materials. There are different pelletizing methods when testing different material properties, such as strand cutting type, underwater cutting type and die face cutting type. The machine offers easy operation, and it is time-saving, space-saving, cost-saving and helps increase economic benefits. It adopts high-level human-machine interface system, which can be customized and integrated according to customer requirements such as automated operation, monitoring, data parameters collection and storage, backup and updates of program record etc. All the data exchange can be completed through the network connections.



## CHUAN LIH FA (CLF)

### Smart Injection Molding Machine - CLF-60TX

In 2016, CLF began to invest in the research and development of smart injection molding machines. By cooperating with the Ministry of Science and Technology and the cooperation of academic institutions to strengthen basic foundation and talent cultivation, the research final goal is to innovate new value and lead the industry with better machines and services. This year, the CLF-60TX smart injection molding machine was launched, which showed the results of product quality and productivity improvement through the advanced research techniques of self-adaptive control, smart clamping force technology and smart injection monitoring. In addition, AOI inspection, remote monitoring of the central connection and automated production were exhibited.



## TUNG YU

### Itungyu-Efficient Injection Molding Machine with UCRB - TIP-1000-2RT-L-250-PCD

Tung Yu has always insisted in providing customized total solutions with offering the best equipment to clients. A creative new design may evolved from the ordinary model is where Tung Yu has innovated its new model with simultaneous injection process and outfeeding process. This two-in-one process has helped reduce time and lower labor. In addition, lowering material waste is another task Ting Yu been focusing on and thus creating the Universal Cold Runner Block (UCRB), which has helped lowered the compound being required and resulted in less waste. Unlike the traditional cold runner, this new universal cold runner block delivers better molding performance and thus enhances the productivity and produces better products.



# Award Winning Products

## FU CHUN SHIN (FCS)

### Injection Molding Machine Industry 4.0 Solution - intelligent ManuFactory 4.0 (iMF 4.0)

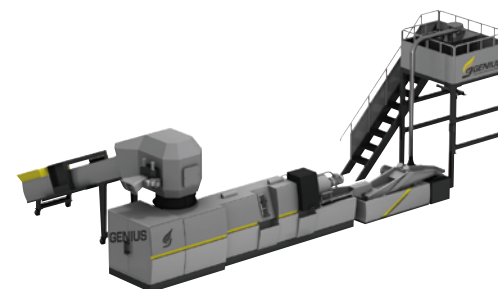
In order to simplify production management, reduce management labor costs, and record real-time production information, the FCS team has developed the intelligent ManuFactory 4.0 (iMF 4.0). Different from the general manufacturing execution system (MES), this system effectively integrates Operation Technology (OT), Information Technology (IT) and Communication Technology (CT) for the injection field planning. This means that the OT extracts the production characteristics and then the IT and OT connect and collect the information collected from machine equipment. The structure of the system is simple and practical, and the maintenance is relatively lowered. This makes the system suitable for SME for management purposes. On the other hand, it also reserves the data exchange interface requested for being used by large enterprises, which can quickly interconnect with the running MES system.



## GENIUS

### Cutter Compactor Plastic Recycling Machine- KRIEGER 85

Genius uses a special construction method to process the die-head and screw. With this process, the tungsten steel which used to be the material of cutting blades has been evenly spray welded on the surface of die-head and the screw. As the result, this helps increase the service life of die-head and screw. Furthermore, this machine is equipped with high precision gearbox made in Italy which endures higher torque limit, delivers better transmission, and saves power consumption with still smooth operation through using a small motor. The newly added quick cutter change system also enables users to replace the wear-out cutter from doors on the two sides of machine.



# ARBURG Takes Leads for New Business



(ARBURG GmbH + Co KG Taiwan Branch)

In April 2016, ARBURG from Germany officially opened their branch office in Taiwan. While people might have been curious, Taiwan is in fact an important overseas market with high potential in consumer electronic industry. For ARBURG, opening a branch was the key to expanding more business opportunities in Taiwan. In the past 10-20 years, Taiwan has been an active participant with many new innovations in electronic products to which helped bring Taiwan in becoming a highly productive market that we should not overlook. Compared to

Germany in which owns a large but stable market in automotive, Taiwan's electronic industry has more possibilities in bringing more businesses. ARBURG is capable to offer clients with not only high-end manufacturing but also the full and wide knowledge sharing from before to after sale services. To expand to new markets, ARBURG always aim for creating strong bond to the local industries, understand

their needs, and deliver quick services from the local service endpoint. ARBURG local offices are ideal for delivering quick response on urgent requests such as machine repair, and regular on-schedule maintenance check and machine re-calibration, which all may be critical to ensuring local ARBURG machines with minimal downtime. During Taipei PLAS, ARBURG is presenting their LSR model for liquid silicone and PIM model for powder injection. These two models are designed for high-end manufacturing needs in producing smart mobile components. Furthermore, ARBURG's central computer management system, the ALS will also be presented for their newest industry 4.0

development. WIR SIND DA (We are there), Arburg is here at your services.

### 1. Hydraulic Allrounder Golden Edition for iPhone case

The hydraulic Allrounder Golden Edition with 1,000 kN clamping force is capable to produce high elastic phone case for iPhone 8. The Golden Edition is an economic model specially designed for liquid silicone and with the support on mold provided by Prover, liquid silicone metering system by 2KM, and linear robotic system by MULTILIFT SELECT.

### 2. Metal production on smart mobile frame

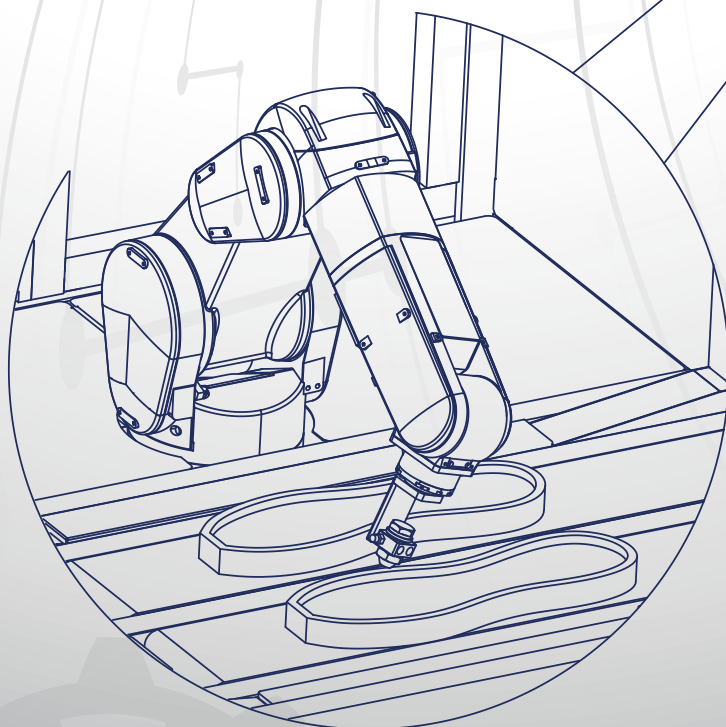
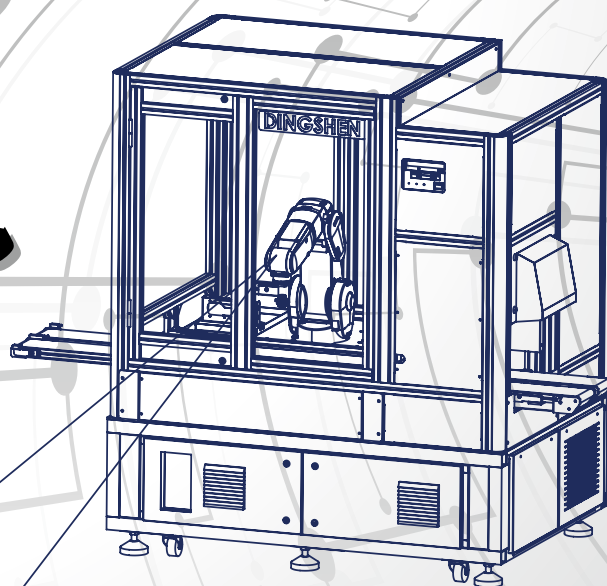
Another highlighted model from ARBURG at Taipei PLAS is the Allrounder 470 E Golden Electric model, which demonstrates metal material on making polished smart mobile frame. This model uses metal injection molding technique, which is capable to handle the challenging request for slim and anti-static products and deliver stable production results.



# 鼎新



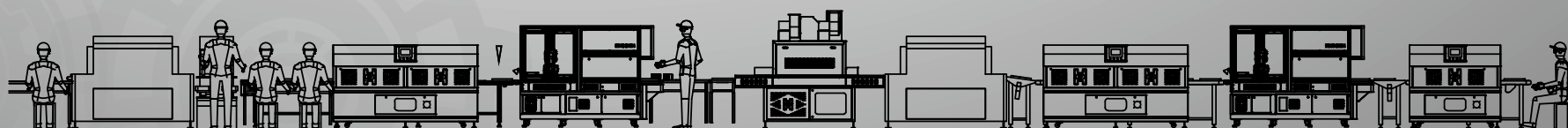
DING-SHEN



BEST CHOICE  
GREAT SERVICE  
NEW DESIGN  
**THINK AHEAD FOR YOU**



August 15-19 2018  
Booth No. **N0326**



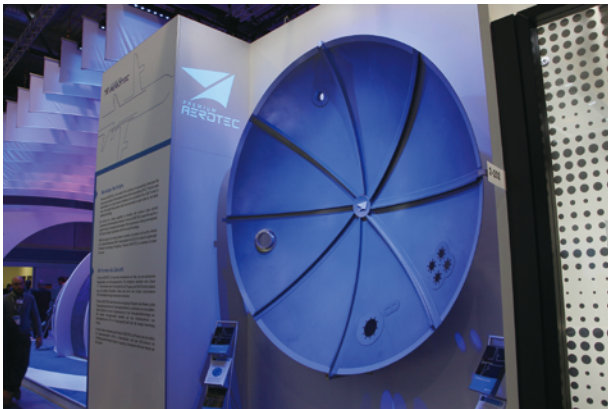
[www.dingshen.com.tw](http://www.dingshen.com.tw)

INNOVATION PLANNING SERVICE



# Plastics of A Tougher Kind

Data Source : PRA 2018 May/ Engineering Plastics  
For complete story, please visit:



**E**ngineering plastics, a class of thermoplastics, possess higher impact strength, high abrasion; wear, chemical and fatigue-resistance; and resilience against extreme environmental conditions, compared to commodity materials.

## Automotive: a harbinger of engineered plastics

German company Lanxess has developed a heat stabilisation system XTS2 (Extreme Temperature Stabilisation) that increases the thermal stability of PA66 to up to 230°C. It is ideal for the production of air intake manifolds with an integrated intercooler. Another 30% glass fibre-reinforced PA66 is under development, for blow moulded hollow components such as air ducts in the engine compartment. US-based PA66 maker Ascend Performance Materials has also developed a high temperature PA66 Vydyne XHT, with two grades designed for prolonged exposure at 210°C and 230°C. Depending on the requirements for the application in question, engineering plastics can entirely replace comparatively heavy metal parts or be combined with composite materials. The weight of individual components can be reduced by using lightweight materials and technologies, without compromising on their physical properties, such as mechanical strength.

US company Teknor Apex says its new series of Creamid A3H7.5G glass-reinforced PA66

compounds are a more economical alternative to metal or current

polyphthalamides (PPAs) or even speciality PAs like PA4.6, PA11T, PA MDX6, or PA4T. The benefits lie in the lower processing and mould temperatures, providing additional benefits in terms of energy consumption and tooling requirements, said the company. The compounds are recommended for under-the-hood parts in vehicles with turbocharged engines where long-term high temperature performance is required. Meanwhile, chemicals/plastics maker Sabic has solutions for electric vehicles, including a thermoplastic-based material that renders protection for batteries in side-crash scenarios, a critical need for automotive makers.

Today, the conventional countermeasure employed is multi-piece stamping reinforcements to strengthen the rocker panel for battery protection. However, these metal solutions add weight to the vehicle, which can affect both efficiency and range, says Sabic. The company's structural hybrid design uses both plastic and metal to produce a lighter reinforcement part and one that can actually improve crash performance. Its current design can offer up to 40-60% lower weight than an all-metal version, while also offering up to 10% greater energy absorption.

## plastics in aircrafts

Owing to their high strength, safety and reduced weight, engineering plastics are becoming a material of choice in the aerospace industry. German aero-structure supplier and Airbus subsidiary, Premium Aerotec, has manufactured a major component in the aircraft's primary structure made of carbon fibre reinforced plastic (CFRP) with a thermoplastic matrix. A pressure bulkhead for an A320 aircraft was presented at the ILA Berlin air show last year.

The component consists of eight segments of equal size, which are connected to each other using welding technology. The weldability of thermoplastics constitutes a huge advantage of this material, according to Premium Aerotec, that executed the entire development and design of the demonstrator, while manufacturing of the individual components was done in cooperation with the Institute for Composite Materials (IVW) in Kaiserslautern.

"Compared to the current traditional pressure bulkhead for the A320 family, created with riveted aluminium components, the pioneering CFRP version weighs less but has the same mechanical properties, as well as having shorter production times and more economic manufacturing costs," said the Augsburg-headquartered

company, which counts Airbus, Boeing, and Airbus Defence & Space as its client base.

In the coming years, and with the emergence of new applications and technologies that seek excellent properties, demand for engineering plastics is expected to reach new heights.



## PRODUCT

### Intelligent All-Electric Blow Moulding Machine

For 20 liter Jerrycan, Advantage/ Efficiency: 40-50% Energy saving, 20-25% Production rate increase 25-30% Dry cycle faster 20db Noise level reduce 0% pollution Industry 4.0 The smart manufacturing.

Apart from the PLC and HMI control system being used, SCADA system is available to link thru internet as to collect all the data and be monitoring



from distance, such as office computer personal PC or mobile for machine. With long term production, all data can be collected for further analysis to improve the efficiency, cut down the cost and bring more profit.

### The New Injection Molding from CLF!

CLF-230AE launches electric injection molding machine equipped with high-end Siemens control system and servo driver. It offers multi-axis control, high-speed injection, high efficiency operation and energy savings to exhibit 16-cavity flip top caps molding. The flip-top cap, unlike the traditional screw-top toothpaste container, offers practicality, convenience, and wide ranging applications in high value added products for PET water and sport bottle caps. The self-developed mold and production system have significant effects on market advantage and competitiveness.







Injection Molding Solutions



敬請蒞臨我司展台  
VISIT OUR BOOTH **K0816**

**孕育創新**  
**驅動產業脈搏**



全立發機械  
CHUAN LIH FA



For More Product Information:

[www.clf.com.tw](http://www.clf.com.tw)



uCloud





# Taipei PLAS Summit for Creating New PLASbility

On 8/16, Taipei PLAS organized its very first Summit on Industry 4.0. The Summit began with the organizers' welcome and carried on to 6 speakers elaborating on the top events happening in plastics and rubber industry for smart manufacturing.

Nowadays, the megatrends that are rapidly influencing the world markets include globalization, demographic and climate changes, and individualization. To adjust to such quick changes, Industry 4.0 can be a solution. To construct smart manufacturing, the OPC-UA is an important element

for Industry 4.0 in combining sensor, machinery, to MES and ERP platform, and the smart machine and smart service are essential to achieving smart production. First, smart machine offers transparent information recording, automatic assistance for data settings and thus enhances machining efficiency. The smart service is about connections and control to support for more efficient, quicker, and predictive maintenance.

The recent environmental friendly plastic theme brought up by straw and plastic bag as the heated topics on the news has placed manufacture on a bullet train now, and much focus has been on providing a higher value-added production by stabilizing the process then optimizing upon it; these are the 2 prerequisite in advance of going forward to smart production. A better optimized production means better control on the melt flow, which brings the melt adaptive control the main goal for future injection molding. Developing automation should not be merely a blind trend for everyone but its emphasis is on creating better production efficiency.

Since the launch of Industry 4.0, the leading machinery foreign brands like ENGEL, ARBURG and WITTMANN BATTENFELD or domestic brands like FCS, DIING KUEN, and HIWIN have been deeply researching on smart manufacturing and therefore established clear criteria and information knowledge on every element required in smart manufacture. Even though it might be a long journey, but it is still encouraged to take improvement effort in stages toward completing smart manufacture.

## INDSUTRY 4.0 HIGHLIGHTS:

- ENGEL: inject 4.0 & authentig MES System.
- FCS: Intelligent ManuFactory 4.0.
- ARUBRG: Industry 4.0 solutions with customized packages applicable on its machines.
- WITTMANN BATTENFELD: HiQ package.
- DIING KUEN: SMB package.
- HIWIN: Smart key components and robots.



## 工業4.0—塑造新契機 高峰論壇

第16屆 Taipei PLAS 首次舉辦『工業4.0 - 塑造新契機』高峰論壇，由6位講者闡述塑膠產業於工業4.0的智慧機械、智慧製造、智慧服務及最新趨勢等議題。現今，影響全球市場的主要趨勢包括：全球化、人口與氣候變遷以及個人化。為了適應這些趨勢的變化，工業4.0可以成為一種解決方案。為了構建智慧製造，從感測器到機械、管理系統MES和ERP等平台，建立統一架構OPC-UA，接著逐步建立智慧機械和智慧服務才能達到智慧生產。智慧機械提供生產資訊數據化，實現自動化製程校正功能，進而提高加工效率；智慧服務則是連接遠端和控制系統，以支持更高效、快速和預測性的維護。

近期環保議題不斷浮出檯面，塑膠袋及環保原料都被放大做檢視，製造環保產品須先通過穩定流程，然後優化流程來實現更高附加價值的產品，這是往智慧生產的先決條

件。在未來塑膠產業，生產優化意味著需要掌控熔體流動，因此熔體變異控制將成為未來射出成型的主要參考依據。業者對於開發自動化系統，不該只是盲目跟從趨勢，應強調創造未來更好的生產效率。

自工業4.0推出以來，ENGEL、ARBURG和WITTMANN BATTENFELD等國外領先機械品牌或富強鑫、鼎坤及上銀等國內品牌不斷地深入研究智慧製造，這對國內業者也許是一個漫長的旅程，但仍然鼓勵廠商們改善製程，朝向智慧製造發展，現在的改善將是未來前進的一大步。

## 智慧產品亮點：

- 恩格爾：inject 4.0 和 authentig MES 系統。
- 富強鑫：Intelligent ManuFactory 4.0。
- 阿博格：客製化智慧製造方案。
- 威猛巴頓菲爾：HiQ 解決方案。
- 鼎坤：SMB 解決方案。
- 上銀：智慧關鍵零組件和機器人。



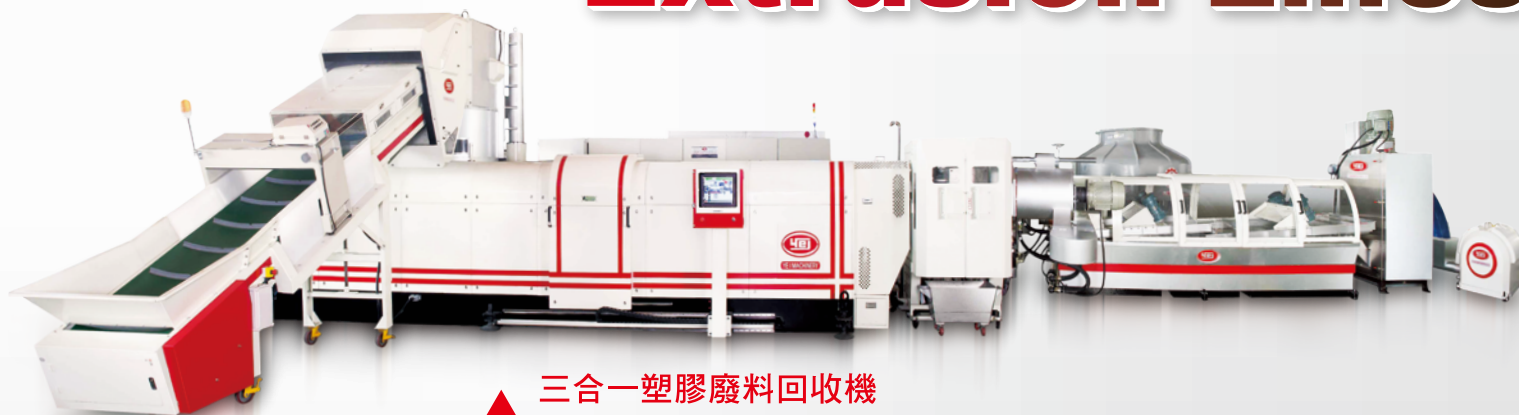




TAIPEI PLAS M0319  
Aug. 15-19 2018 Booth (4F)



# Manufacturer of Extrusion Lines



## 三合一塑膠廢料回收機

### THREE IN ONE PLASTIC RECYCLING MACHINE

- 適合原料：PE, PP, ABS, PS, PLA, EPS, EPP  
APPLICABLE MATERIAL: PE, PP, ABS, PS, PLA, EPS, EPP
- 模頭切 DIE-FACE PELLETIZER
- 產量：100KGS/HR. – 1,200KGS/HR.  
CAPACITY: 100KGS/HR. – 1,200KGS/HR.



## ABA PE共擠壓吹膜機

### ABA PE CO-EXTRUSION BLOWN FILM LINE

- 中間層使用70%碳酸鈣降低製膜成本  
DRIVE MATERIAL COSTS DOWN DUE TO 70% OF CaCO<sub>3</sub> IN THE MIDDLE
- 產品：平口袋,印刷袋,壓花袋,垃圾袋,包裝袋  
PRODUCTS: FLAT BAG, PRINTED BAG, EMBOSSED BAG, GARBAGE BAG AND GENERAL PACKAGING BAG

## 兩段式塑膠廢料回收機

### TWO STAGE PLASTIC RECYCLING MACHINE

- 適合原料：表面大量印刷膜, 清洗膜, 髒料  
APPLICABLE MATERIAL: HEAVY PRINTED FILM, WASHED FILM AND CONTAMINATED MATERIALS
- 模頭切 DIE-FACE PELLETIZER
- 產量：100KGS/HR. – 1,000KGS/HR.  
CAPACITY: 100KGS/HR. – 1,000KGS/HR.



[www.yei.com.tw](http://www.yei.com.tw)

一億機器廠股份有限公司 YEI MACHINERY FACTORY CO., LTD.

台南市永康區民東路6號 No. 6, Mindong Road, Yeong Kang Dist., Tainan City, Taiwan

Tel: +886-6-253-6066~9 Fax: +886-6-254-3717 E-mail: service@yei.com.tw





# 推薦！臺北必Buy商圈

## Taipei Popular Business District



### 西門町商圈 Ximending Shopping District

想了解臺北年輕人的流行趨勢，那來西門町就對了！百年古蹟的西門紅樓，除了飽覽古蹟文物之外與感受手作創意市集的生命力，西門町不但見證了歷史，也成為青少年流行文化最前線，打扮新潮的年輕世代在這裡展現自我。

★ 搭乘捷運板南線至「西門」站，於6號出口出站即可抵達。

If you want to catch up with the trendy youngsters in Taipei, Ximending is the place to go! Ximending is a proof of history and also the front line of pop culture where the fashionably-dressed young generation express themselves freely.

★ Transportation: Take MRT Bannan Line to "Ximen" station and take Exit 6.



### 臺大公館商圈 Taida Gongguan Shopping District

「臺大公館商圈」濃厚的人文氣息，充滿著歷史的積累，是臺北市南區的繁華生活商圈，鄰近有臺灣大學、師範大學等校區，聚集的學生人潮進而帶來不少消費商機。

★ 交通資訊：搭乘捷運松山新店至「公館」站下車即可抵達。

Rich in history and culture, the 'Taida Gongguan shopping district' is a bustling district in Southern Taipei. The students of the neighboring Taiwan University and Normal University contribute to the considerable business opportunities in the area. Tingzhou Road is also praised as the 'Road of South East Asian Delicacies' where you can feast on various exotic cuisines.

★ Transportation: Take MRT Songshan-Xindien Line to "Gongguan" station.



### 捷運中山站徒步區商圈 MRT Zhongshan Station Pedestrian Mall

鄰近的「條通商圈」則以日式風情聞名，五花八門的日式商店、和風美食應有盡有，充滿著濃厚的東洋風情。周邊也有美術館如臺北當代藝術館，獨具風格的藝文空間和人文創意，展現臺北富饒的文化底蘊。

★ 交通資訊：搭乘捷運淡水線至「中山站」即可抵達。

"What distinguishes it from the rest of the shopping district is the collision of boutique cultural and artistic features. Spot, the Taipei Film House, is the former U.S. consulate which adds foreign culture to the bubbly Zhongshan district. A lot of young entrepreneurs have flocked to this area to start up their businesses.

★ Transportation: Take MRT Tamsui Line to "Zhongshan" station.



### 101 商圈 101 Shopping District

「101 商圈」是臺北市最具指標性的都會商圈，市府廣場、新光三越廣場，經常舉辦各項活動或園遊會，威秀影城中庭常有歌手新片發表演唱或各項造勢活動，街頭藝人表演，吸引路人的眼光，展現多變的城市風貌。

★ 交通資訊：搭乘捷運板南線至「市政府」站，或搭乘信義線「臺北101 站」下車，即可抵達。

'101 shopping district' is the most iconic shopping district in the Taipei metropolitan area where people flock to department stores, hotels and trendy restaurants. A variety of events and fun fairs take place at City Hall Plaza and Shingkong Mitsubishi Plaza. In the courtyard of the Vieshow Cinemas, there are often song-release events or themed campaigns going on, and street artists gather to give their best performances, attracting pedestrians in Taipei.

★ Transportation: Take MRT Bannan Line to "Taipei City Hall" station or take MRT Xinyi Line to "Taipei 101/World Trade Center" station.



### 永康商圈 Yongkang Shopping District

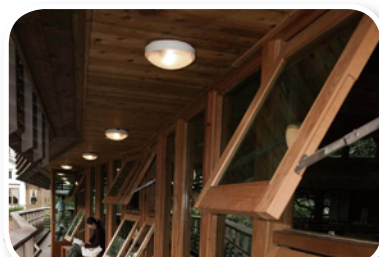


永康商圈以永康公園為中心，不時會有藝術家在此表演，增添了不少文藝氣息。鄰近大安森林公園，加上美食眾多、巷弄店鋪各具風尚，捷運信義線通車後，交通更加便捷，吸引絡繹不絕的觀光客前來朝聖。

★ 交通資訊：搭乘捷運信義線至「東門」站，5號出口出站即可抵達。

Yongkang Street is where the Taipei alley culture originated. Since the MRT Xinyi Line started operating, the delicacies and distinctive shops have become more accessible and are continuously attracting endless streams of tourists. Yongkang Street is perfect for a leisurely stroll to enjoy a slow-paced exploration in Taipei!

★ Transportation : Take MRT Xinyi Line to "Dongmen" station and take Exit5.



資料來源：台北市觀光旅遊局



# 需求市場商機來自阿博格



德商阿博格機械有限公司台灣分公司  
(ARBURG GmbH + Co KG Taiwan Branch)

德國 **ARBURG** 是全球領先的射出成型機設備製造廠及射出技術開發企業，於 **2016 年 4 月** 正式營運臺灣分公司，並強調建立分公司是在臺灣成功開展業務的里程碑。阿博格認為臺灣是海外市場潛力很大的地方，尤其以消費電子市場為主，

過去 **1、20 年** 臺灣不斷推出新產品，這樣的需求所創造出來市場是相當可觀的，並觀察出臺灣廠商在此的活躍性以及臺灣於全球創新方面是世界有目共睹的，畢竟德國還是以汽車業為大宗服務，而臺灣的電子消費市場後續卻是更加龐大的商機。阿博格能為客戶提供高端技術、售前及售後服務和豐富的专业知識；作為世界領先的高品質塑膠加工射出機的製造商之一，深耕市場及在地服務為經營原則，提供機台緊急修復、定期保養、參數校正等售後服務和維修技術，並確保廠商機台使用無虞。**ARBURG**（阿博格）於 **Taipei PLAS** 上展示 **LSR**（液態矽橡膠）和 **PIM**（粉末注射）的加工製程。這兩個高端展品展示現場生產智慧手機零件之相關技術，除此之外，**ARBURG**（阿博格）中央電腦管理系統 **ALS** 作為工業 **4.0** 展示的核心部分，這次進行首次展示。**WIR SIND DA** 阿博格在此為您服務。

## (1) 液壓 ALLROUNDER GOLDEN EDITION 生產 iPhone 手機殼

一台鎖模力為 **1000 kN** 的液壓

**ALLROUNDER 420 C GOLDEN EDITION** 可為 **iPhone 8** 生產彈性手機殼，生產模具來自 **Prover** 公司，液態矽定量給料系統來自 **2KM** 公司，操作由線性機械手系統 **MULTILIFT SELECT** 完成，**GOLDEN EDITION** 入門級系列機器是為液態矽橡膠加工特別量身打造的。

## (2) 金屬材質的智能手機框架

在台北國際塑膠工業展參展的電動

**ALLROUNDER 470 E GOLDEN ELECTRIC** 現場演示如何生產具有拋光表面的金屬材質智能手機框架。該電動入門級系列展示樣機是專門為金屬粉末 (**MIM**) 的加工而設計的。基於其薄壁和不導電的設計需求，因此智能手機框架的穩定生產是十分具有挑戰性的

# 更堅固耐用的塑料



全文請見  
(QR code)

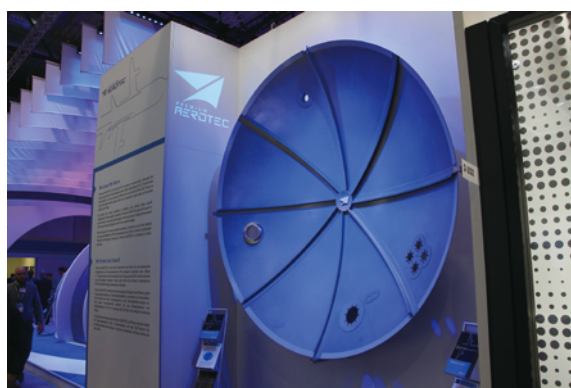
工程塑料是一種熱塑性塑料，具較高的衝擊強度和耐磨耗特性與商品材料相比，它能夠抵禦極端的環境條件。

## 汽車：工程塑料的先驅

德國 **Lanxess** 所開發的熱穩定系統 **XTS2**（極限溫度穩定），可將 **PA66** 的熱穩定性提高至 **230°C**，非常適合用來生產擁有集成中冷器的進氣管。另外，正在開發中的 **30%** 玻璃纖維用來增強 **PA66**，適用於吹塑成型的空心部件，如引擎艙內的空氣管道。美國的 **PA66** 製造商也開發了一種耐高溫 **PA66 Vdyne XHT**，其中兩種等級設計可長時間暴露於 **210°C** 和 **230°C** 的環境。根據相關用途的要求，工程塑料可全面替代較重的金屬部件，或與複合材料結合使用，通過使用輕質材料和技術，可以減輕單部件的重量，而不影響其物理性能，如機械強度。

美國的 **Teknor Apex** 公司表示，其新系列的

**Creamid A3H7.5G** 玻璃纖維增強 **PA66** 複合材料是一種更經濟，可替代金屬或現有的聚鄰苯二甲胺 (**PPAs**)，甚至是 **PA4.6**、**PA11T**、**PA MDX6** 或 **PA4T** 等特殊 **PA** 的替代品。推薦用於需要長期高溫性能的渦輪增壓引擎車輛的引擎蓋下方的部件。另外，塑料製造商 **Sabir**，為電動汽車推出一種熱塑性材料，可在側面碰撞時為電



池提供保護，這對汽車製造商極為重要，尤其是在製造商需要把大型電池安裝在車底板的情況之下。

## 壓力下不失堅韌：飛機中的塑料

德國航空結構供應商 **Premium Aerotec** 所製造飛機主要結構的主要部件，是由碳纖維增強塑料 (**CFRP**) 和熱塑性基體製成的；它在去年的柏林航空展上展示 **A320** 飛機的耐壓艙壁。這家公司說明，與目前採用鉚接鋁製部件製造的傳統 **A320** 系列相比，這個 **CFRP** 版本質量更輕，但卻有相同的機械性能，以及更短的生產時間和更經濟的製造成本。

在未來的幾年，隨著尋求卓越性能的新用途及新技術的出現，市場對工程塑料的需求預計也將達到新高峰。

資料來源：PRA 2018 May / Engineering Plastics

# 產品報導

## 單頭單模全電式中空成型機

鳳記國際機械公司於 **2018 年** 發表全新一代智能全電式中空成型機『**eBlow**』，以大噸數（夾模力量）機型：夾模力可達 **250~300kN**、可生產 **15~30** 公升堆疊桶。

基於此市場需求並於 **2017 年** 定調開發主軸：『**eBlow T20s**』。以最大規格夾模力 **250kN**、最大產品 **20** 公升堆疊桶、單夾模台最大產量 **130pcs/hr** 為目標，這些規格是最貼近實際市場需求，對於設計與製造成本也是最有經濟效益的選擇。機台本身實際操作上能達到節能省電 **40-50%**，產量提升 **20-25%** 以及噪音降低 **20** 分貝，搭配工業 **4.0 SCADA** 系統能即時蒐集即時資料及進行數據監控。



## 智慧射出成型機

**CLF-230AE** 電動射出成型機，搭配高端的歐系西門子控制系統及伺服馬達驅動器，實現高精度的多軸控制、高速射出及高效節能，生產 **1 模 16 穴** 模內折蓋，不同於一般瓶蓋，此折蓋在於飲用時，可以不用將瓶蓋旋開拿起來，目前多應用於寶特瓶蓋或運動瓶蓋較高附加價值的產品上，模具為台灣自主開發生產，整套生產設備非常具有競爭力，是目前非常夯的產品。





# 優秀產品介紹

## 全立發

### 智慧射出成型機 - CLF-60TX

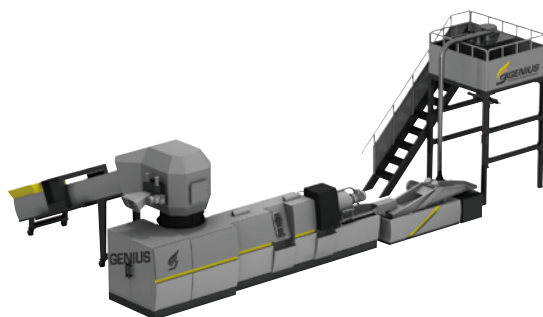
全立發在 2016 年開始投入智能化射出成型機的研究開發，透過科技部的專案研究計畫，與學術單位合作，先從基礎打底、人才培育上加強實力，最後目標是價值創新及產業領航。今年推出 **CLF-60TX** 智慧射出成型機，透過射出參數自適應控制、鎖模力智慧感測技術及智慧射出監控等先期研究的技術，展現出產品品質與生產力提升的成果，另外特別展出 **AOI** 光學檢測、中央連線遠端監控及自動化生產。



## 長毅

### 三合一塑膠回收造粒機 - KRIEGER 85

以嶄新特殊加工技術，用於工業刀具製作的鎢鋼材質均勻地焊接於押出機螺桿及造粒模具表面，可增加產品的使用年限。裝載義大利原裝進口的高度精密研磨齒輪箱，其可承受扭矩大、傳動效率好，搭配較小馬力的馬達也不會過載，可為客人節省更多的電力消耗。新增快速換刀設計，客戶無須再將粉碎桶的外蓋取下就可以直接從兩側的閘門將磨損的刀具取下，並更換新的刀具。



## 銓寶

### 智慧吹瓶生產系統 - BottleViewer

智慧系統 **BottleViewer**，提供更簡單、更低成本的導入門檻，提供這些中小企業主掌握生產狀態，提供更快速、即時的成本分析。進階的功能，更提供了更多工業 4.0 的生產解決方式：智慧型預測保養系統 **IPM(Intelligent Predictive Maintenance, IPM)** 提供機器健康的預警選項避免停線，全自動化虛擬量測 (**Automatic Virtual Metrology, AVM**) 在高速生產下也能實現產品線上全檢。**BottleViewer** 能讓業主可以在世界任何一個角落掌握生產狀態，更讓企業提昇管理效能，獲得比以往更大的生產效益。



## ALL-ELECTRIC BLOW MOULDING MACHINE

單頭單模全電式中空成型機

Full range from 200 ml bottle - 30 liter canister



### ADVANTAGE / EFFICIENCY

Compared to Hydraulic System Machine:



40-50%  
Energy  
Saving



20-25%  
Production Rate  
Increase



25-30%  
Dry Cycle  
Faster



20db  
Noise Level  
Reduce



0%  
Pollution



EHB Series

### INDUSTRY 4.0

The "Smart" Manufacturing

Apart from the PLC and HMI control system being used, SCADA system is available to link thru internet as to collect all the data and be monitoring from distance, such as office computer, personal PC or Mobil for machine:

- Performance data
- Production status
- Productivity status
- Material consumption, input and output
- Energy consumption
- Running parameters
- Alarm management

With long term production, all data can be collected for further analysis to improve the efficiency, cut down the cost and bring more profit.

EXTRUSION  
ISO 9001:2008



Extrusion Excellence

[www.fki.com](http://www.fki.com)



鳳記國際機械股份有限公司

FONG KEE INTERNATIONAL MACHINERY CO., LTD.

71042台南市永康區正北一路168號

No. 168, Cheng Pei First Rd. Yongkang Dist., Tainan 71042, Taiwan

Tel. +886-6-2532157 Fax. +886-6-2533079 Email. sales@fki.com



Booth No. **J0118**



# 優秀產品介紹

富強鑫

## 射出機工業 4.0 解決方案 - 熔體變異適應控制

二代油壓機搭載熔體變異適應控制系統，射出機台通過模穴感測訊號掌握熔體充填狀態，執行熔體變異的適應性的決策，有效抑制熔體黏度變異，提高產品品質的一致性與生產效率。同時透過模穴感測訊號即時監控產品成型過程曲線與模穴曲線訊號特徵，達到即時監控成型品質避免不良品流入市面、取代傳統人工品檢方式節省品檢人力成本以及協助建構成品品質履歷追蹤系統之優點。



鳳記

## 單頭單模全電式中空成型機 - FK / EHB 75GT20SS

鳳記國際機械於 2016 年 12 月開始著手進行大噸數全電式中空成型機的資料蒐集與設計概念發想，並於 2017 年 1 月底定調開發主軸：『eBlow T20s』。以最大規格夾模力 250kN、最大產品 20 公升堆疊桶、單夾模台最大產量 130pcs/hr 為開發目標，因為這些規格是最貼近實際市場需求，而且對於設計與製造成本也是最有經濟效益的選擇。



富強鑫

## 射出機工業 4.0 解決方案 - 智慧製造工廠系統 4.0

為了簡化生產管理、降低管理人力成本，掌握即時的生產資與紀錄，才能把握調度的空間有別於一般製造執行系統 (MES)，本系統針對射出場域規劃，有效融合操作科技 (Operation Technology, OT)、資訊科技 (Information Technology, IT) 與通訊科技 (Communication Technology, CT)，亦即以 OT 萃取場域的生產特徵，IT 與 OT 串聯機台設備的訊息，架構精簡實用，維護簡單成本相對低廉，適合中小企業管理應用。同時也為大型企業保留資料交換介面，可快速介接運行的 MES 系統。



東毓

## 智慧型節能雙邊自動脫模設備 - TIP-1000-2RT-L-250-PCD

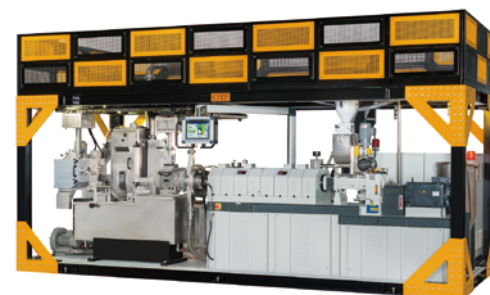
東毓以客製化全方位解決方案為客戶提供最佳設備，從基本設計找到創新的切入點，有效利用設備等待時間，可同時進行射出成型與脫模取料流程，成功解決時間與人力問題；另外，針對「降低原料消耗」的問題提出改善方案，自行研究開發全新專利技術—「泛用型冷澆道系統」，藉由此設計能減少膠料使用與廢料產生，對於傳統型冷澆道而言，泛用型系統的模具相容性更高，且更能大幅提升效率與產品品質。



誠玉

## 多功能雙螺桿材料測試實驗機 - CK-32HT

CYKF 開發的多功能性實驗型押出機，可以做多樣化的材料研發、測試、分析，取得最佳的成果，發揮設備的最大效用。可依材料特性在最短時間內調整更動符合需要的切粒模式。操作簡便、節省時間、節省空間、節省成本、增加經濟效益。採用高階人機介面系統，可依客戶需求做客製規劃整合。如自動化的操作、監控、數據參數的收集儲存、備份與程式的記錄更新…等，皆可透過網路連結做完整的數據交換。





# 2018『研究發展創新產品競賽』頒獎典禮

- 昨 (8/16) 晚  
於台北南港展覽館 1 館盛大舉行



## 塑膠射出成型機械類

**優等** 全立發機械股份有限公司  
CLF-60TX智慧射出成型機

**佳作** 宜得世股份有限公司  
AEEZ600-ES150全電式射出機  
震雄機械股份有限公司  
SM150LSR液態矽膠射出成型機



## 塑膠押出成型機械類

**優等** 誠玉開發機械股份有限公司  
CK-32HT多功能雙螺桿材料測試實驗機



## 塑膠中空成型機械類

**優等** 鳳記國際機械股份有限公司  
FK / EHB 75GT20SS單頭單模全電式中空成型機

**佳作** 金展精密科技工業股份有限公司  
EM08S3智慧高速吹瓶機  
銓寶工業股份有限公司  
CPSB-LSS8直線式全電高速吹瓶機



## 橡膠機械類

**優等** 東毓油壓機械股份有限公司  
TIP-1000-2RT-L-250-PCD智慧型節能雙邊自動脫模設備



## 循環系統或回收設備類

**優等** 長毅機械工業有限公司  
KRIEGER 85\_三合一塑膠回收造粒機

**佳作** 世林機械有限公司  
Repro-Air 120智能型風冷造粒回收再生機



## 其他塑橡膠機械設備類

**佳作** 美洛克工業股份有限公司  
K-3030 KING 3D列印機  
晏邦電機工業有限公司  
DHM-SL-06空壓式除濕乾燥機



## 自動化塑橡膠成型機械及其週邊設備與系統類

**優等** 富強鑫精密工業股份有限公司  
射出機工業4.0解決方案-智慧製造工廠系統 4.0

**佳作** 百塑企業股份有限公司  
智機產業化暨IM4.0智慧助手  
華嶸精密機械股份有限公司  
智慧管理三射複合成形系統

## 2018年 台北國際塑橡膠工業展 研討會 / 活動日程表

如有修正，以現場實際狀況為準，不另通知。

8/17  
(Fri.)

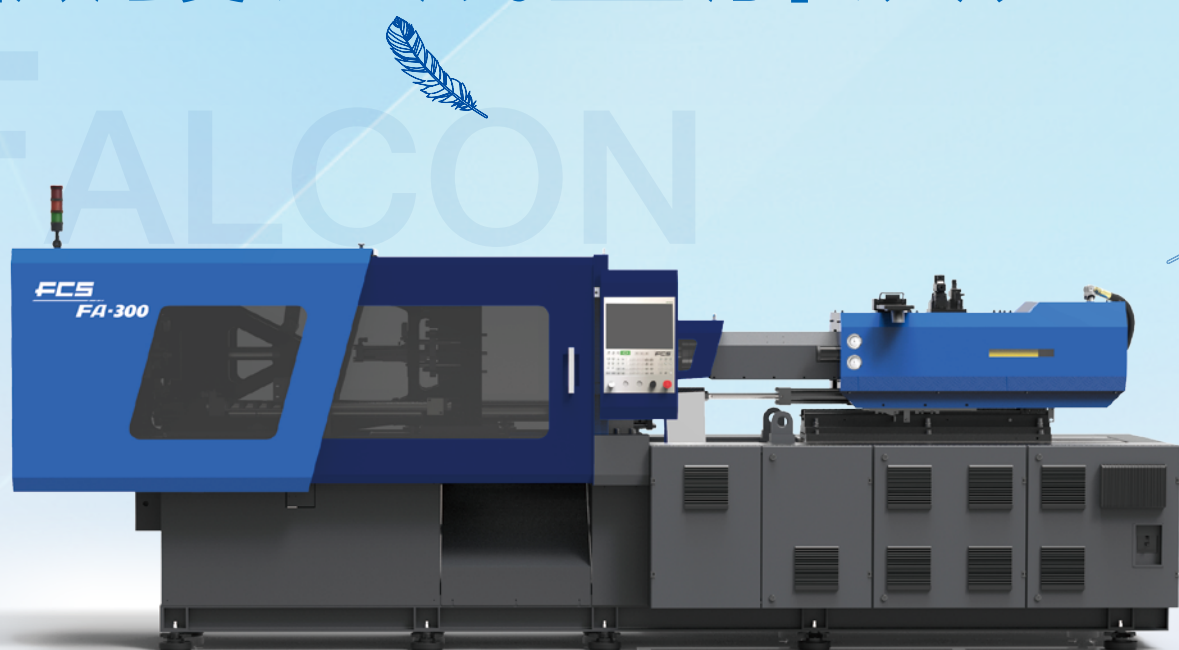
時間	活動內容／講題	主持人／主講人	主辦單位	地點	備註
10:00   12:00	雅式與應用行業協會交流會		普拉瑞斯 創意整合有限公司	台北南港展覽館 1 館 402a 會議室	陳依蓉小姐 +886-4-24517070 #268
10:00   10:40	台灣推動智慧機械策略與作法	智慧機械辦公室 黃嘉宏 秘書長			
10:40   11:20	智慧機械如何運用感測器 及發展智慧服務商機	工業技術研究院 智慧微系統科技中心 邱以泰 專案副組長			
11:20   12:00	單齒腹啮合量測概念	財團法人精密機械研究發展中心 邱垂元 工程師			
13:30   14:10	高分子產品失效分析 暨整體解決方案	塑膠工業技術發展中心 陳明坤 副理	外貿協會 機械公會	台北南港展覽館 1 館 402bc 會議室	張家蓁小姐 +886-2-23494666 #682
14:10   15:10	長纖補強熱塑複合材料技術發展進程 功能型纖維材料開發及製程優化	塑膠工業技術發展中心 董佳欣 博士 賴玟佑 研究員			
15:20   16:00	耐微波快速蒸煮塑膠材料發展趨勢	塑膠工業技術發展中心 劉寬仁 研究員			
16:00   16:40	高分子加工新形態 - 機聯網與 3D 列印彈性線材開發 新塑膠加工 - 塑膠產品快速開發試製	塑膠工業技術發展中心 王仕凱 研究員 鄭惟升 研究員			
16:40   17:20	自由貿易港區利基及 營運模式 - 開拓外銷市場之新優勢	臺灣港務股份有限公司基隆港務 分公司業務處 梁經士 副處長			
17:20   18:00	從自動化到智能化： 機器人實現智慧製造	艾波比股份有限公司 賀良偉 經理			
13:00   17:00	易格斯耐磨工程塑膠		台灣易格斯 有限公司	台北南港展覽館 1 館 402a 會議室	謝智宇先生 +886-4-23581000 #102
13:00   16:30	身邊的彈性體專家研討會： TPE - 聰明的應用，使用得聰明	梁文輝	財團法人塑膠工業 技術發展中心	台北南港展覽館 1 館 403 會議室	涂香君小姐 +886-4-23595900 #811





# MuCell<sup>®</sup> Molding System

## 微發泡成型解決方案



**FA** SERIES

- 高效能 Cycletime Reduction **15% ~ 40%** ↑
- 輕量化 Weight Reduction **6% ~ 12%**
- 高良率 High Production Quality

高性能曲肘油壓射出成型機

Advanced Toggle Hydraulic **Injection Molding Machine**

+ **iMF4.0** 智慧製造工廠  
Intelligent ManuFactory

 **TAIPEI PLAS**

Booth **J0518**

富強鑫集團 **FCS Group**

### HEADQUARTERS

+886 6 5950688  
+886 6 5951129  
fcsco@fcs.com.tw

### FCS DONGGUAN

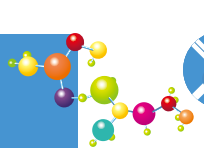
+86 769 83313753  
+86 769 83181903  
cdg@fcs.com.tw

### FCS NINGBO

+86 574 56138688  
+86 574 56138600  
cnb@fcs.com.tw







# 展覽快訊

累積參觀人數 (國內+ 國外總計)

8,410

第3日

## 強勢回歸 開創新局 共15家卓越廠商得獎

外貿協會與機械公會於昨 (8/16) 晚舉辦「研究發展創新產品競賽」頒獎典禮，共有 27 件參賽作品，各分為七大類 -- 塑膠射出類、塑膠押出類、塑膠中空類、橡膠機械類、循環系統或回收設備類、自動化塑橡膠及其週邊設備與系統類和其他塑膠機械設備類，從類別中選出優等與佳作獎，並從所有參賽作品中遴選出美學獎、智慧機械獎以及特優獎。經過縝密的評選機制，讓評審團難以取捨，也展現臺灣塑橡膠機械業者投入創新研發的成果，更彰顯出臺灣機械優質產品的保證。隨著工業 4.0 時代的來臨，本屆亦在所有競賽之機械產品中，增設智慧機械獎項目，業界非常踴躍提供與智慧機械有關的機種與新作品參賽，足見臺灣塑橡膠機械業長期對研究開發的重視，共同為塑橡膠產業開創新局。



特優獎

富強鑫精密工業股份有限公司

射出機工業4.0解決方案-FA160熔體變異適應控制



美學獎

鳳記國際機械股份有限公司

FK / EHB 75G120SS單頭單模全電式中空成型機



智慧機械獎

銓寶工業股份有限公司

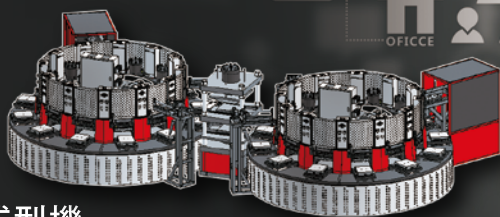
BottleViewer智慧吹瓶生產系統

## 啟動你的未來製程

鴻綺專業於提供生產可視化、高效益、高智慧的客製化鞋機製程。我們不僅限於全自動化，更能提供整廠設備與智能化系統整合，讓你一觸可及未來製造。

### HC-258CME

圓盤式全自動橡膠熱壓成型機


**鴻綺機械股份有限公司**  
HORNG CHII MACHINE INDUSTRY CO., LTD.

Tel: 886-4-25627106  
Fax: 886-4-25625651  
E-mail: sales@horngchii.com.tw  
42950 台灣台中市神岡區社南里中山路667巷71號  
No. 71, Lane 667, Zhongshan Rd., Shengang Dist., Taichung City, 42950 Taiwan

