

# 2021

by Joyce Huang, Fastener World

## A Deficient, Steep, and Clogged-up Year

### How the Industry Survives Every Step of the Way from Domestic and Overseas Challenges

The COVID pandemic raged and swept over the world in 2019, impacting all walks of life. It disrupted the long-established globalization whose element includes the fastener supply chain that Taiwan take pride in. **Looking at 2021, we see the post-pandemic era brings a sea change in the fastener industry that is characterized by three threats: (1) shortage of supply; (2) steep prices; (3) clogged transport.**

“Shortage” signifies the crisis in the supply chain and lack of labor under the global setting this year. Not only the government but the people are desperate for stable supply. To Taiwanese fasteners companies operating in Taiwan and China, the oil shortage in UK, semiconductor shortage in the U.S/Europe, coal and electricity shortage in China and India, among other energy and workforce crisis, are going to exacerbate in the future and a turmoil on the world market could shake up the whole industry, especially with Taiwan exporting 90% of fasteners it manufactures. “Steep prices” are manifested from appreciated New Taiwanese Dollars and increased costs. As far as the fastener industry is concerned, there is a 30% to 70% rise in cost throughout the whole manufacturing process from wire rod processing, pickling, rust removal, to heading and shipment. With the climbing exchange rate of New Taiwanese Dollars as an addition, fastener companies are tested by a challenge to allocate budget and improve decreased competitiveness. Lastly, “clogged transport” means the pandemic-driven labor shortage leads to delayed shipment, inadequate containers and clogged harbors which remain unresolved. As the cost of transport surges, disruption of global supply chain gets worse. Despite having a full order book, Taiwanese fastener companies are stuck with marine transportation issues that lead to decreased stock and delayed shipment. They are forced to opt for air transport as an alternative which in turn increases cost by manifolds. They just lucked out by the government well controlling the pandemic and are able to operate as normal and make outstanding sales performance. The determining factor is access to materials. The amount of wires purchased and the purchase price as well as stocking up materials are the keys to getting the current challenges over.

#### (1) Shortage of Workforce

In the wake of COVID, Taiwanese government has reduced the number of foreign labors allowed into the country. A couple of other factors include an ageing population, increased minimum wage, and the fact that high-tech companies have been setting up new plants and hiring talents. These factors undoubtedly threaten the fastener industry by restraining their access to workforce, and therefore lack of workforce will be the pitfall in the development of Taiwan fastener industry. “The workforce of Taiwan’s fastener companies consists of Taiwanese labors (70%) and foreign labors (30%). For outsourced tasks such as electroplating, heat treatment and pickling foreign labors take up the percentage of over 50%. On one hand it is the COVID-driven restriction on foreign labors’ entrance to Taiwan; on the other hand, it is a full order book from the end of 2020 to the present day because overseas clients dread of goods shortage in the wake of opening markets in the U.S. and Europe. Both situations strike altogether and delay delivery,” said a Taiwanese fastener business owner. In 3 to 5 years there will be high-tech industrial areas sprouting up across Taiwan, and we don’t even have to second-guess where the government’s support will be inclined to. Lack of workforce will be a determining factor affecting the development of Taiwan fastener industry.





## (2) Wire Rod: Steep Price & Stable Supply

The ups and downs of steel price is highly relevant to the fact that China as the largest steel consumer uses over 60% of the world's production. A lack in the material or a change in policies will push the price up. Another fastener business owner stated that a steady rise in wire rod price makes for a less significant impact, whereas alternating rise and drop are more likely to cause trade disputes. It won't matter as much for the business owners if they cohere customers' purchase price to the increase of wire rod price for the business owners. However, the owners would normally have to cover 20% to 30% of the cost for utilities, rent, product processing fees, manufacturing cost, freight rate and so on. In the time when the price for everything goes up, so does the stress of maintaining enough cash flow. A fastener business owner indicated that traders and manufacturers are the two pillars for Taiwan's fastener export. Given the experience over the past year, the operating cost of traders was doubled, while that of manufacturers' was up around 60% and therefore extra caution is a necessity. The increasing operating cost goes to overseas buyers as well, and therefore, it calls for management of risks.

## (3) Appreciated New Taiwanese Dollars

Export continues to be subject to unfavorable factors including appreciated New Taiwanese Dollars (TWD). To Taiwan fastener industry with 90% of its products for export, a strong TWD decreases the industry's competitiveness in the world market, particularly as opposed to other main competitor countries with less strong performing currencies which create bigger stress for Taiwan. Particularly, the exchange rates of emerging countries, where Taiwan's machines are exported to, have depreciated by 50% to as high as 200%. Additionally, many governmental resources have gone to high-tech companies. However, with nearly 50% of fasteners exported to the U.S., Taiwan is fortunate to have US Dollars to utilize and pull through.

Foreign Currency to TWD Exchange Rates for 2018-2021						
	USD	EUR	JPY	RMB	INR	VND
2018	30.143	35.581	0.2729	4.562	0.4415	0.001309
2019	30.908	34.609	0.2836	4.4751	0.4390	0.001331
2020	29.448	33.595	0.2759	4.2682	0.3975	0.001268
2021	27.981	33.405	0.2573	4.3260	0.3798	0.001218

Source: Taiwan Central Bank





Taiwan Fastener Export in 2019-2020 (Unit: KG)			
	2019	2020	Change [%]
U.S.A	621,962,469	609,131,909	-2.063
Germany	132,505,809	116,623,332	-11.986
The Netherlands	80,348,283	67,241,601	-16.312
Japan	72,771,839	63,283,611	-13.038
UK	55,620,928	41,692,178	-25.042
Thailand	21,720,407	20,775,441	-4.351
Vietnam	7,632,762	8,586,503	-11.107
Source: Bureau of Foreign Trade			

Taiwan Fastener Export in Jan. 2020- Sep. 2021 (Unit: KG)			
	Jan. 2020 - Sep. 2020	Jan. 2021 - Sep. 2021	Change [%]
U.S.A	445,030,140	525,721,595	+18.132
Germany	88,177,083	98,582,787	+11.801
The Netherlands	47,908,933	66,817,026	+39.467
Japan	49,040,321	49,752,565	+1.452
UK	30,684,324	44,921,484	+46.399
Thailand	15,507,826	18,594,940	+19.907
Vietnam	5,618,600	5,203,427	-7.389
Source: Bureau of Foreign Trade			

## (4) Container Shortage, Clogged Harbors

The statistics of Taiwan fastener export in the period from 2019 to 2021 shows a recovering American/European market and Southeast Asia with a less visible growth due to unstable development of the COVID pandemic, but we can find that the order books of Taiwan fastener companies are full in the domestic decline of COVID cases. Given the clogged harbors and container shortage, it is worth noting that a few Taiwanese companies may seem to have an order book full till next spring, but actually it is just that the orders for a period of 2 months are extended to 4 months because overseas clients repeat placing orders or turn to place orders to other local manufacturers in case of a chaotic supply chain. This phenomenon is increasingly evident and is unfavorable to the development of Taiwan fastener industry.

## (5) "50% Rule" of Wire Rod

Taiwan's fasteners are highly affected by China's in terms of pricing. Years ago, **Former TIFI president Mr. Wu-Zhongyi brought up a concept called "50% Rule of Wire Rod" which evaluates a fastener company's competitiveness on the baseline which is 50% of wire rod cost. If the cost exceeds 50%, it bodes for drastic reduction in competitiveness, and calls for an urgent need to transform business, increase product added values, or reduce production cost, otherwise, there will just be a vicious competition for thin profits.** Take automotive component companies for example, some automakers would ask them to lower the price by 3% to 5% within a year to maintain the automakers' competitiveness. Taiwanese people have growing demand for electric vehicles, so Taiwanese automotive fastener companies should deploy for EV fastener development.

## (6) EU to Impose Carbon Tax in 2026

The EU brought CBAM (Carbon Border Adjustment Mechanism) to the table this July which will be gradually implemented from 2023 and will initially apply to imported steel, aluminum, cement, fertilizer, electricity and other highly carbon-leaking products. The grace period only requires importers to report the level of carbon emission on the imported products and no fees will be charged. In 2026 when CBAM is in effect, importers must purchase a CBAM certificate from the EU to pay the fees for carbon emission of the imported products. MOEA (Taiwan) estimates that 212 product items may be subject to the CBAM with an impact range of around NTD 24.5 billion which takes up 3.6% of the products exported to the EU, mostly steel products.

## What Lies Ahead for Taiwan Fastener Industry

Taiwan fastener industry consists of mostly manufacturers and they have branches in China and Southeast Asia where they have an edge in manufacturing. The pandemic drags down productivity and this is more serious in China than in Southeast Asia. The overseas supply chain is more or less affected by politics, economy, natural disasters, export delay, power rationing and forced cuts to factory production, unlike what it was before when companies could utilize their advantages with overseas branches to increase their edge. Therefore, there is no end to transforming and upgrading fastener companies and their products. Particularly in the path of globalization where they have to face market competition and meet client requirements, they must continuously optimize and upgrade the manufacturing process, including introducing automation, AI, and Big Data, and adopting robotic arms or opting for unmanned operation to reach production target. Furthermore, they can create added values via re-deployed finance or marketing. They can also build overseas bases or go public as a long-term target.

The post-pandemic era has turned the macro-environment into something that can take control over the fastener companies. A higher proportion of outsourcing and foreign labors could mean a higher risk to bear. Large companies differentiate themselves from competitors by equipment upgrade, mass production and investment, while small companies survives and develops upon profits, and outtake competitors by mobility and agility.

By estimate, the pandemic will bash uncompetitive small and medium companies out of the market. The industry will grow healthier. The big and strong will remain big and strong, and this will be an ever more evident trend. SMEs used to be pillars for Taiwan's economic vibe. In a time of appreciated New Taiwanese Dollars, building a plant in ASEAN could be an option for them to consider if they are not going for new blue oceans.



# 2021 Taiwan Fastener Industry Survey

by Dean Tseng, Fastener World

Fastener World Magazine embarked on an annual survey on Taiwanese fastener companies in October. We listed 10 issues of 2021, and invited companies to evaluate each issue for the level of impact and rank the issues from 1st place (most impacted) to 10th place (least impacted). Based on the feedback from 82 companies that took our survey, the top 10 issues of 2021 are:

Ranking	Top 10 Issues of 2021
1	Wire rod availability
2	Exchange rate (appreciated TWD)
3	Harbor congestion, increased freight rate
4	U.S./ European fastener market demand
5	Overseas plants' production and sales change under the pandemic
6	The pandemic's impact on trade, production and sales
7	Increased cash flow stress
8	Workforce and foreign labor availability
9	Impact of carbon tax on fasteners
10	Transforming and upgrade of fastener companies and their products

Now we can tell that the biggest concern after the pandemic outbreak is “wire rod availability”, which signifies considerable cost stress on Taiwanese fastener companies as a result of global rising steel price over the past two years.

Taiwan's export has been robust since the second half of 2000 resulting in a trade surplus, and because the Central Bank of Taiwan didn't actively adjust the exchange rate, “the New Taiwanese Dollars have appreciated” and remain as a strong one among the Asian currencies, with a prospect to remain strong through next year. Therefore, exchange rate is the 2nd place in the chart. There is no way to solve “harbor congestion and increased freight rate” this year and this issue may continue through next year, hence becoming the third biggest concern.

As long as the top 3 concerns stay, the companies' shipments will be obstructed and revenues will decrease despite a strong “U.S./ European fastener market demand”. Therefore, market demand is not the determining factor to corporate sustainability in the wake of pandemic outbreak.

To SMEs, “carbon tax” is still a few years ahead and operating cost will add up if they take corresponding actions to improve performance in building a green environment. At present they don't have enough personnel to deal with carbon tax which as a result has yet to gain enough attention. “Transformation and upgrade” is a long-term expenditure which, in contrast to stabilizing cash flow, retaining talents and gaining profits, is more critical in the current backdrop of tremendous cost pressure.

This survey result is also open for reference to government-level financial authorities and industry policy makers. ■

## Evaluate and rank the issues for the level of impact

(Note: Sent to 1,322 companies. Actual respondents: 82 companies.)

