

# TIFI Chairman Anchor T. H. Chang: Improve Your Technical Strength and Seek High Added Value



by Gang Hao Chang, Fastener World

The global fastener industry is facing many industrial or technological challenges, so if companies cannot adapt themselves to the drastic market changes, they can be easily left far behind, which is now also one of the most concerned issues in the industry worldwide. The fastener industry in Taiwan has successfully been through 60-70 years of development and has accumulated many robust technical strengths and well-trained skilled force; however, the inflow of skilled force into Taiwanese fastener industry has gradually become insufficient in recent years and Taiwan also faces the imposition of various forms of antidumping tariffs and protective measures in some countries, all of which makes TIFI Chairman Chang appeal to the industry for leaving their comfort zone and be active to figure out their own ways to improved technical strength and upgraded business level for sustainable operation. Facing the competition from so many countries that have a thirst for taking their market away, Taiwanese fastener industry does not have more time left to waste anymore!

In an interview conducted by "Commercial Times", Chairman Chang emphasized, "It's definitely essential to enhance the core momentum and technical level of a business." Chairman Chang encourages industry professionals to take the first step for their industrial upgrade programs from the industry sectors of automobiles, railways, medical devices, aerospace and 3C products, as these sectors are currently or are expected to be the main focus of the market development and can help create higher added value for Taiwanese fastener industry. Chairman Chang also referred to the introduction of automation and R&D of peripheral components as one of the most critical parts in the process of industrial upgrade for seeking higher added value.

Thus far, a few Taiwanese fastener companies have dedicated themselves to having their technical level upgraded and are continuously working hard to seek higher added value for their products and services. Take automotive fasteners, which represent almost 28% of the fastener application market, for example, they used to be at high unit prices. Furthermore, due to the strict requirements for high quality, punctual delivery and well prepared aftersales service, it usually shows high entry barriers for newcomers, which means less competitors and can be the first direction for Taiwanese companies, should they want to seek higher added value.

In regard to the "antidumping" section, which the entire industry is mostly concerned about, the EU has cancelled the antidumping measures against certain iron & steel and stainless steel fasteners imported from China and Taiwan in 2016 and 2017 respectively. Since then, Taiwan's fastener export to the



EU and China's fastener export to the EU can be said to have returned to the stage of "fair competition." In 2016, the total volume of China's fastener export to the EU hiked by nearly 25% to 0.58 million tons, the highest record over the past 7 years. However, the scenario that all Taiwan's market share in the EU is taken by China, fortunately, did not happen. On the contrary, Taiwan's export to the EU grew slightly to reach about 0.53 million tons, showing European companies' great confidence in the quality and competitive edge of Taiwan's fasteners, which Taiwanese fastener industry could finally give a sigh of relief. However, China's fastener export to the EU in the 1st quarter of 2017 also increased by 33%. It is expected that the significant effect from the termination of antidumping measures will be observed in 2017 and more depreciation of Chinese RMB and more appreciation of New Taiwanese Dollar will be also observed this year. As a result, if Taiwanese companies could not improve their technical level and reinforce their leading capabilities as soon as possible, they will still be outpaced by other competitors in the future.

In order to help Taiwanese companies maintain their competitiveness worldwide and keep pace with the trend of Industry 4.0, the Industrial Development Bureau of Ministry of Economic Affairs (Taiwan) has planned a "NICE Upgrade & Transformation Program for the Fastener Industry" to help the industry transform, increase the intelligence level of domestically produced equipment, achieve environmental protection and reinforce the development of green energy. Chairman Chang encourages that Taiwanese companies should be active in taking part in this program for consolidating the way toward high added value and intensifying competitiveness.

Chairman Chang is convinced that the global market trend in 2017 will go really well and he also believes that the global manufacturing industry is showing a green light in 2017 and that the economic situations of the countries to which Taiwan's fasteners are mainly exported are also turning well. Chairman Chang shows great confidence in the "growth in both the export volume and the export price" for 2017.

With the support of so many favorable factors in the market, Chairman Chang looks forward very much to the upcoming fastener event in Taiwan next April, which will be held again at Kaohsiung Exhibition Center. According to statistics of the show organizer, a very large number of companies have booked their stands and all stands released so far have been sold out, making the current number of stands booked reach more than 1,000. Major Taiwanese leading fastener brands will attend this grand event and demonstrate their vital energy and growth momentum.

## An Overview of Taiwan's Fastener Trade with Europe in 2016

by Gang Hao Chang, *Fastener World*

### A Profile of Taiwanese Fastener Industry

The beginning of Taiwanese fastener industry can be traced back to the 1940s. Although the development of Taiwanese fastener industry is comparatively late when compared to others in Europe and America, it is also an industry with nearly 7 decades of history and has already become a very well-established fastener industrial supply chain. Not to mention that Taiwan has earned a reputation as the "fastener country" on the global stage for years.

Currently there are roughly 1,300 fastener companies in Taiwan and most of them are located in Kaohsiung City and Tainan City of Southern Taiwan (especially at Benjhou Industrial Park and Luchu Industrial Park in Kaohsiung, which are both the most essential fastener manufacturing hubs of Taiwan). Fastener companies in this area represent almost 50% of the total fastener companies in Taiwan. In addition, as this area is very close to the locations of Taiwan's China Steel Corp. (CSC) providing steels and assistance in R&D, Metal Industries Research & Development Centre (MIRDC) focusing on technical research and offering guidance to relevant industries, and Kaohsiung Port for international trade & export, a quite energetic and well-developed fastener industrial cluster has been created as a result. On the other hand, as there are several

Table 1

Taiwan's Export by Weight (HS Code 7318 screws, bolts, nuts, coach screws, screw hooks, rivets, cotter pins, washers, spring washers, etc.)

Ranking	Country	2014 (kg)	2015 (kg)	2016 (kg)
	World	1,501,697,033	1,470,992,279	1,435,750,086
1	USA	555,453,198	546,108,965	538,009,693
2	Germany	142,884,207	136,122,818	143,196,167
3	The Netherlands	81,869,436	81,760,831	86,056,479
4	UK	67,758,478	69,562,893	66,393,418
5	Japan	68,728,882	65,476,799	62,320,620
6	Canada	45,688,043	48,611,896	42,166,370
7	Italy	38,482,125	35,188,254	36,807,306
8	Poland	39,582,609	31,093,106	32,299,812
9	Sweden	33,456,841	30,940,353	30,987,261
10	France	29,488,861	27,390,219	28,235,300

Taiwan's Export by Value:

Ranking	Country	2014 (USD)	2015 (USD)	2016 (USD)
	World	4,048,948,068	3,880,596,255	3,610,883,332
1	USA	1,447,361,270	1,450,778,261	1,346,098,911
2	Germany	375,886,200	336,411,067	339,502,425
3	The Netherlands	223,378,480	197,018,892	205,188,306
4	Japan	212,378,935	194,533,227	182,458,452
5	UK	180,719,632	178,366,592	162,662,098
6	China	122,980,282	110,656,184	117,929,837
7	Canada	117,018,549	126,340,252	106,393,410
8	Sweden	98,458,251	88,785,052	82,913,161
9	Italy	92,178,290	81,573,152	80,629,999
10	Mexico	66,415,507	73,567,185	70,665,089

successful hand tool and precision automation machinery industries in Taichung and Changhua regions of Central Taiwan, which have tremendous demand for fasteners, a few fastener companies chose to start their business here. Of course, there are also some fastener companies in Northern Taiwan, but their clustering level is not as significant as those in Southern Taiwan.

Taiwanese fastener industry is export-oriented and nearly 90% of its products are for export. No matter what types of supplier you are looking for (e.g. raw materials, machinery, fastener processing, heat treating, surface treatment, inspection and packaging), you can easily find quite excellent companies to collaborate with in Taiwan. In early times, Taiwanese fastener companies used to be OEMs for standard parts. However, with their techniques being more mature year after year and the increasing competition from other emerging countries such as China and Southeast Asian countries, Taiwanese fastener industry has been in recent years gradually moving toward the development of “Fasteners with High Added Value (e.g. automotive fasteners, aerospace fasteners and precision electronics fasteners)” instead of OEMs for customers. They even started to focus more on the R&D and design of multifunctional, light-weight or bi-metal/special material fasteners on their own. Many Taiwanese fastener companies have been also certified to ISO/TS 16949 and AS 9100, which clearly shows the inner characteristics of these Taiwanese companies – Seeking Continuous Betterment of Their Business!

## Taiwan’s Fastener Export to Europe in the Past 3 Years

Taiwan’s fasteners are mainly exported to Europe and USA. According to the recent import and export statistics of Taiwan Customs released by Bureau of Foreign Trade (Taiwan), the total weight of Taiwan’s fastener (HS code:7318) export in 2016 was about 1.45 million tons (around 40% to N. America, 38% to Europe and 13% to Asia). If calculated by USD, the total value reached about USD 3.6 billion (40% to N. America, 35% to Europe and 16% to Asia). The percentages of Europe and N. America in Taiwan’s fastener export do not show very obvious difference between each other. (See **Table 1**)

In the period of 2014-2016, the total fasteners Taiwan exported to the world (either it is calculated by weight or value) showed a slight drop, but still maintained above the level of 1.40 million tons (or USD 3.5 billion). The top 10 partner countries in Taiwan’s export (calculated by weight) were USA, Germany, the Netherlands, Japan, Canada, Italy, Poland, Sweden and France. If calculated by value, the top 10 partner countries in sequence were USA, Germany, the Netherlands, Japan, UK, China, Canada, Sweden, Italy and Mexico. At least 5 out of the top 10 countries are in Europe, revealing that Taiwan’s fastener trade is very dependent upon Europe. Compared to the statistics in 2015, Taiwan’s fastener exports to Germany, the Netherlands, Italy, Poland, Sweden and France all increased. If calculated by value, the exports to Germany and the Netherlands also showed the growing trend.

**Table 2** shows the major fastener categories Taiwan exported to Europe in 2016. Compared to the statistics in 2015, Screws (HS 731816) and Other Wood Screws (HS 731812) both showed significant growth. However, Other Screws and Bolts With/Without Nuts and Washers (HS 731815) and Self-Tapping Screws (HS 731814) both showed a slight drop.

Table 2. Major Fastener Categories Taiwan Exported to Europe in 2016

HS Code	Product Category	2015[kg]	2016[kg]	Year-on-Year Change (%)
731815	Other Screws and Bolts With or Without Nuts and Washers	314,585,446	299,306,502	-4.857
731816	Nuts	108,748,479	112,109,720	3.091
731814	Self-Tapping Screws	68,765,882	67,691,137	-1.563
731812	Other Wood Screws	50,173,135	53,579,048	6.788

## Taiwan’s Fastener Import from Europe in the Past 3 Years

As aforementioned, Taiwan’s fasteners are mainly for export, so there appears very significant difference between Taiwan’s total fastener import and its export. **Table 3** shows that Taiwan imported approximately 18 thousand tons of fasteners from the world in 2016 and its top 10 import origins were Japan, China, Vietnam, Malaysia, Philippines, Thailand, India, Germany, USA and S. Korea. If calculated by value, the total import value was about USD 130 million and the top import origins were Japan, USA, China, Germany, Vietnam, S. Korea, UK, the Netherlands, India and Sweden. Generally, fasteners Taiwan imported from China and other Southeast Asian countries were mainly low-grade standard parts, while fasteners it imported from Europe,

USA and Japan were mainly high-grade well-engineered fasteners. Fasteners Taiwan imported from Europe were mainly from Germany, UK, the Netherlands and Sweden. If calculated by weight, fasteners Taiwan imported from Germany in 2016 were more than those it imported from the same country in 2015. If calculated by value, fasteners Taiwan imported from UK also showed the same growing trend.

Major fastener categories Taiwan imported from the world were: Other Screws and Bolts With or Without Nuts and Washers (HS 731815). Taiwan imported 354,428 kg fasteners of this kind in 2016, a nearly 5% drop from the year of 2015.

### New Challenges for Taiwanese Fastener Companies in Europe

Taiwan has faced more competition and challenges in its fastener export to Europe since the EU terminated the antidumping measures against certain carbon steel and stainless steel fasteners from China. In order to adapt to such market changes, Taiwanese companies have not only sped up its business transformation toward the development of more high-end products, but also have been active in exhibiting at major int'l fastener fairs (e.g. Fastener Fair Stuttgart) and demonstrating their breakthroughs and strengths in fastener manufacturing and R&D to European buyers. On the other hand, through strategic alliances among businesses and investment in advanced facilities and setups of R&D and testing laboratories, Taiwanese companies are now capable of offering the most suitable solutions to their European clients.

Many Taiwanese companies have also become the members of Taiwan Industrial Fasteners Institute (TIFI) or Taiwan Fastener Trading Association (TFTA) in order to get the real-time updates of the industry news and trends and they have taken further steps to reinforce their competitive edge as well.

Table 3

Taiwan's Import by Weight (HS Code 7318 screws, bolts, nuts, coach screws, screw hooks, rivets, cotter pins, washers, spring washers, etc.)

Ranking	Country	2014 (kg)	2015 (kg)	2016 (kg)
	World	21,178,823	20,279,886	17,736,247
1	Japan	7,924,602	7,362,681	5,930,787
2	China	3,538,676	2,794,326	3,938,072
3	Vietnam	3,942,105	3,597,754	2,996,278
4	Malaysia	47,839	122,118	430,241
5	Philippines	947,427	620,619	405,086
6	Thailand	1,205,035	1,063,809	403,014
7	India	10,934	29,428	354,810
8	Germany	424,919	338,164	346,705
9	USA	266,651	263,696	304,134
10	S. Korea	362,200	871,465	233,383

Taiwan's Import by Value

Ranking	Country	2014 (USD)	2015 (USD)	2016 (USD)
	World	144,004,117	135,102,341	130,214,219
1	Japan	71,509,094	64,664,087	59,989,809
2	USA	16,507,768	17,767,147	21,255,904
3	China	7,051,957	6,174,559	8,142,168
4	Germany	11,407,572	8,125,637	7,724,679
5	Vietnam	5,410,098	4,731,102	3,430,144
6	S. Korea	3,858,528	5,836,494	3,306,154
7	UK	1,565,853	1,108,628	2,336,205
8	The Netherlands	1,598,075	1,965,537	1,725,248
9	India	168,917	378,631	1,644,831
10	Sweden	2,008,314	2,429,674	1,578,549

