



EC Revises the Anti-dumping Margins of Certain Iron or Steel Fasteners Originating in China

In a final disclosure document released on December 14, 2021, the European Commission revised the anti-dumping margins of certain iron or steel fasteners originating in PR China to a range of 22.1%-86.5%, slightly lower than the previously disclosed 23.9%-89.8% range in November.

The involved products are: certain iron or steel fasteners (excluding stainless steel fasteners), including wood screws (excluding square head screws), self-tapping screws, other screws and bolts with heads (with or without nuts or washers, excluding railroad screws and bolts) and washers.

The involved product codes are:

CN codes 7318 12 90, 7318 14 91, 7318 14 99, 731815 58, 7318 15 68, 7318 15 82, 7318 15 88, ex 7318 15 95 (TARIC codes 7318 1595 19 and 7318 15 95 89), ex 7318 21 00 (TARIC codes 7318 21 00 31, 7318 21 0039, 7318 21 00 95 and 7318 21 00 98), ex7318 22 00 (TARIC codes 7318 22 00 31, 7318 22 00 39, 7318 22 00 95 and 7318 22 00 98).

Company	Definitive Anti- dumping Margins
Jiangsu Yongyi Fastener Co., Ltd.	22.1%
Ningbo Jinding Fastening Piece Co., Ltd.	46.1%
Wenzhou Junhao Industry Co., Ltd.	48.8%
Other Cooperating Companies	39.6%
All Other Companies	86.5%

Industry Update

Taiwan CSC Announces Steel Prices for Q1 2022

The Directorate General of Budget, Accounting and Statistics (Taiwan) raised the GDP forecast for 2021 to 6.09%, a record high since the last 11 years. Taiwan's manufacturing sector and export continue to gain strength and the export value of the country reached



a record-breaking USD 41.58 billion in November 2021. The downstream steel-consuming industries will benefit from the steel demand derived from domestic and overseas large infrastructure projects. Taiwanese steel market will remain upwards, steady and strong in the future. In addition, EU's anti-dumping tax on China's fasteners will bring orders to Taiwanese suppliers.

Baowu Group and Anben Iron & Steel Group from China have announced to keep their January 2022 prices flat, signaling the market prices are stabilizing. Furthermore, China's crude steel production have dropped more than expected. The projected total production for 2021 is around 1.04 billion tons (down about 26 million tons), and it is projected to reduce to 1.04 billion tons. The latest EU carbon price is up over 80 euros, an annual growth of over 150%. Additionally, Tata Steel indicated the future steel prices will be much higher than the last decade due to increased material cost and reduced export from China.

The COVID variant rages again putting the supply chain under pressure. Harbor congestion and shortages of containers will continue in the short term. The domestic clients to Taiwan CSC bear the pressure of limited cash flow and heaping goods that they can't ship out due to logistics barriers. In light of this, Taiwan CSC decided to lower the Q1 2022 prices by an average of 2.15% (NTD 0 to 900 per ton) to increase downstream steel-consuming industries' competitiveness in taking orders and export.

Prices Mi	Products	Margin of Adjustment (in NTD per ton)
	Automotive Materials	-900
	Low Carbon Wire Rods	-500
	Mid & High Carbon Wire Rods	-500
	Cold-Headed/Low alloy Wire Rods	-500



South Africa Makes Final Determination to Impose Taxes on Imported Iron or Steel Hexagon Bolt

International Trade Administration Commission of South Africa (ITAC, representing SACU members including Namibia, South Africa, Lesotho, Eswatini and Botswana) has made the final determination to impose taxes on imported bolts with hexagon heads of iron or steel for a period of 3 years. The product code involved is 73181543. The respective tax rates for certain periods are: 31.8% from December 10, 2021 to December 9, 2022; 30.8% from December 10, 2022 to December 9, 2023; 29.8% from December 10, 2023 to December 9, 2024.

Opportunities with U.S. Infrastructure Plan Boost 5 Taiwanese Fastener Company's Sales Through Q3 2022

Benefiting from EU's anti-dumping investigation against Chinese iron and steel fasteners, and U.S. 1.2 trillion dollar infrastructure plan, as well as a rise in steel demand, 5 Taiwanese fastener companies including Chun Yu, Tycoons, QST International, Jau Yeou, and Fong Prean have their order books fully scheduled through O3 2022.

Chun Yu president Huei Jeng Lin said the domestic market is stable and there is an increase in demand from the EU. He expects at least 3 to 5 years of a vibrant market, especially with the U.S. and Europe as critical export destinations for Chun Yu's fastener products.

QST International president Mark Wu said the plant in China focuses on the local market and mainly supplies automotive screws, while the headquarters in Taiwan and the plant in Germany also manufacture automotive screws. He is optimistic about the first half of 2022 but thinks it requires observation on the second half.

Tycoons president Kenny Huang said the plant in Thailand has the order book fully scheduled through August 2022. He expects at least 5 years of a vibrant market.

Jau Yeou president Tea-Ren Sun said the small screws of Jau Yeou are mainly sold to Germany, Spain, Italy and northern Europe. The order book has been fully scheduled through June 2022, but he is concerned about appreciated Taiwanese dollars, rising material costs, and jam-packed harbors that massively increase costs and offset profits.



EV Trend Now Sweeps into Japanese Fastener R&D Market

Poised to take over Tesla, the newcomer Lucid emerged as a surprise and topped the market with its title for creating a battery of 520 mileage. The EV trend is sweeping the Japanese components manufacturers like a tsunami and it doesn't exclude fastener-related companies.

The white-hot EV market has forced a change in Japanese fasteners. While a fuel vehicle uses 30,000 components, an EV only requires half of the total amount. To reduce power consumption, EVs must be lightweight to reduce vehicle weight, which means manufacturers must use lightweight resin instead of iron as the material for automotive components.

The same lightweight requirement goes for fasteners. Each 0.5 grams saved on a single screw will reduce over 1 kilogram for an EV's total weight. Currently there are some Japanese fastener manufacturers who have developed aluminum screws weighing one-third of iron screws. With nearly the same contractibility as resin when exposed to heat, aluminum screws work well with resin automotive components. Some Japanese manufacturers have even developed CFRP fasteners. Additionally, some have developed titanium screws for use on EVs that can rebound like a spring and hence are resistant to vibration and loosening, but the problem lies in the cost which is 30 times higher than iron screws as well as the difficulty in processing titanium screws.

Besides screws, screwdrivers will have to be redesigned to drive screws into small electronic components on EVs. EVs require driving fasteners in a very confined space and therefore a combination of fastening screws with adhesives and thermal welding emerges on the market to prevent screws from loosening.

Fastener Exports to Europe and USA Significantly Recovered in Jan-Oct 2021



Ministry of Economic Affairs, R.O.C.

Taiwan is the world's third largest exporter of fasteners. During 2021, the recovery of global economic activities and the sharp rise of steel prices have boosted exports of Taiwan's fasteners. In the period from January to October 2021, the export value increased by 33.2%.

The U.S. and the EU are the top two export markets of Taiwan's fasteners, accounting for nearly 70% of its total fastener exports. As the U.S. and the EU continue to remove restrictive measures, the recovery of infrastructure, automobiles, construction, and DIY repair industries has accelerated, thereby driving a rise in demand.

The technology of Taiwan's fastener production is advanced and durable in quality, while enjoying the advantage of industrial clusters. Taiwan's factories utilize smart and automated production, as well as develop fasteners of high value for the automotive, aerospace, rail, and dental care sectors. Hence, the exportation of Taiwan's fastener products to Europe and the U.S. is expected to continue growing.

Companies Development

OFCO's Fastener Production up 20% with 5G-enalbed AloT

After 2 years of deployment of 5G-enalbed AIoT provided by Chunghwa Telecom, OFCO now uses sensors to collect Big Data and



manage production, and has succeeded in improving the production efficiency of 13 thousand kinds of products by 20%. OFCO is the first Taiwanese fastener company that has integrated 5G Internet into its production lines.

General Manager Yen Wu said that with the introduction of 5G OFCO can weigh materials, record production parameters, know the service life of dies and the quality data of fasteners checked in every process, and the timestamp of each operator's operation.

Wu said that OFCO has had 127 machines optimized with this technology. Now the company can get the materials ready beforehand and improve production efficiency by 20%. Calculating the service life of dies using accurate data can save about 25% of the total die cost. The alert system reduces anomaly by 60%. Overall, the technology improves product delivery by 99% and improves competitiveness.

Short of Labor Ails Taiwanese Fastener Companies

The inflow of orders has increased to the point of overwhelming Taiwanese fastener companies since the start of 2021, but it also unveils the problem of labor shortage in those companies working really hard to catch up with customers' lead times. For a long time, insufficient domestic labors has forced Taiwanese fastener companies to rely on foreign labors. However, the obstructions in introducing foreign labors during the pandemic is adding pain to the companies, and this is coupled with exchange rates, shipment fee, available ships and other variables. The companies describe this year as a crazy ride but still have to pre-deploy workforce.

Taiwan's policies on foreign labors have untightened a little for concerns over human rights. Furthermore, the gap of minimum wage between domestic and



foreign labors is no longer an issue under the dire lack of labors. However, the policy that allows foreign labors to stay or change employers after 3 years of working, could give foreign labor agencies room for manipulation and encourage foreign labors to switch to employers offering higher payments. This will add to the hardship for Taiwan's conventional industries, because foreign labors are not mentally attached to the land they work on and the companies they work for, and it is quite difficult to retain them.

In the past, foreign labors helped with unwelcomed jobs. If they get to choose work environment and wage. What will be left for Taiwan fastener industry? Automation requires time, funds, facilities and technical upgrade which are a high hurdle for small and medium enterprises. Therefore, Taiwanese government should readjust policies, set up time schedules to reduce impact, and provide multiple solutions for transformation and upgrade, rather than watch small and medium enterprises getting edged out of the market.

Recently, Taiwan is loosing its edge in introducing foreign labors. As a result, both the government and the industries should make re-examination and readjustment. The labor shortage has called for the fastener as well as other industries to examine foreign labors' wage rise and deployment of automated production, in order to reach balance between labors and companies and keep the competitive edge in the international market.



Japanese Monotaro Establishes Large Distribution Center

Japanese top online tool and component distributor Monotaro provides various industrial products including tools, automotive components, fasteners and dies, totaling over 18 million items. The company held a ceremony on Novemebr 26, 2021 for the completion of the Inagawa Distribution Center in Hyogo Prefecture. The center set to launch in April 2022 is the largest distribution operation of the company. It spans 163 thousand square meters and stocks up to 500 thousand items. The investment value was JPN 40 billion. The center will adopt 800 automatic guided vehicles manufactured by Hitachi.

Shanghai University Successfully Develops the World's First Grade 19.8 Bolt



After more than a year of trial and error, the team working on high performance steel at Shanghai University of Material Science and Engineering worked with 7 other collaborators, and successfully developed the world's first Grade 19.8 ultra-high strength bolt dubbed as the world's strongest fastener. By optimizing the material and heat treatment, the Grade 19.8 bolt achieves a tensile strength of 1900~2070MPa under room temperature. A shear test compliant to GJB 3376-1998 standard reveals the bolt's shear is 115KN. A room temperature tensile fatigue strength test compliant to GJB 3376-1998 and GJB715.30A-2002 standards reveals that the bolt didn't break during the test and didn't crack on the bolt's surface and threads after its removal. This newly-developed ultra-high strength bolt can meet requirements with its combined performance.



EcoVadis Has Awarded TR Fastenings Silver Medal Status for Sustainability



As part of Trifast plc, TR Fastenings has been reporting their environmental initiatives and statistics for some years. It is proud to have been recognised by EcoVadis in gaining global business sustainability ratings. EcoVadis is involved in more than 200 industries across over 160 countries, so the awarding of a Silver Medal to TR Fastenings represents a major statement in regard to its commitment to sustainability.

EcoVadis combines innovative technology and expert knowledge of sustainability processes to monitor performance in this increasingly vital sector, and it has evaluated more than 75,000 businesses. "Here at TR, we understand the importance of recognition from industry specialists. We also know that long-term success in sustainability can lead to benefits in winning new business through enhanced customer confidence proving that we are committed to shared environmental goals. Internally our employees are embracing and understanding that they can influence change and believe that our fastenings enable innovation today to build a better tomorrow," said TR.

Mark Belton CEO of Trifast who is driving the ESG strategy stated that "We are delighted to have received a Silver Medal Sustainability Rating from EcoVadis, the world's leading ratings provider. This is in recognition of the efforts of a great many individuals, teams and departments within the TR family. It's important to also note that we see this as part of our ongoing and permanent commitment to improving the environment for all".

Gwo Lian Machinery is Approved to Establish Operation in Kaohsiung Science Park

The Review Committee of Science Park under the Ministry of Science and Technology (Taiwan) has approved Gwo Lian Machinery to set up a branch in Kaohsiung Science Park. The total investment value is NTD 220



million. The company develops and manufactures smart wire drawing machines, which can plastic deform metal wires and combine with smart technology. With its presence in the Park in the future, the adoption of smart production can speed up the optimization of production for high quality and help upgrade the domestic industry.

Through roller pressing, Gwo Lian extends the service life of dies to 10,000 tons and increases the speed from 600 meters/min. to 1,200 meters/min. The unique thermal displacement cooling system can lubricate and prevent clogging. Gwo Lian's machines combine with a life expectancy alert system for critical components, temperature control system and maintenance alert system, and can get access to maintenance information online via network connection to a specified workstation.

Nord-Lock Group Celebrates Significant Milestone with Official Pittsburgh Grand Opening

After several years of planning, a new home for Nord-Lock Group's manufacturing and Americas regional sales organization is open for business in Pittsburgh. Previously located in the Carnegie area, the new Nord-Lock Group facility – in Clinton Commerce Park, just five minutes from Pittsburgh International Airport – calls on a number of new features to strengthen its position in the Americas market.

Key developments include:

- 29% increase in total production area to 110,000ft² (10,219m²)
- 200% increase in office space to 15,000ft² (1,392m²)
- Expansive, streamlined production facility with new machinery and equipment
- · Training center and hands-on laboratory
- On-site gym and cafeteria
- Next to Pittsburgh International Airport

The new facility is an impressive state-of-the-art site and a modern addition to the Pittsburgh area. A clean façade sits proudly among green surroundings, with tall flags and Nord-Lock Group's custom blue branding

meeting your eye from the moment you approach the facility. Inside, the warehouse has a gleaming polished concrete flooring, and no detail has been overlooked in furnishing the offices or finishing the technical learning spaces and laboratory.





NORMA Group has entered into a strategic partnership with SAB S.p.A ("SAB"), an Italian specialist in joining technology for drinking water, irrigation and drainage. From November 2021, SAB will produce highquality NORMA PN 16 compression fittings certified for drinking water applications for NORMA Group. Further products are to follow. In addition, the agreement reached stipulates that NORMA Group and SAB will jointly develop new products. With this cooperation, NORMA Group is strengthening its water management business in Europe and, in particular, further expanding its position in the field of drinking water applications.

"SAB has a proven record of outstanding product expertise," says Dr. Michael Schneider, CEO of NORMA Group. "With this cooperation, we gain additional production resources and can serve our customers in Europe better and faster with water management solutions. Efficient use of the scarce resource of water is becoming increasingly important, which is why we are consistently expanding our water management business in all regions."



Japanese OSG Forms a Joint Venture with Swiss Coat-X SA

OSG invested in Swiss Coat-X SA (CEO: Andreas Hogg) through its subsidiary OSG Coating Service CO., Ltd. Additionally, both parties have reached an agreement to form the joint venture Coat-X Japan. Based in La-Chaux-de-Fonds, Switzerland, Coat-X SA provides highperformance coating. OSG invests 51% and Coat-X SA invests 49% to form the joint venture Coat-X Japan in Shinshiro City of Aichi Prefecture, in order to develop high-performance, water and heat resistant coating for electronic components in Japan and Asia.



〒005 東明

Tong Ming's New Plant in Zhejiang (China) to be Inaugurated in Q4 2022

With a positive prospect on China's continuous development in infrastructure, Tong Ming has initiated a plan of new plant in Zhejiang. In 3 to 5 years, its total capacity is expected to grow and the business performance which benefits from the new plant will continue upwards.

China plans to invest RMB10 trillion to 17.5 trillion on 5G, industrial IoT, information center, AI, new energy vehicle charging stations, etc. To be ready for the business opportunities, Tong Ming will set up a new plant in Zhejiang with an outlook of 80,000 tons of capacity for the next 3 to 5 years.

The current plant spans around 152 thousand square meters with an annual capacity of about 120 thousand tons. The total capacity is expected to increase by 100 thousand tons in the next 3 to 5 years. The new plant will span about 47.9 thousand square meters and mainly manufacture small screws and nuts. The new plant is expected to be inaugurated by Q4 2022.

Acquisitions





South Korean Hyodong Machine President Receives Gold Tower Industry Medal

Ministry of Trade, Industry and Energy and

Korea Machinery Industry Promotion

Association held the 2021 Digital Transformation Fair Online & Onsite from October 19 to 22, 2021.

Vice Minister Park Jin-gyu of S. Korea's Ministry of Trade, Industry and Energy said machinery has been the second largest export industry of South Korea since 2015. This industry gains importance by introducing advanced technology in response to trade protectionism, digital transformation and carbon neutrality initiatives.

President of Hyodong Machine was honored with the "Gold Tower Industry Medal" during the event. His effort in developing large forging and forming machines and dedication to smart manufacturing leads the technological development of the South Korean machine industry. He is recognized as one of the characters to have revolutionized and secured the international competitiveness of the South Korean machine industry.

SUMEEKO Revenue in October 2021 Grows 4.85%; Subsidiary MMG Gains More Orders

SUMEEKO

SUMEEKO grossed NTD 190 million in revenues last October, up 4.85% from the same period in 2020.

The first 10 months grossed NTD 1.913 billion, up 15.41% from the same period in 2020. The Covid pandemic has reduced its pace in Europe, and auto chips delivery continues to increase. Carmakers' demand for fasteners has picked up since car production resumed.

SUMEEKO's revenue was back on the growth track in October 2021. With the outlook for recovering car demand and the increased product delivery of the subsidiary MMG, the performance in Q4 was going positive. Furthermore, low inventory level drives clients to replenish the stock which could raise the steel price globally and push the clients to place orders. The October 2021 revenue heralds the advent of high season.

MW Industries Expands Threaded Fastener Products Through Acquisition of Ideal Fasteners

MW Industries, a leading provider of precision components, announced the acquisition of Ideal Fasteners, a global manufacturer of threaded fasteners. The acquisition of Ideal Fasteners closed on December 10, 2021 and expands MW Industries' existing US-based manufacturing locations to provide precision components for worldwide distribution. The combined company will offer an increased selection of stock, standard, and custom socket caps, button sockets, flat socket caps, and other threaded fasteners along with a wide variety of highly engineered metal and plastic components.

"Ideal Fasteners is the perfect addition to the MW Industries family. At a time when customers want components faster than ever before, businesses need to be able to quickly source a variety of parts from a single provider. Ideal Fasteners allows us to offer a greater breadth of products so we can provide the diversity of products customers need. We are excited to integrate the Ideal Fasteners product lines into our portfolio," said Simon Newman, CEO of MW Industries.



Avantus Divests Composites Business to Focus on Expansion into C-Class Components

Avantus Aerospace continues its transformation into a 'pure-play' C-Class parts manufacturer, having recently completed the divestiture of its non-core composites business line. Two U.S.-based structural composites companies – Performance Plastics (San Diego, CA) and Angeles Composite Technologies (Port Angeles, WA), were sold to JW Hill Capital, a Scottsdale, Arizona-based private equity firm. SDM Composites (Hermosillo, Mexico) was sold to Groupe Latécoère, headquartered in Toulouse, France. The Avantus Group has facilities in the U.S. and Europe and provides shims, detailed parts, specialty fasteners, precision machining, and elastomer gaskets to the aerospace and semiconductor industries.

Brian Williams, CEO of Avantus, said: "As we position ourselves for the ramp-up in aerospace production, Avantus is focused on growing our core businesses and capabilities. We're certain that the new homes for our composites companies will likewise give them exceptional focus for growth and expansion."

Avantus acquired three specialty fastener companies over the last 22 months (including two during the pandemic) – Fastener Technology Corporation, California Screw Products, and Fastener Innovation Technology – and will continue to expand its range of C-Class components, both organically and via further acquisitions. With tremendous emphasis on operational excellence and customer service, the acquired accompanies have already achieved industry-leading performance in terms of quality, lead-times, on-time delivery, and customer responsiveness.

Associations



Hong Kong Screw & Fastener Council's New Chairman in Office

The Council held a member assembly on December 13, 2021 to elect the new board of directors. The new chairman is Mr. Ping-Fai Tsui who will lead all other directors on the council affairs and continue interaction and collaboration with other commerce associations and organizations.



Pac-West Welcomes New Board of Directors for 2021-2022

U.S.A.-based Pacific-West Fastener Association has announced the new Board of Directors for 2021-2022. Mr. Clay Weaver from Industrial Threaded Products has been elected President and Jo Morris from Desert Distribution has been elected Vice President.

The other BoD new members include Mark-Thomas Cordova from Centennial Bolt (Secretary/Treasurer), David Palmquist from ND Industries (Immediate Past President), Craig Beaty from Beawest Fasteners (Director), John Butler from The Olander Corporation (Director), Hans Fuller from Fuller Metric (Director), John Gaudette from Metric & Multistandard Components (Director), Eunice Hajek from M & M Fasteners Supply (Director), George Martinez from Brighton-Best International (Director), Marisa Mudge from Mudge Fasteners (Director), and Ken Rosenblatt from Hi-Q Fasteners (Director).