

Feature

# Construction Fasteners Suppliers

*edited by Fastener World*

Construction fasteners are critical parts highly relevant to public safety. From the high-strength fasteners used in the buildup of scaffolds to ensure work safety to others used in building structures, all of them may be influenced by various environmental factors like humidity, earthquakes, low temperature or extreme dry weather. As a result, construction fastener manufacturers in response to the evolving engineering technology continue to upgrade their product design, improve the load capacity & tensile strength of products, and develop lighter and more easy-to-use fasteners, which are strictly tested, processed with high-end technology, and compliant with safety standards. These products always feature anti-breakage, anti-slippery, anti-deformation, anti-loosening and anti-rust, which are not required by some other fasteners.

This time we are pleased to have 4 companies focusing on the area of construction fasteners joining this feature, which include Joker Industrial Co., Ltd., King Century Group Co., Ltd., Sucoot Co., Ltd. and Hsien Sun Industry Co., Ltd. The commonly used anchors usually show excellent fastening performance in concrete and are widely used in several buildings. Many companies have also found their niche in certain areas. For example, some may be specialized in design and manufacture of anchor nuts, some may be specialized in CNC machined anchors and some others may have developed their own world-class scaffold systems. Different products are complementary to each other in various applications, which are all for achieving better and safer construction.





## The Wizard at Construction Fastener Design Joker Industrial Co., Ltd.

by Nai Wen Chang, *Fastener World*

Dubbed by many of his customers “the wizard,” President Pang Ching Huang of Joker Industrial Co., Ltd. has always got quite a few innovative ideas for improving customers’ products and procedures on his mind. In addition to understanding what customers’ needs are, Joker could even develop new products for customers to satisfy their engineering demand and is happy in doing it at all times, which may be why its customers are also willing to exchange their innovative ideas for products with Joker.

### A Wide Range of Construction Fasteners Featuring Patented Design and Excellent Performance

Joker’s “Sissy Stud” is well-known for its 3 different patented threads, which help generate very strong engagement while the screw is being drilled into concrete and offer more excellent pull-out force and anti-seismic & anti-loosening performance compared to other well-known brands. Sissy Studs are installed with high torque by power tools, which can greatly enhance work efficiency. Considering the total cost of construction projects and high wage levels in Europe and USA, Joker has been quite active for years in promoting this type of concrete anchors in these regions. The benefit created by less work time required far outweighs the price difference between traditional anchors and the new type of anchors.

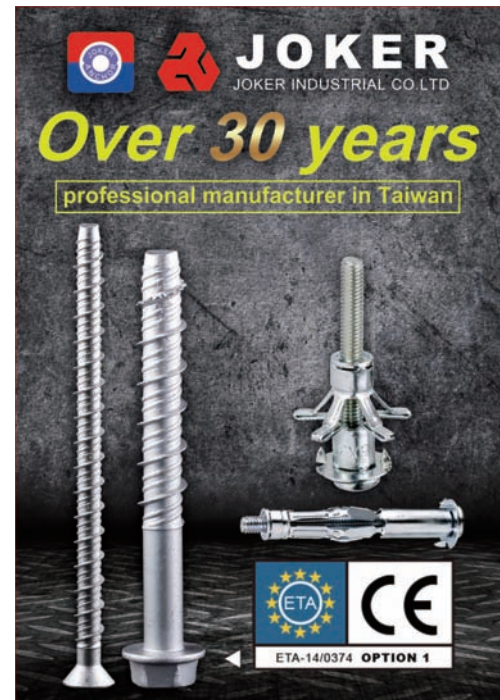
Anyone can easily recognize Joker’s “Wuga” hollow wall anchor among many



different anchors, not only due to its exceptional design, but also its “being welded” feature commonly adopted in manufacturing hollow wall anchors. “Why welded? As quality is the only thing matters,” Mr. Ryan Huang from Joker noted. “In the modified integral stamping process, it is difficult to monitor product quality. Moreover, if viewed by its manufacturing theory, products formed by

this process feature some weak

points and are at the risk of failure while being installed. However, Joker’s “Wuga” manufactured through a more expensive welding process features not only high strength, but also patented design to prevent it from failure while being installed. Its ease of installation is also better than that of other integrally formed products.”



The patented Sleeve Anchor Joker co-developed with two other engineers from Hilti shows excellent pull-out performance at all concrete conditions and its patented design also allows users to complete continuous installation of anchors, which is labor and time saving. Joker offers products of high quality and more excellent performance and is always active in expanding its market territory. Mr. Ryan Huang further added, “Our customers are very willing to discuss new product developments and improvements of existing products with us. If you go visit us at trade shows, you may see that many customers come to us with their drawings in hand for further discussion.”

### The First in Taiwan to be Accredited to ETA Option 1

A majority of Joker’s products are currently sold to the European market (around 70%), followed by USA (15%) and Other Regions (15%). According to Joker, the economy in E. Europe in recent years has been growing really fast, which boosts consumption in the market, so consumers’ demand for fasteners seems to be increasing as well.

Already accredited to ISO 9001 and ETA-14/0374, Joker has also successfully had its Sissy Stud accredited to ETA Option 1 in 2014, making it the first Taiwanese manufacturer to get the accreditation. In response to different market demand, this year Joker has also added more head and size variations into its Sissy Stud series to allow more users to experience Joker’s excellent Sissy Studs.

Contact: Ms. Amy Huang  
Email: [info@joker.com.tw](mailto:info@joker.com.tw)

## King Century Group Co., Ltd.

### Developing New High-Performance Construction Bolts

by Nai-Wen Chang, *Fastener World*

King Century continues to push itself in technical innovation. Not only does it develop products as per client's requests, but it also self-develops hollow wall anchor bolts. The products are manufactured from continuous stamping through 25 processes into a one-piece construction. In 2003, the company became the first in Asia Pacific to mass produce cold forged parts. In the same year the company set up a cold forging center to develop multi-station production of anchor bolts, and started to work with American, European and Russian brands to provide service of processing anchor bolts and high-end expansion bolts. Since then, the company developed 4-die-4-blow and 6-die-6-blow cold forging. King Century's expansion bolts are certified by B&Q (ScrewFix UK) and favored by British DIY enthusiasts. Furthermore, King Century helped a French client manufacture a new ETA-compliant product. As a result, the company made its way into the German refurbishment market and made a stunning presence in the EU market.



### Super High-Performance Products Sweeping the American & European Markets

King Century's high-load M27M22 10.9-grade anchor bolts were selected by Europe for high-speed rail anchoring. Additionally, its high-performance CNC-machined anchor bolts were selected by Marina Bay Sands Resort in Singapore for building constructions and made King Century awarded as the best supplier. These anchor bolts went through anti-corrosion surface treatment to have high quality acclaimed by users in the bay area. They provide anchoring for concrete with/without cracks, anchoring for indoor/outdoor/high-corrosion environments, and for special requirements on anti-vibration. They can be surface treated to have quality-approved high anti-corrosion for use with building and bridge constructions. Their available sizes are M6x40 to M24x300 and 1/4x1-3/4 to 1-1/4x12, and their available materials are SS304 and SS316 steels.



King Century has many types and sizes of construction products. The high-performance hammer-drive anchors are all metal and suitable for HPC. Available in SS304 and SS316 steels, they are easy to install and come with the following sizes: M6x45 to M20x200 and 1/4x1-3/4 to 3/4x8. Other unique products, such as concrete anchor bolts, high-load anchor bolts, elevator anchor bolts, chemical bolts, high-load undercut anchor bolts, and embedded parts. Currently the products are sold worldwide through Stanley Black & Decker Inc. (Powers Fasteners), Illinois Tool Works, Inc. and other major companies.

### Construction Structural Safety Monitored with Traceability System & TQM

"Our products have stable and reliable quality. For a long time we have received continuous OEM orders from clients. Our offer of premium safety is represented by our best cost-performance ratio, high-performance products, professional R&D staff, the best anchoring solutions and diversified functions, as well as premium load-bearing capacity during installation." said Jeffery Chang, General Manager. Every batch of products strictly complies with ICCES and ETA quality traceability system and follows TQM. All King Century products have AIG Product Liability Insurance and a maximal insurance claim of NTD 1 million.

### Continuous R&D in Cutting-edge Construction Fasteners

King Century knows the world trade is in increasing demand for specialization and international standards compliance, so it set up a base in Ningbo of China for manufacture of high-end expansion bolts. The base manufactures 15,000,000 pieces of all kinds of mechanical anchors per month. King Century's craftsmanship propels its development in construction anchors and its sustainable partnership with clients. The construction industry is developing new and diverse engineering methods for fasteners from large construction anchor bolts to DIY fasteners. Therefore, the market is demanding more construction hardware and its design is facing bigger challenges. Developing high-end anchor bolts according to clients' requests is the target of King Century as a professional OEM company.

King Century contact: Jeffery Chang, General Manager  
Email: [jeffrey@king-century.net](mailto:jeffrey@king-century.net)



## Expert Manufacturer of Conical Nuts for Sleeve Anchors

### Hsien Sun Industry Co., Ltd.

by Nai-Wen Chang, *Fastener World*

Starting from manufacturing bike nuts, Hsien Sun has opened business for 46 years. Now it is dedicated to developing various special nuts in addition to the product it started with, because manufacturing and providing more than one type of products is the way to stay irreplaceable in the market and sustain business. As far back as 20 years ago, Hsien Sun developed and mass-produced conical nuts which are now its primary product. Conical nuts are a critical component in the anchor category. Manufacturing them requires a certain level of forming technique to meet quality requirements. With mature manufacturing technology, pursuit of perfection in manufacturing process, and good product quality, Hsien Sun helps clients acquire ETA certificates with the conical nuts sold to major construction fastener companies in Europe.

#### Forming Products Directly Without a Second Process Creates Price Competitive Edge

Nuts come in various forms and types. Anchor nuts requires a higher degree of technique in manufacturing. Hsien Sun stumbled upon manufacture of conical nuts through serendipity. The wall thickness of conical nuts is much smaller than that of hexagon nuts, and therefore inadequate technique would easily break the wall in manufacturing and fail. When General Manager Peter Tsai came across such a situation, he did not give up. With years of technical experience and relentless efforts to overcome obstacles, he finally overcame the bottleneck and developed a conical nut formed directly without a second process which saves the need for machining and therefore becomes more price competitive than a machined conical nuts. While saving costs for clients, his anchor nuts set a new mile stone for Hsien Sun.

Besides common knurled conical nuts, Hsien Sun can cope with various customized designs such as those for 2-cuts/3-cuts conical nuts. These 2-cuts and 3-cuts nuts may seem to require secondary processing, but thanks to mature technique and perseverance in solving problems, Hsien Sun can form them with no need for a second process, saving the time and production cost for secondary processing. This not only significantly decreases lead time, but also lowers the probability of



damaging the nuts when sending them back and forth between processing plants. The technical level of Hsien Sun has made its conical nuts more durable in service and more price competitive. Based on the current market trend, Sales Manager Julia Tsai said: “Besides conical anchor nuts, the products nowadays are more and more diverse. We do everything we can to cope with the need for customization and continue to upgrade our technique and quality.”

#### International Quality Certificate + Highly Customizable Service

Hsien Sun is currently certified to ISO 9001:2015 and can manufacture different strength grades and dimensions of customized products in accordance to clients' demand. It offers products in various materials including carbon steel, stainless steel, alloy steel, brass and aluminum, and can cope with various surface treatments. Hsien Sun stresses its connection with clients as a “collaborative relationship” which utilizes Hsien Sun's technique to help clients design customized nuts. Furthermore, Hsien Sun has enough experience to spot defects in a design and help clients deal with them, and it receives positive feedback for the suggestions and improvement plans that it proposes.

Hsien Sun's products are applied in diverse industries such as construction, automobile, infrastructure, tool, and machinery. Its clients are mostly based in Western Europe. Its products are trusted by clients, some of whom have collaborated with Hsien Sun for decades. “We are more like a collaborative partner with our clients!”, said Julia. The 4,030 square meter plant of Hsien Sun has a bright working environment, good ventilation, and is still adding and upgrading equipment and software. The work area is well arranged and manufacturing process is strictly followed to significantly improve production efficiency.

To further improve product quality, Hsien Sun uses optical sorting machines to do full inspections, which means every nut must go through optical inspection and sorting before they go out, thereby decreasing the rate of defection. After sorting, the nuts will have to go through a second sorting which is done manually. This sophisticated double layer of quality check is a commitment for Hsien Sun itself and for clients as well.

Hsien Sun's contact: Sales Manager Julia Tsai  
Email: [hsien.sun@msa.hinet.net](mailto:hsien.sun@msa.hinet.net)



## Designated Brand in National Projects

### Sucoot Co., Ltd.

by Nai Wen Chang, Fastener World

The scaffolds are required in construction projects but usually received little attention as they are removed when the gleaming buildings or gigantic structures completed. Actually, we have good scaffolds in Taiwan that Sucoot Co., Ltd. has introduced the Ring System from Europe and had it modified to adapt with site conditions of Taiwan where earthquakes and typhoons happen from time to time and thus a more robust scaffold system is developed.

As quick and labor-saving fastening is always favored on-site, Sucoot then adopted "Wedge" to achieve for the purpose. Moreover, for easy assembly by

different crews, Sucoot also designed a fool-proof device favored by users who appreciate its good quality scaffolds, quick and easy to assemble, and higher safety obtained compared to traditional scaffolds.

### The No. 1 Scaffolds Supplier in Taiwan, Once a Forged Fasteners Manufacturer

The key point in assembling scaffolds fast, simple and safe lies on forged fasteners. If one wants to enhance the load capacity of scaffolds, the manufacturing procedures are critical. Starting its business with fasteners for scaffolds, Sucoot recruited many talented people with the professional background of civil engineering, structural engineering,



metallurgy and mechanic in its Taiwan HQ and the forging plant in China. Those people with various expertise in the company help to improve product quality and further extend the company's field from standard units selling into more diversified services thus transforming Sucoot from a parts supplier to a designer &

manufacturer of advanced scaffold systems, and now evolved as a total scaffolds and formwork solutions provider and has set up two branches in Thailand and Indonesia, both fledglings to meet multiplying market demands.

Sucoot's products are used in almost all big civil projects in Taiwan, such as highways, High Speed Rail, Kaohsiung MRT & Taipei MRT, a Mega Hydro Cracking Complex, and Taipei Big Dome. Even the stage build-up for the most popular band Mayday's bustling concert, and Ang Lee's movie scenes in "Life of Pi", further proofing Sucoot System's versatility and reliability in meeting myriad requirement outside typical construction.

Sucoot's scaffold systems have been sold to 60+ countries including Thailand, Malaysia, Dubai, Europe, USA, and South America, as its products are considered the byword of quality and safety under the ceaseless effort of Succot team to improve the efficiency and increase ease of use for customers so as to help them reduce working time and save labor cost.

### Saving 90% Labor Force and THSR Engineering Office Award for High Efficiency

With years of collaboration with several engineering companies, Chairman Shih demonstrates advantages of Sucoot's products of efficiency and mechanization. Sucoot was once a company which only offered scaffolds for sales and rental, but now it also offers scaffolds construction, making it a B2C rather than a B2B service provider to



customers. He added, "Take the airport MRT for example, it originally required around 70 workers, but thanks to mechanization and efficiency Sucoot offered, then it only required 7 technicians plus regular machines to complete the construction of 300 bridge spans (in a total length of 10.2 KM) within 30 months, meeting contract schedule, specified quality and safety requirement. For all this achievement, Sucoot was awarded by THSR Engineering Office, making it the only one scaffold company in Taiwan to win this honor.

### Guaranteed Safety / Products are Offered with Warranty

Now as a global renowned company, Sucoot not only is accredited to ISO9001, but also the first Taiwanese scaffold company accredited to EN12810-1 from the EU and ANSI-10.8 from the USA. Moreover, Sucoot is also accredited to an Australian certification and extended its product range to a complete set System Formwork. It also provided special formwork and scaffold systems for the construction of access roads to Houli Flora Expo, finished on time.

That workers fall down from work sites, scaffold collapse and formwork crumbling are major causes of fatalities in the construction industry. With his concern about public safety, Chairman Shih always does best to enhance scaffolds and formwork safety. He said, "Our systems are assembled with machines and special tools, it means precise control. The well-guided and systematic assembly, movement, positioning and disassembly help us to achieve less and efficient use of labor force and a safer working environment. We cherish the life of everyone and care for their wellbeing. We concern about environmental protection and conservationist, for this that all of our products are hot-dip galvanized and feature more than 10 years of durability, thus increasing the repetitive use of products." Sucoot is indeed a successful company strictly committed to its social responsibility.