

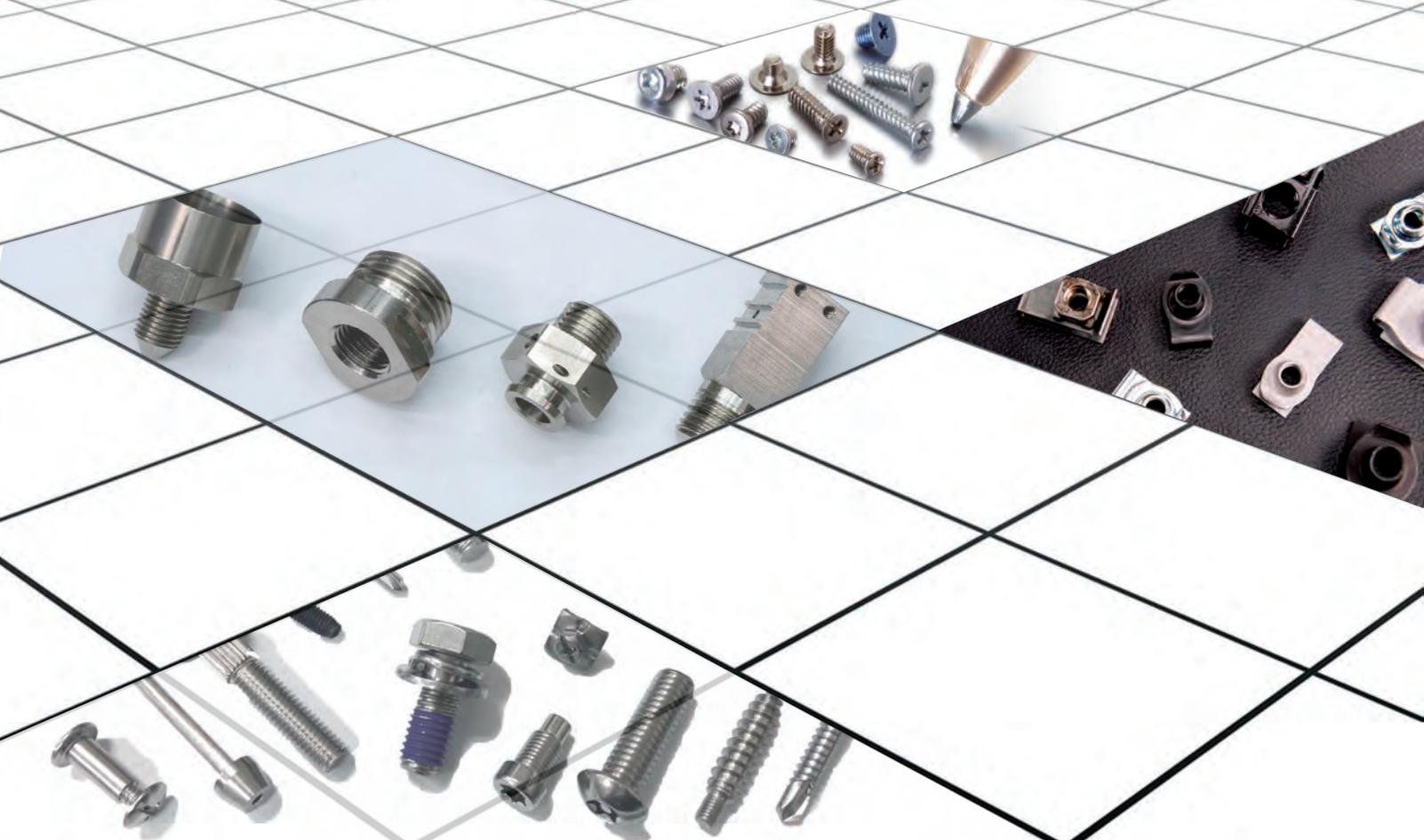
Small Screws, Washers, Stamped Parts

edited by Fastener World

According to the latest fastener import/export statistics for Q1 2018 released by Taiwan Customs, Taiwan exported over 400,000 tons of fasteners to the world in total in the period, up 5.24% from last year and the total export value reached more than 1.15 billion USD, a surge of 18.95% from last year's corresponding period. The export in the section of small screws (such as wood screws, self-tapping screws, etc.) increased by over 8% compared to last year's corresponding period, while the export in the section of washers (such as locking washers, other washers, etc.) also demonstrated growth compared to last year's corresponding period. With the upcoming high season for fastener export in Q3 this year, it is expected that the export volume will continue to climb and the orders will demonstrate a significant increase as well.

In this issue, Fastener World's editors had special interviews with outstanding small screws, washers and stamped parts manufacturers. These companies shared their stories of success and unique and leading manufacturing technology, which all impressed us quite a lot. Now, please follow our steps and read together the stories about these brilliant companies!

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High Quality Comes from Perfect Details!

Ming Sheang Taps Into European/U.S. Automotive Supply Chain

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

The automotive industry always has strict quality requirements for auto parts, and therefore, if a company could successfully tap into the automotive supply chain, they definitely have made a lot of effort to take the lead in quality control and procedure management. With 3 decades of R&D experience and the dedication to strict quality control and making no compromise over any manufacturing procedure, Ming Sheang has successfully got its firm stance into the automotive industry and received int'l standards certification such as LRQA, ISO 9001, IATF-16949, ISO/IEC 17025:2005, and TAF. Its products are supplied to GM, FORD, BMW, FIAT, VOLVO, Volkswagen, NISSAN, SUBARU and many other leading car brands. With its business expanded to more diverse areas, Ming Sheang's products have been also applied to home appliances and generators. Its customers come from the domestic and overseas markets.

Ming Sheang's products can be divided into 3 main categories: U-Nuts, Cage Nuts and Clips, all which can be made of low/medium/high carbon steel or stainless steel as per customer's specific need.



Automated Manufacturing Lines and Full-range Specifications for Supply to the Market

Ming Sheang has installed various sets of manufacturing equipment and punching machines in its plant and developed automated/semi-automated tapping machines and automated assembly equipment on its own, which can be used to manufacture products commonly used in the market. In addition, as automation is comprehensively introduced into its manufacturing lines, significant differences caused by improper human operation could be greatly avoided. Ming Sheang also invested a lot in the QC & inspection phase, including the introduction of automated torque tester, push-in force tester, Rockwell hardness tester, 3D image measurement instrument, optical sorting machine, etc. With these devices, it can analyze the variance in manufacturing and continue to improve procedures, which is why it could achieve the excellent performance of the defective rate below 50ppm and 100% punctual deliveries, in which it has taken pride for so long.

Product item	Material	Specification (Metric)	Specification (Inch)	Thread Code
U-Nut	Low / Medium / High Carbon Steel	M4, M5, M6, M8, M10	1/4"-20, 5/16"-18, 3/8"-16	8#-32, 10#-24, 10#-32, 12#24
Cage Nut	Carbon Steel, Stainless Steel	M4, M5, M6, M8, M10	1/4"-20, 5/16"-18, 3/8"-16, 1/2"-13	8#-32, 10#-24, 10#-32, 12#24
Clip	Carbon Steel, Stainless Steel	Upon request	Upon request	n/a

General manager David Chou said, "Our products are generally applied to the assembly of automotive sheet metal and they demonstrate several advantages in application. For example, our high quality U-Nuts will not impede the operation of assembly lines or cause unexpected stop of production lines because of "non-threaded" or "impurity."

Popular in Europe and USA and Active in Developing New Markets

The competitive edge of Ming Sheang's products makes it gain a solid presence in two major markets- America and Europe. Moreover, Ming Sheang has been also strengthening its marketing and promotion activities in recent years in Asia, Latin America and Europe, such as Brazil, Mexico, Czech Rep. and Finland.

General manager Chou pointed, "With good expectations toward the global automotive market, such types of products will definitely show great demand, which does not only mean growing revenue, but also reinforce our determination to achieve better quality. We'd like to continuously receive recognition and gain trust from customers using our products. In the future, we'll also continue our way on quality first and relentless improvement, support customers with punctual deliveries and fast utilization, and enhance our ability for manufacturing procedure arrangement."



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Customized Stainless Steel Small Screws Processing Expert

Aby Screw Ltd.

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



“PERSUE TOP QUALITY, FOREVER IN OPERATION” is one slogan every domestic and overseas customer visiting Taoyuan-based Aby Screw Ltd would definitely see and is also a corporate policy Aby Screw has been sticking to since its inception in 1990. Over the past 28 years, Aby Screw has kept pace with the industrial development and application trend and has been dedicated to the production of high quality stainless steel small screws. Aside from production of standard parts, its strong customizing and processing capabilities are also the largest reason that many industrial customers would like to choose Aby Screw as their long term partnered supplier.

Excellent SCREW Customizing Capabilities (Per drawing screw)

Aby Screw has years of manufacturing experience and technique for stainless steel small screws and is able to offer satisfying advice according to customized fastener needs of customers from different industries. Its tidy and bright inventory area is always stored with enough volume of products to satisfy customers' urgent purchasing needs. Its main products include tapping screw, machine screws and self-drilling screws, made of A2(SUS304), A4(SUS316) and C1(SUS410), with the specifications of M2-M10(#0~3/8") and the length of 3mm-200mm(1/8"-8"). As the stability and durability of its products are better than other similar products in the market, their products have been comprehensively used in buildings industry, wooden constructions, transport infrastructure, aluminum doors/windows, sanitaryware, lattice, floors decorations and many other applications which require longer product service life. Aby Screw has also obtained the certificates of ISO 9001:2015 and CE-EN14592.

Irregularly Releasing New Products and Extending Business Reach to Cover Main Industrial Applications

Being aware of the recent growing demand for assembly parts for precision electronic products, accessories for computer modules, machinery and plastic parts insertion, the R&D team of Aby Screw has successfully developed corresponding fastening solutions, which include micro screws for precision electronic components, SEMS screws for mechanical industry and PT screws for plastic parts, made of A2(SUS304) and A4(SUS316), with the specification of M1.4-M6(#0-1/4") and the length of 2m-50mm(1/8"-2"), mainly for the markets in Europe (e.g. Germany, Italy and Czech) and Southeast Asian countries (e.g. Philippines).

Speaking of these newly released products, Aby Screw said proudly, “Different from products in sizes of M3-M10, small screws in sizes of M1.4-1.7 require higher technical entry barriers, so not every company has the manufacturing capabilities. With the excellent quality of our small screws, we hope that customers can fully understand our technical capabilities.”

From wire, heading, threading, secondary processing quality control, testing instruments, passivation, inventory to the final delivery, Aby Screw always has complete SOP to monitor manufacturing lines, so it could help customers create the advantages of “Quick Delivery, Reasonable Prices and Customized Screws with the Highest Quality.” Aby Screw emphasized, “Superior quality has been always what we are seeking for. With the introduction of ISO9001:2015 quality management system and strict and effective quality control conducted by our in-plant staff, we hope and are absolutely able to become the strongest support of our customers.”



Aby Screw Ltd.

Starting Business from Precision Hardware, INTAI Technology is Moving Toward Transformation

When it comes to precision metal hardware manufacturing in Taiwan, the Taichung-headquartered INTAI Technology Corporation definitely shouldn't be neglected. Since 1988, INTAI has pioneered in the manufacture of precision hardware (e.g. screws for hard disk drive) and with techniques accumulated over the past 3 decades as well as step-by-step transformation, INTAI has also successfully become a company with more than 600 employees and a specialized developer of precision fasteners for automotive, aerospace, precision hardware, medical devices and RF microwave applications. The company has not only tapped into the market of medical implants, but also has become a supplier of automotive nuts, safety chair parts, axle parts and other stamped parts for the downstream assembly plants of leading car manufacturers (e.g. Ford, GM, Toyota).

INTAI's team has complete & vertically integrated engineering technologies, automated manufacturing facilities and professional tooling R&D capabilities. On top of that, its customers recognized superior quality, competitive prices and a broad range of service lead to increasing orders from the global market as a result. In 2012, INTAI was officially listed on Taiwanese OTC market.

One-stop Service A Partner That Supplies "Real Added Value"

From material selection, metal processing, secondary processing, inspection, packaging, re-inspection to final delivery, INTAI always has a dedicated team to satisfy global customers' demand for one-stop service. They could not only provide customers with R&D suggestions and technical support, but could also ensure the shortest time for products to arrive at customers' sites.



Guided by the policies of developing cost-effective solutions and introducing proactive technologies, INTAI is also working relentlessly to develop high-quality, reliable and high-performance parts that comply with IFI, DIN standards and FQA regulations.

Active Participation in Industry-Government-Academy Collaboration in Order to Expand Capacity and Business Territory

Being ISO 9001, ISO 14001, ISO13485, IATF16949, FDA 21 CFR 820, cGMP-QSR and TÜV certified, INTAI has focused more on the business incubating programs for dentistry, implants, SFR and MIM in recent years in addition to medical device manufacture.

President Mr. Simon Tsai said, "we are taking deeper root in extending our business reach to more market sectors. For example, we've been a member of Aerospace A-Team Alliance in Taiwan and co-established with HIWIN and other reps from the industry, the government and the academy "the Central Taiwan Medical Device for Minimally Invasive Surgery and Smart Complementary Appliances Platform" in anticipation of boosting the development of biomedical industry in central Taiwan. On the other hand, for expanding the current capacity and going toward more diversified development (e.g. INTAI's 3D spine surgery navigation system demonstrated at the showroom of the AI Robot Self-Development Base), INTAI is also in process to set up a new factory at Taichung Houli Science Industrial Park."

Mr. Tsai added, "We will make any endeavor to offer customers better service which though has been widely considered fully-satisfying and sincerely welcome inquiries from existing customers and prospects in the future."



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Shiho Screw Industrial Co., Ltd. (former Taiwan Nitto Seiko Industrial Co., Ltd.) has been in the business for over 4 decades with an aim at becoming a “leading brand in micro screw manufacture.” With the investment from Nitto Seiko Co., Ltd. and Ho Tai Development Co., Ltd, Shiho has been dedicated to manufacturing various micro screws, self-tapping screws, cold forged parts and fixings in correspondence with versatile needs of global manufacturing (e.g. cars/motorbikes, home appliances, mobiles, computers, VR, cameras and printers) and the flourishing economic development of Taiwan and Southeast Asia. Its monthly capacity is approx. 0.65 billion pieces. Moreover, Shiho is also a sales agent for Nitto Seiko’s screw driving machines (incl. single-spindle/multi-spindle screw driving machines, screw driving robots), screw feeders, etc. In addition to the HQ in Kaohsiung (Taiwan), Shiho also established Nitto Precision Screw Industrial Co., Ltd. at Jiashan Economic Development Zone (China) in 2002, further improving its capacity and maintaining steady sales growth. In 2019 Shiho will also celebrate its 50th anniversary and share its happiness with the industry.



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

Creating Profit with Customers, Shiho Screw to Celebrate 50th Anniversary



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The Practitioner of High Product Quality!

Entering Shiho’s factory one could see its insistence on high quality. Not only more than 100 sets of heading, threading, heat treating, electroplating, sorting and packaging machines and devices were installed in its factory, but also 5S and SOP were introduced into its manufacturing line, which completely reveals that Shiho has been always a practitioner seeking high quality. After 1996, Shiho successfully obtained the certificates of ISO 9002, ISO 9001/2000, ISO 14001, SONY Green Partner, OHSAS 18001 and ISO/TS 16949. Its quality management system has been approved internationally.

Made-in-Taiwan Products with Japanese Quality

Having a solid background of micro screws, Shiho is able to offer the optimal products to industries all the times. For example, “GIZA TITE” and “#0 Phillips Micro Screws (M1.4-M2.6)” recently developed by Nitto Seiko are respectively used as perfect “Fastening Solutions” to provide anti-loosening and meet compact product design required by customers.

“GIZA TITE” Resin Self-tapping Screw: This type of screw is manufactured upon receipt of customer’s order. There are square grooves at 4 points at equal intervals in the longitudinal direction on the outer circumference of the thread, giving it excellent anti-loosening capability even in environments with fluctuating temperature change or vibration. It is widely applied to automotive, cameras, mobiles, home appliances, game consoles, medical and building industries.

#0 Phillips Micro Screw (M1.4-M2.6): This type of product is used in applications that require compact design and cameras manufactured in Taiwan. Its main markets are Taiwan, China, Southeast Asia, Europe and USA. Speaking of the trend of products being more compact with sophisticated design, general manager of Shiho Hidekatsu/Matsui said, “We plan to manufacture a new #00 Phillips Super Micro Screw (M 0.8 - M 1.0), which will be smaller than micro screws, thus helping customers meet their demand for less weight, thickness and length.”

Reinforcing Core Technology and Extending Business to Other Markets Not Dominated by Japanese Companies

General manager Matsui said, “Screws Shiho manufactures are generally of specifications less than M6 and are comprehensively used in game consoles, cameras, automotive components, etc. However, we’re also convinced that energy-saving automatic screw driving machines will be a very potential market (if considered by labor cost or work safety). In terms of marketing, we also have sales with language skills for English, French and German. In addition, with the core technology of our three business pillars (screws, screw driving machines and flow meters) as well as the “Fastening Solution” collaboration with Nitto Seiko, we could not only consolidate our existing markets with vibrant Japanese companies, but could also extend our reach to other markets.” As is mentioned in the mission statement of Shiho: Shiho looks forward to gaining a firm presence in the int’l market with sustainable operation, creating profit with customers, lower cost and higher quality. ■