

To Do a Good Job, One Must First Sharpen His Tools

# Feature- Fastener Molds, Dies, Taps, Punches and Tooling Suppliers

edited by Fastener World

The performance of a single piece of screw or nut is deeply influenced by the quality of heading, thread rolling and drill point making and such procedures are reliant upon the application of various molds, dies, taps, punches and toolings. In other words, without good tools to do a job, it is impossible to produce high quality fasteners.

The development of Taiwanese fastener tooling industry is well over 6 decades. With the growing demand for fasteners and fastener manufacturing facilities, a diverse range of tooling (e.g., molds, dies, punches, threading plates and special forming tools) have been developed thus far and these items have been also widely used in the application of fastener making.

As most tooling products are categorized as consumables and they require after sales service for customers, the development of Taiwanese fastener tooling suppliers, who are well-known for their excellent customer service and flexibility, can continue to sustain. With many fastener companies expanding their sales to China and Southeast Asia and many Taiwanese machines being sold to emerging countries (e.g., Mexico, Argentina, Peru) or other regions like Latin America, Southeast Asia and China over the past decade, tooling products made in Taiwan have become common in the international market. A few manufacturers have even successfully tapped into Europe, USA, Japan, S. Korea where high end products are highly demanded, which is definitely good news for Taiwan. Many overseas direct users gradually shift their orders for tooling to Taiwan due to better technical experience, durability, high quality, precision, reasonable prices, compliance with int'l standards and the ability to 100% meet customers' requests. Fastener manufacturers from China, India and Southeast Asia, in particular, show double digit fast growth each year. At the moment, many Taiwanese tooling product manufacturers can not only accept standard orders, but also offer customization service. They can even offer make-to-stock production for long term customers, greatly shortening the time for tooling replacement and solving the issues with inventory control.

In this feature, we especially invited 10 Taiwanese and overseas well-known tooling products & facilities suppliers to share their stories of success and expectation toward the future tooling market, in anticipation of giving our readers a clearer picture of the current tooling industry and boosting the development of the global tooling market through their experience in the tooling field.

-GIAN-YEH INDUSTRIAL CO., LTD.

- SUPERIOR TOOL CO., LTD.

-S.G. CARBIDE DIE CO., LTD.

- TUNG FANG ACCURACY CO., LTD.

- E-FONG DIE MANUFACTURE CO., LTD.

- LU-YI DIE WORKS CO., LTD.

- CHUAN CHANG MOULD CO., LTD.

- RY MAW PRECISION TOOLING CO., LTD.

- CTR CARBIDE DIES

- KINEFAC® CORPORATION

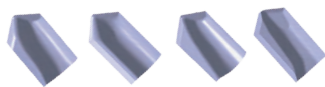




# Gian-Yeh: Dedicated to Developing Superior High- Performance Drill-Point Dies Suiting Customer Demand

by Gang Hao Chang, Vice Editor-in-Chief of Fastener World

Gian-Yeh Industrial Co., Ltd., which is celebrating its 30th anniversary in 2018, has been a globally recognized and trusted drill-point dies manufacturer and developer. It owns the industry leading technology and quality in the R&D of drill-point dies for drilling screws. When Gian-Yeh was just founded, Taiwanese drilling screw industry was also at the very beginning of development. During the time, Gian-Yeh noticed that the supply of drill-point machines and dies in Taiwan was insufficient and only a few local companies were involved in relevant R&D and most of these demands had to be satisfied by importing Japanese machines, so it started its business from developing dies for drill point machines suppliers on the one hand and manufacturing drilling screws on the other hand. With years of dedication, it has now accumulated a wealth of experience in manufacturing drilling screws and built a solid base for it to accurately solve any customer's problems with manufacturing drilling screws. Gian-Yeh is currently specialized in dies for self-drilling screws, dies for screwdrivers, dies for rivets and dies for wood nails.



## Highly Efficient Capacity to Satisfy Global Demand for Higher End Products



With the 3-in-1 functions (drilling, tapping and screwing), drilling screws are more difficult to be produced if compared to other screws, but they are widely applied in the building and roofing industries. Accordingly, in order to satisfy the increasing demand of global customers for drill-point dies, Gian-Yeh currently has two modern manufacturing plants and has introduced more than 120 sets of electrical discharge machines (EDM) to meet customers' strictest

requirements for quality, volume and lead time. On the other hand, it also has a plant ready for use to increase order demands and plant expansion in the future, which not only shows Gian-Yeh's manufacturing capabilities, but also shows its outstanding efficiency and work flexibility.

President Tsang Yao Lin said, "Our monthly dies capacity has reached 6,000 pcs. Among these products, 60% are standard parts and the remaining 40% are customized parts as per customer's request. In addition, the ratio of export to domestic sales is 4:6." Speaking of the demand of Taiwanese, Japanese and European leading companies for high-end dies, president Lin said with confidence, "These demands are all opportunities and drives for our continuous growth. At the stage of dies R&D, our superior team not only focuses on reinforcing the performance of products, but also respects and maintains unique features that belong to respective customer, which is why Gian-Yeh could be continuously trusted and supported by customers and keep developing new products over the past 30 years. Combining Gian-Yeh's features to make progress with customers is our goal for sustainability."

## AutoCAD, High-Speed Machining and Upgraded Manufacturing Technology

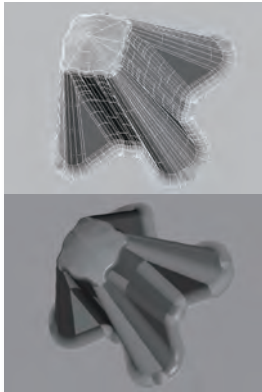
Gian-Yeh believes that European/U.S. high-end dies markets will definitely be the drive to promote the quality of relevant Taiwanese manufacturing and that Europe, Southeast Asia and Indian markets are also very likely to replace China as the focused markets with outstanding growth. As a result, for continuously tapping into the supply chain of int'l leading companies, the quality and technology must be continuously improved and reinforced. In order to achieve this long-term goal, Gian-Yeh, being quite good at traditional machining technology, also uses computers to complete precision drafting along with high speed machining to enhance its manufacturing technology. On the other hand, in order to develop more customers and satisfy stricter customers' requirements, Gian-Yeh is currently reinforcing its forging, material metallurgy, and surface coating technology and is quite active in the R&D of products. Its main R&D projects are dies for stainless steel and dies for large-size drilling screws. The newly designed and patented cutter type has the features of no slip at fixed points, quick cutting and unique dimension and is available upon customer's request. Facing the opportunities and challenges in 2018, president Lin said, "I'm really thankful for the support of our long term customers to Gian-Yeh in the past years. In the new year, Gian-Yeh will work harder to offer customers products with higher quality and irreplaceability. We also look forward to continuously working with our customers for better growth and prosperity."



**World's Exclusive!**

# Superior Tool Rolls out Patented X-Drive Punch

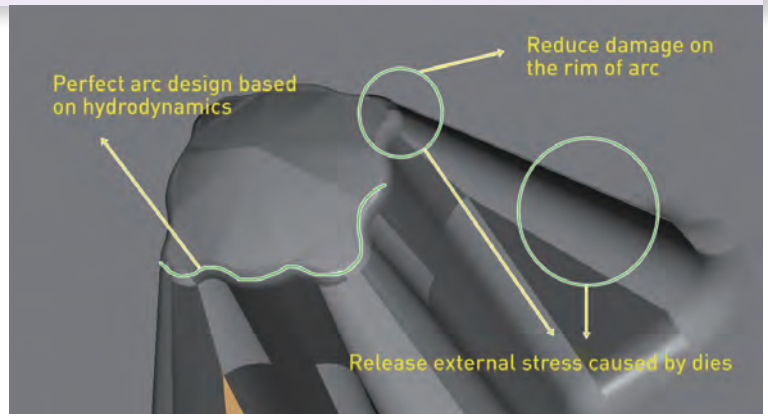
## Perfect Solution to Cam-out Problems

by Dean Tseng, *Fastener World*

Established in 1986 and highly reputable in the industry, Superior Tool Co., Ltd. is a specialized maker of Phillips punches and other precision tools for screw manufacturing that are available in various customized head types and sizes. The company started off trading punches. In 1998, Taiwan was hit by a financial crisis, and that is when the company decided to set up its precision tools production department to begin developing and making punches and dies for business improvement and sustainability. Eventually the company was never even affected by the financial crisis and in turn lifted its business performance. Recently the company has rolled out the world's only patented X-Drive punch that significantly refines old model designs. What's even better is that the screw heads punched by X-Drive are compatible with old-model bits. Before the release of X-Drive, screw makers would have to increase bore depth to improve bore fit, causing the inconvenience of frequently changing punches and shortening punch life. Now the X-Drive punches are here to solve the problem!

### World's Exclusive New Patent

Superior Tool enhanced the geometric structure of old-model punches, and rolled out the patented X-Drive punch with best fit and strong structure to perfectly reduce and even eliminate the possibility of cam-out. The company filed an application to Japan Patent Office in June 2017, and soon received the patent certificate for X-Drive in August 2017. The company has also filed patent applications to Taiwan, China, U.S., and Europe. "We have worked a lot on design. It is not easy if anyone would want to make a knockoff," said general manager Tony Tsai with pride for his new product. Exclusive geometric design and superfluid dynamics make this patented punch super anti-counterfeit!



### Ultra-powerful Curves Structure Brings an End to Cam-out

Speaking of the critical design of X-Drive, "It has to go through our exclusive wobble gage and penetration gage inspection in the manufacturing process. By design, the whole punch is formed by curves and its specs is similar to original Phillips sizes. The purpose is to allow users to quickly and conveniently replace their current Phillips screws, and optimize the poor fit of their current Phillips recess," said Tony. This means the screw heads punched by X-Drive are compatible with all old-model bits you see on the market. In clients' perspective, this makes the introduction of new punches more convenient, and there is no need to specifically change screw head design and enlarge/thicken screw neck. It is a win-win for clients, users and Superior Tool, and is a single solution that brings multiple benefits.

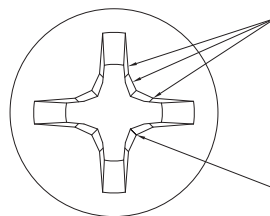
### Offering Production and Cost Advantages

X-Drive's advantage is not just limited to its total curve design that achieves superfluid dynamics. It can also reduce the probability of punch cracks and let out the external stress brought by dies. Finally, its "cam-out resistance" eliminates the possibility of abrasion between the screw and bit. Plus, there is no need to change screw head design and enlarge/thicken screw neck. With X-Drive, screw makers can save much on material costs, extend punch life by multiple folds, and increase production advantages.

### Ten Advantages of the New X-Drive Punch:

1. Great fit.
2. Material saving.
3. More convenient punch introduction.
4. No cam-out.
5. Strong structure.
6. Compatible with old models.
7. No need to change screw head design and enlarge/thicken screw neck.
8. World's exclusive new patent.

Tony said, "With these ten advantages, our X-Drive punch can not only significantly improve clients' operation efficiency but also create bigger cost advantage. Anyone in need of our products is welcome to contact Superior Tool!"



Torque points on old-model bits:  
The positions may result in cam-out easily.

Fit point on old-model bits:

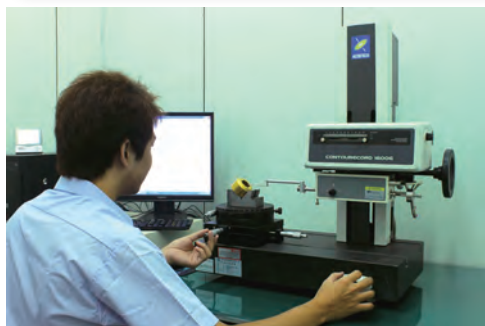
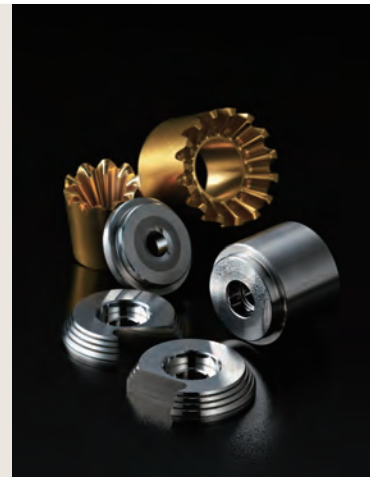
The fit point is located at the end of the line, so the Phillips socket must be deeper in order to achieve better fit.



# *S.G. Carbide Die: Dedicated to R&D of Tungsten Steel Dies for Multi-stage Cold Forging*

by Gang Hao Chang, Vice Editor-in-Chief of Fastener World

Founded in 1990 and based in Changhua (Taiwan), S.G. Carbide Die Co., Ltd. is one of the leading manufacturers and developers of tungsten steel dies for multi-stage cold forging machines. Under the leadership of two well-experienced founders with the background of technical engineers, the company has grown from an enterprise of 4 employees that only accepted orders for tungsten steel grinding for cold forging plants in central Taiwan into a well-known and reliable tungsten steel dies brand to domestic/overseas customers within nearly 30 years. S.G. Carbide Die currently is able to offer customers from screws/nuts, hand tools & sleeves, ratchets, automotive/motorbike industries various dies for cold forging machines, and it also has a wealth of research and experience in various toothed forged dies for transmission. The excellent grinding & polishing quality, globally approved manufacturing procedures, quick lead time and the capability of S.G. Carbide Die to help customers develop dies have made many companies collaborating with S.G. Carbide Die for the first time become its loyal customers.



## Fully Automated Manufacturing Lines Certified to Int'l Standards

The R&D of dies is a highly precise procedure, so if any error occurs, the performance may not be as good as originally expected and the defects may also result in increasing replacement cost and customer complaints. Hence, in order to continuously provide customers with consistent dimensions, lifecycle of products and processing results, S.G. Carbide Die has adopted the fully automated manufacturing procedures for years and every step is also compliant with ISO 9001:2008. Not only every piece of dies made by S.G. Carbide Die can be traced with tags, but also customers can rest assured that all dies are compliant with int'l standards. Although most orders placed to S.G. Carbide Die request customized products, S.G. Carbide Die can still carry out 100% quality control from drawings submission, purchase of materials, manufacturing arrangement,

inspection to shipment with its ERP, barcoding and ISO 9001 quality management systems. Such well-established procedures also help greatly eliminate possible errors in manufacturing and enable S.G. Carbide Die to achieve the final goal of punctual delivery.

## Quality First and Setting No Limits to Introduce More Precision Processing and Inspection Machines

When it comes to quality control and customer satisfaction, S.G. Carbide Die manager Eric Xie said, "In order to enhance our dies quality, we continued to introduce various sets of precision processing and inspection machines in the past 10 or more years to fulfil the strictest precision control requested by customers. Thus far, in terms of inspection, we've introduced Coordinate Measuring Machine (CMM), Contour Tracer Machine, 3D Vision Measuring, 2.5D Optical Comparator, Height Gauge, and Concentricity Gauge; in terms of precision processing, we've also introduced CNC Internal Grinding Machine, CNC Cylindrical Grinding Machine, CNC EDM, CNC Wire EDM, CNC Milling Machine, CNC Lathe, and Fluid Polishing Machine. These precision processing and inspection machines and our ERP system demonstrate our greatest sincerity to serve leading companies around the world."

## Growing with a Solid Base and Focusing More on European and Thai Fastener Markets

The flexible service, stable quality, punctual delivery and competitive prices S.G. Carbide Die could offer have successfully solicited many domestic/overseas customers to become its long-term partners. Such a solid base has also made it widely appreciated by customers



and win the "certified tungsten steel dies manufacturer award" presented by Taiwanese armament factory. The annual capacity of S.G. Carbide Die has thus far reached 24,000 pieces, 35% of which are for export. The fastener industries in Thailand and Europe will be also the focus of S.G. Carbide Die in the future. Speaking of the future development of the company, S.G. Carbide Dies holds a very optimistic attitude and expects to offer global customers high quality dies along with complete service and maximize customer satisfaction. President K. H. Hsieh emphasized, "We believe in continually investing in our people, equipment and technology and will try our best to fully meet our customer's needs with unmatched efficiency and skills."

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# Tung Fang Accuracy: Automating Punch Production and Solving Customers' Problems with Production Lines

by Gang Hao Chang, Vice Editor-in-Chief of Fastener World



Luzhu, Kaohsiung-based Tung Fang Accuracy Co., Ltd. established in 1995 has been in the punch & die business for fasteners for nearly 23 years. It is one of the main contributors that helped Taiwan fastener industry shift from standard parts manufacturing to higher level of fastener manufacturing. With the business philosophy of continuous R&D and striving for perfection and the mission of achieving excellence, Tung Fang under the leadership of President Chi-Tung Yen continued to offer punches and dies necessary for fastener manufacturing to customers over the past two decades, which not only helped customers maintain the high quality of products, but also greatly improved the performance of customers' products. The main products include lobe punches, 12-point punches, hexagon punches, carbide punches, special punches, carbide screw dies and screw dies.

## From None to Automated Production, Tung Fang Just Made It!

That many Taiwanese small fastener factories could finally grow into leading big companies, to some extent, should be attributed to Tung Fang. Back to the times when the fastener industry was on a sharp growth, President Yen saw the potential of the fastener industry and the importance of its role in every industry sector, so he chose to step into the fastener-related tooling industry after graduation. He started his work from basic lathing processing, where he gradually accumulated the practical experience and acquired technical knowledge of fastener manufacturing. After then, he started his own business with the industrial management fundamentals learned from school and passion for serving customers.



Originally focusing on parts OEM, CNC machining, general parts production, punches/special punches and carbide screw dies, Tung Fang has at the moment successfully transformed into a supplier of special types of punches (especially hexagon punches, lobe punches and special punches). More than 50% of its orders are made for punches, while dies and other tooling represent 20% and 30% respectively. As every customer requests different specifications, Tung Fang continues to upgrade the computerization and automation of its manufacturing systems every year in order to manufacture punches with great lifespan and precision. Tung Fang has also introduced many high-end machines from Japan and the professional team with experience in punch manufacturing, giving customers a very good impression on high precision, efficiency and effectiveness of cost reduction of its products and making them willing to establish long term and close cooperation with them. President Yen said, "Serving customers with an honest and moderate attitude has been always our commitment; however, manufacturing the highest quality and the most suitable products for customers has been even the priority in our ideas and goals."



## Targeting Overseas Market Demand and Extending Reach to the High-End Punch Supply Chain

The business of Tung Fang has been gradually extended to overseas markets in recent years and its overseas customers are mostly from Japan, Italy, Turkey, India and China. The ratio of domestic sales to overseas sales is 6:4. With the prerequisites of increasing great demand in Europe, the wish to make the business running more mature and keeping pace with globalization, Tung Fang will be active in developing customers in the region and other advanced markets and will continue to offer customization service to satisfy needs of the high-end markets and plan to add the production for special and automotive applications. In addition, noticing the issue of insufficient labor and talent, it has also planned to introduce robotic arms in Feb. 2018 and reinforce various software/hardware to elevate its manufacturing capacities and offer customers more efficient service.

President Yen added, "Over 80-90% of our customers are direct users, which is definitely what we would like to see, because this enables us to know what our customers really want and be in the frontline to solve all customers' problems. Avoiding getting involved in price cutting competition could also enable us to make more efforts in offering customers more suitable and competitive solutions, which helps create a win-win and achieve sustainable operation. Creating our own brand and widening our marketing approaches will be our goals in the future as well. In 2018 Tung Fang will also exhibit at Fastener Fair Turkey and Taiwan Int'l Fastener Show. Through exhibiting, we hope to make more punch direct users recognize us, trust us and appreciate us."

~Your priority choice for high quality dies development~

## ***E-FONG: Taking the Lead in R&D of Tungsten Carbide Dies***

by Gang Hao Chang, Vice Editor-in-Chief of Fastener World



### **The Industrywide Admired Super Hard Tungsten Carbide Dies**

Headquartered in Gangshan, Kaohsiung (Taiwan), E-Fong Die Manufacture Co., Ltd. has been dedicated to the manufacture and R&D of dies for various industrial parts applications for several years and has been a reliable partner trusted by many industry leading customers. Under the leadership of General Manager Jack Wang, who has a wealth of industrial experience and a talent for corporate management, and with the full dedication to satisfying a diverse range of customers' demand, E-Fong is currently specialized in the manufacture of super hard Tungsten Carbide dies. Its main products include fastener dies, non-standard dies, forming dies, triangle dies, strong beam dies, 4 & 6 combination screw dies made of Tungsten Carbide, SKH9, SKH55, M42, etc. These dies with superior performance and excellent quality have successfully turned E-Fong into a very reliable partner to many Taiwanese fastener manufacturers. E-Fong has in recent years become a commonly seen dies brand in the complex fastener manufacturing procedures.

### **Dedicated to R&D of Multi-station Fastener Dies & Extending Reach to Advanced Market Sectors**

Considering the fact that many fastener companies around the world continue to focus more on the automotive, aerospace or even more advanced market sectors and in order to get closer to these customers' demand, E-Fong has been actively

dedicated to the development of various multi-station (multi-blow & multi-stroke) fastener dies in recent years, particularly dies for making automotive fasteners & fixings, bullet dies, combination dies and other dies for sleeves/locknuts and nuts. General Manager Wang said with confidence in an interview with Fastener World, "In response to the development of the global automotive industry, which requires higher and higher precision, E-Fong continues to integrate the creativity of their R&D staff and experience of technicians to develop new products, enabling them to provide the global fastener industry full of competition with more proactive, challenging and competitive dies products."

### **An ISO 9001 Approved Company with a Professional Team for Dies R&D**

Since the inception, E-Fong has spared no efforts in the development of dies. Its excellent R&D team mainly focuses on the R&D of multi-stroke and multi-layer dies, especially those dies for heads/under-heads processing, hole drilling and hole punching. In addition to the development of dies, E-Fong also attaches much importance to the pre-sale/after-sale service for products, making it widely appreciated by customers. It has been thus far certified to ISO 9001 as well. All of these show the continuous insistence of E-Fong on perfect product quality and its strict attitude toward every detail.



### **Improving Capabilities and Talent to Grow with Customers**

Facing more and more competitors in the market, E-Fong is not afraid and is brave to take challenges and go further. General Manager Wang said with a firm tone, "E-Fong is full of hope and vision for the fastener industry; furthermore, we also hope to develop more patented products in the next three years and share our enthusiasm with others. It is said that sharp tools make good work, so currently E-Fong is expanding its production capacity. What is even more important is the emphasis on personnel developing and training. Through these changes, E-Fong would spare no effort to make its modest contribution to all partners, and thus consolidate our presence in the fastener industry!"



# Lu-Yi Die Works: All Our Pursuit of Every Client's Satisfaction



by Gang Hao Chang, Vice Editor-in-Chief of Fastener World



Located in Hemei, Changhua (Taiwan), Lu-Yi Die Works Co., Ltd. is a top-level drill point dies manufacturer. Established in 1988, Lu-Yi continues to stick to the spirit of “satisfying each client’s demand” and has been in the business for more than 3 decades. It has now become an exemplary die manufacturer to many domestic/foreign fastener manufacturers. Different from other manufacturers offering tens of die types, Lu-Yi has dedicated itself to the R&D and manufacture of drill point dies, of which it is very capable, since its inception, and its drill point dies are all compliant with int’l standards (i.e., drill point dia. 2.1- 10mm & drill point length 1.5-22mm). These dies play an indispensable and essential role in the manufacturing procedures of carbon steel and SS self-drilling screws. The company is specialized in manufacturing all sizes of drill point dies made of tungsten steel and high speed steel and the types include Pinch Point, Center Point, Bullet Shape Point, Nail Shape Point and Wing Point. In addition, Lu-Yi can also offer die customization service for any screw dimension requested by any client. Such flexible R&D and manufacturing capabilities have made Lu-Yi dies widely adopted by its domestic/foreign clients and successfully sold to China, Japan, S. Korea, Australia, India, Thailand, Poland, Italy, Germany, Austria, Turkey and so on.

## CAD/CAM Manufacturing Technology / Industrywide Admired Die Quality

Knowing that quality is the main point to create added value for clients and give a soul to products, Lu-Yi introduced CAD/CAM manufacturing technology into the company in 1996, which has not only widened the distance of its R&D and manufacturing level from its competitors, but also consolidated the base for it to maintain consistent performance and stability of its products.

President James Lu, who has led Lu-Yi for 15 years, said, “Self-drilling screws include features of drilling, tapping and fastening and there is no requirement for pre-drilling, thus showing the dual advantages of cost and time savings. Currently the industry requires that self-drilling screws must be not only more labor saving and safer, but also quicker. In other words, the drilling speed must be quicker and the time for a screw to penetrate through the steel plate must be also shorter. In order to achieve this goal, having the best quality of drill points will be very essential. As the leading company in this area, Lu-Yi strives to be the best of the best and never stops improving its drill point dies design for achieving the most effective penetration within the shortest time. In addition to drilling and tapping speed, extending the service life of dies is also what we are striving for.” President Lu said proudly, “Lu-Yi’s dies allow users to form drill points with less effort, which means less impact on dies and thus longer service life! Longer service life could significantly reduce the cost and times for die replacement. What’s most important is that it could help maintain smooth operation of production lines.” Lu’s words fully demonstrate the commitment of Lu-Yi’s R&D team to create the most competitive self-drilling screw drill point dies for the clients.

## Independent R&D / Internationally Certificated Patents

Lu-Yi, always thinking about how to create value for clients’ brands, has had its exclusively developed dies for cutting and material flow removal parts of self-drilling and self-tapping screws patented in Taiwan and China since 2009. With the DNA of R&D and the increasing sales demand, Lu-Yi relocated to a new site three times the scale of its previous site with greatly increased capacity in 2015. It has recently invested a lot in the R&D of enhancing the drilling speed, service life and durability of dies. Lu added, “Satisfying clients’ demand is our profession and our technical team is trying to complete everything to the best.”



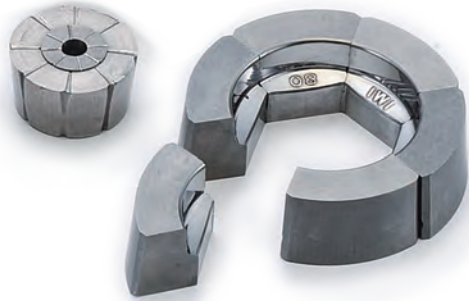
## Sustainable Operation and Reinforcing Int’l Business Territory



Lu-Yi could even do more than others when it comes to market expansion. For example, in addition to maintaining close relationship with existing Taiwanese partners, it has also extended its reach to overseas markets in recent years to solicit more customized orders and set offering high quality dies at reasonable prices as its final goal. With human-oriented principles, the blueprint of Lu-Yi offers clients and employees the strongest backup and support. Lu concluded at the end of the interview, “In addition to satisfying clients’ demand, I also hope our employees could feel support from the company, as we value clients and employees in our blueprint. Satisfying clients, offering them complete technical support/service, taking care of our employees and their family will be the only way for Lu-Yi to achieve sustainable operation!.”

# Chuan Chang Mould: Taking Root in Taiwan and Extending Reach to Southeast Asia

by Gang Hao Chang, Vice Editor-in-Chief of Fastener World



Chuan Chang Mould Co., Ltd., located in Gangshan, Kaohsiung (Taiwan), is an indispensable hand that drives Taiwanese fastener industry to achieve efficient and high quality manufacturing. Its main business includes the manufacture of various standard and non-standard moulds for screws & nuts making made of super hard tungsten steel and SKD61. For years Chuan Chang has been dedicated to the R&D of well-engineered moulds for many domestic/foreign customers and satisfying their different order requests, making it establish a reliable brand image and gain a well-known reputation in the industry.

## The Strongest Support for Fastener Manufacturers / Being Active in Business Expansion

The quality of fasteners is closely related to the performance of moulds. Accordingly, Chuan Chang has insisted on being the strongest support for fastener manufacturers and helping customers produce reliable, durable and well-engineered finished products at all times since its inception. Under the leadership of Managing Director Chih-Ming Chu, who has more than 20 years of industrial experience, Chuan Chang not only consolidates the operation in Gangshan and the other in northern Taiwan, but also plans to extend reach to other emerging fastener manufacturing markets in Southeast Asia within a few years. Indonesia, in particular, where FDI is currently vibrant and shows increasing domestic market growth potential, will be one of the main focuses of Chuan Chang in the next 2-3 years.

“Prior to the establishment of Chuan Chang, I had worked in a factory for 10 years and I did learn a lot of knowledge and technical experience in mould production, which later becomes the solid base for Chuan Chang to maintain steady growth in competition. The main business of Chuan Chang is nut making moulds. Apart from orders placed by Taiwanese customers, Chuan Chang also processes overseas orders for parts development. Hence, Chuan Chang definitely has a wealth of knowledge and complete experience in the development of standard or custom-made parts. The ratio of our export to domestic sales 3-4 years ago was 3:7 and it has now increased to 4:6. We hope that such a ratio could become 5:5 in the near future. In the section of export, though we have some partnered trading companies, most of the companies we collaborate with are factories and direct-users. Through collaboration with these direct-users, we could have quicker discussion on manufacturing technology and offer more efficient after-sale service. We have also collaborated with many customers from Italy, Poland, Croatia, Thailand and Indonesia,” said Managing Director Chih-Ming Chu.

## Being Brave to Face Industrial Competition and Find Niche Markets

The competition in Taiwan or global mould markets has become fiercer than ever. For anyone who wants to be the winner among so many rivals, he must do a very good job in the technical and market perspectives. Managing Director Chu especially pointed out that more and more customers tend to send requests directly to mould factories in recent years, so how to make Chuan Chang selected as their priority partner would be quite important. Managing Director Chu added, “Many requests for smaller size mould development made out to Taiwan have been gradually shifted to other countries. So, facing the global competition, Taiwanese companies must go overseas and Chuan Chang would definitely like to be the first in these markets where many fastener and car manufacturers have gained a solid presence. For example, countries like Indonesia offer favorable tariffs to material import, so for us, they are opportunities!”



## Customization and Branding to Help Optimize the Added Value of Customers' Products

In terms of product R&D, Managing Director Chu said, “Solving customers' problems is my biggest achievement. Most of our orders are customization and we could make any adjustment upon customers' requests. We could process most orders many companies could not! Our monthly capacity is about 1,300 pieces, all of which marked with Chuan Chang's name.” Chu's words fully demonstrate the confidence of Chuan Chang in its quality and its corporate responsibility to grow with customers. Looking forward, Chuan Chang will not only accelerate the setup of its overseas factory, but will also reinforce collaboration with customers in order to become the paradigm of Taiwanese mould companies going overseas.



# Ry Maw is Establishing Its Punch Kingdom

## Knowing Customers Better than They Do

by Gang Hao Chang, Vice Editor-in-Chief of Fastener World



### Designer Fastener

The Best Partner For Your Success  
Total Quality Control • Excellent Mechanical Property

Headquartered in Hunei (Kaohsiung) and established in 1998, Ry Maw Precision Tooling Co., Ltd. has been in the business for nearly two decades. For years it has continuously built up close relationship and collaboration with the fastener industry and has become a precision tooling supplier for global fastener manufacturers. With an excellent technical & sales team and integrated management & operation systems, Ry Maw specializes in the production of customized punches for fasteners and can produce as per customer's drawing, effectively achieving the precision and stability required by customers. Its eye-catching performance, durability and effectiveness of products has won itself an industrywide admired reputation.

### 100% Customization, Giving a Boost to Customers' Products

The customized product portfolio of Ry Maw currently includes Punch Parts, Stamping Punches, Square Punches, Socket Punches, Hexagon Punches, 12-PT Punches, Customized Punches and Sleeves, mainly made of high speed steel and tungsten steel, which could be also electroplated upon customer's request. Inside the plant of Ry Maw are also installed with Micro-Hite 350, Rockwell Hardness Test AR-10, Projectors PH-3500/PJ-A3000/PH-3500, Surface Roughness Machine SJ-301, 3D Measuring Instrument CW-3020-CNC, Contour Measuring Instrument CV-500 to ensure that the quality of all punches is fully compliant with relevant standards.

“Being a humble solution provider for customers” has been for long the mission statement of Ry Maw. Knowing that every customer's demand is different, Ry Maw develops its own unique one-on-one project for punch development. Through the complete SOP that helps achieve accurate processing time control, dimensions, and completeness, every piece of punch delivered from Ry Maw can be 100% compliant with the requirements of every customer's drawing, thus eliminating the issues generated by inferior quality like unexpected halts of production lines, cost hikes and shipment delay. Ry Maw, since its inception, has dedicated itself to product processing for Japanese customers and maintained long-term collaboration with traders. Its customers are not only from the domestic Taiwanese market, but also from overseas markets like Europe, USA and Japan.

### ISO 9001 Certified, Ry Maw Never Stops Until Perfection

If we review Ry Maw's history in the past 20 years, we could see that Ry Maw reached a new stage almost every few years. For example, it was established in 1998; its plant was expanded in 2001; the first relocation was completed in 2005; it integrated scrapped material recycling system in 2006; it was certified to ISO 9001 in 2009; and most recently, its new website was activated in 2016. “Our progress is still ongoing, as we hope to offer the best products to customers and make them create more added value with our products. Our business philosophy is: Good relationship with customers, highly demanding quality, international vision, morality is a virtue, and employees are our wealth. On the other hand, we are also dedicated to diversifying our product range and improving their service life and quality. We regularly examine our procedures with ISO and PDCA systems, continuously acquire new knowledge and make improvements in order to provide much more market uniqueness. Our non-stop growth in technical achievements is the best proof of our eagerness to respond to customers,” said General Manager Sung Ming-Hsien.

### Outperforming with Profession, Ry Maw Aims at Orders from Tier 1 Customers in Europe/USA/Japan

Ry Maw's wealth of knowledge and experience in punches make it able to fully control the manufacturing procedures, thus completing tasks as scheduled, achieving required modulus and allowing customers to launch immediate production upon receipt. Looking forward, Ry Maw has had its own blueprint ready. GM Sung concluded, “We wish to be the supplier for T1 customers and add in our orderbook with more requests from Europe, USA and Japan within a few years. Moreover, we also wish to strengthen and keep stable relationship with customers and solve their problems in time, increasing their reliance and trust in our quality.”

# ***CTR Carbide Dies:*** ***Dedicated Only to Fastener Tooling of Premium Quality***

*by Gang Hao Chang, Vice Editor-in-Chief of Fastener World*



Established in 1973, the Birmingham, England based CTR Carbide Dies is one of the largest in the world. With a team of 40 skilled engineers and other well-talented multilinguistic sales professionals, CTR Carbide Dies is able to supply a complete portfolio of standard and specialized fastener tooling and dies made of a wide range of materials such as tungsten carbide in grades G6 to G30 and export to its customers worldwide in more than 50 countries.

## **Seven Decades Expertise in Fastener Tooling and Metal Machining**

CTR, originally focusing its main business on automotive supply, has gradually extended its product coverage in recent years to aerospace, railway, medical, energy, defense and many other market sectors, in order to fully satisfy demands of customers from various industries. Boasting over 75 years expertise in the fastener industry, the management team of CTR continues to maintain close working relationship with customers, which, according to Peter Ruitenbergh, Sales & Marketing Manager of CTR, enables them to “offer added value tool design and 3D development modelling resulting in cost savings by reducing process operations with the benefit of extended tool life.”

By having the strictest manufacturing process and quality inspection controls in place, CTR could offer fastener tooling that meets the highest industrial standards and requirements, which have been also widely used in manufacturing fasteners of industrial standards or special specifications including airframe rivets, anchor bolts, wheel bolts, engine bolts, special formed gear assemblies and alloy nuts.

## **Full-range Customer Support, Complete In-plant Equipment & Approved Certification**

In addition to the manufacture of fastener tooling and dies, CTR also has a unique customer support facility from rapid turnaround for modification/refurbished tooling to a comprehensive CAD/AUTOCAD die design consultancy service. CTR was certified to ISO 9001 in 2004 and was later certified to AS EN ISO 9100 aerospace standard in 2007. The quality system of CTR has been also recently re-certified to BS EN ISO 9001:2015 and AS 9100 Rev D.

Mr. Ruitenbergh added, “We have proven experience in low volume sub contract machining such as tooling for spring manufacturing, tube cold forming dies, feed fingers and various other component part machining. Our portfolio of machine tools includes Mill Turn CNC Lathes, CNC Internal Grinding Machines, two 5 Axis machining Centres all complemented by the latest technology in Wire and Spark Electrode Discharge Machines.” All of these show the involvement and endeavors of CTR manufacturing group to offer customers the highest quality and the most comprehensive products and service.

According to the management team of CTR, the company, being an active contributor to the R&D of fastener tooling and dies, will continue to make endeavors to fulfil the “Complete Tooling Requirement” of customers as its objective, because, as the entire team of CTR always believes, “it is not only the quality of life that we all come to demand and expect, but also the life of quality.”



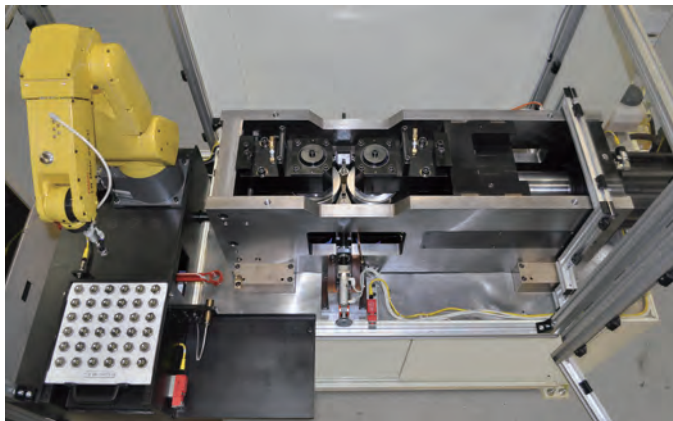
# KINEFAC®:

## 55 Years Excellence in Metal Forming Systems

by Gang Hao Chang, Vice Editor-in-Chief of Fastener World

**KINEFAC is a world leader in the development of metal forming machines, dies, and systems for the precision threaded fastener and leadscrew industries. For over 55 years it has provided highly engineered fastener manufacturing solutions with the most sophisticated process control systems available. CNC cylindrical die thread rolling machines, end-forming machines, turning machines, fillet rolling machines, and radial forming machines are among the versatile machine tools that Kinefac produces for the global fastener market. It provides solutions which can transform raw material from coil stock into finished and highly precise 3A-class threaded fasteners using its customized forming dies and tooling. Specialized infeed rolling systems can achieve production rates at up to 60 parts per minute.**

The precision threaded fastener industry has brought on the demand for increasingly sophisticated cold forming machine tools. Precision, repeatability, and control are the name of the game when it comes to stringent dimensional and quality requirements on expensive specialized fasteners. KINEFAC has developed a unique line of CNC “PowerBox” cylindrical die thread and form rolling machinery with vertical and horizontal rolling axis and capacities up to 330 TONS. It has incorporated a level of unsurpassed sophistication and user-friendly machine tool control and monitoring systems. Features such as auto-assist die matching, variable die penetration rates, automatic re-roll cycles, and programmable work revolutions save time, setup headache, and expensive setup blanks. With storage memory for over 500 individual part programs, your frequent change-overs and setup requirements become streamlined at the touch of a few program re-call buttons. Its 25 TON capacity MC-15 Kine-Roller offered with CNC servo-electric die rotation and servo-hydraulic and electric die positioning is one of its most popular models for forming threads in exotic and standard alloys for both infeed and through feed rolling of fasteners and leadscrews up to the 1” diameter range.



The KINEFAC engineering and applications team is currently focusing on new techniques for further enhancing the user experience and production setup efficiency when it comes to thread rolling highly specialized fasteners in exotic alloys such as Titanium and Inconel demanding the best quality. Some of the latest features in patent pending development include servo-controlled blade rolling systems which reduce rolling pressure on the thread crests, automatic die matching which does not require costly setup blanks, and servo-positioned die skew angle for precision through feed rolling setups.

KINEFAC has adapted to ever changing markets throughout its multi-decade history. One of the most important keys to surviving and advancing is constant innovation and reinvention of products and technology. The fastener industry is moving closer and closer to the lot size of one concept and on-demand customization of manufacturing environments. The age of intelligent machinery with inter-communication on the manufacturing floor is rapidly coming to realization. Flexible manufacturing systems will be a big part of the future of the machine tool industry. Since fasteners are found in nearly every device on earth in one form or another, the machine tools and manufacturing systems responsible for producing them will likely be at the forefront of these flexible and intelligent production systems. KINEFAC is geared up and ready to tackle the challenges that lie ahead in an ever-evolving economy. ■