

# Western European Fastener Market Analysis



## Preface

Since the establishment of the EU in 1993, European countries have broken down their national boundaries, and have divided their industries and cooperated with each other to become more competitive globally and economically. Even in the face of the global economic downturn and the rise of China's economy, W. Europe still holds a key position in the global economy with its high-quality human resources and industrial strength.

Compared to E. Europe, which is a new type of market after the collapse of communism, W. Europe is a region with a long history of convergence of advanced countries in the world, and has close economic and trade relations with many industries where Taiwan has advantages. In 2021, Taiwan's import from the eight major W. European countries (i.e., France, the Netherlands, Belgium, Luxembourg, Germany, UK, Switzerland, and Austria) was NT\$913.60 billion, with a CAGR of 7.0% over the past six years, and exported NT\$673.86 billion, with a CAGR of 5.2% over the past six years.

This article focuses on the above eight major countries in W. Europe, explores the current development of the fastener industry in W. Europe, and takes Germany and France with larger fastener import and export amounts as the analysis targets, and proposes suggestions and strategies for Taiwan fastener industry to expand into the W. European market.

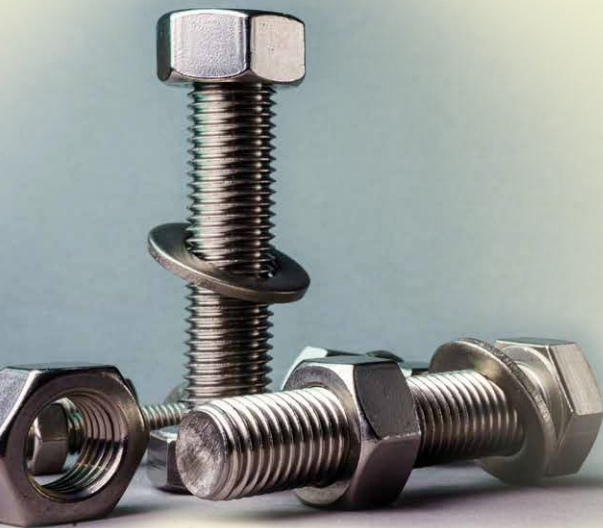
## Global Import and Export of Fastener Industry in Major W. European Countries

### (I) Import:

The top three W. European countries importing fasteners in 2021 were Germany (about NTD 126.37 billion), France (about NTD 49.88 billion), and UK (about NTD 40.35 billion). Although imports are not absolutely equal to actual demand and the country's production and inventory must be considered, they still reflect the country's fastener demand to some extent. The average CAGR of import of the eight W. European countries in the past five years was 3.2%, and no country had negative growth. The three countries with the highest CAGR of import were: Austria (7.9%), Luxembourg (7.7%), and the Netherlands (5.6%).

### (II) Export:

The top three W. European countries exporting fasteners in 2021 were Germany (NT\$205.13 billion), France (NT\$40.21 billion), and Switzerland (NT\$26.37 billion). The average CAGR of exports from major W. European countries in the past five years is about 3.0%, with only France and Switzerland showing slight negative growth. The three countries with the highest export CAGR were Luxembourg (11.5%), Austria (10.0%), and Germany (4.3%). Therefore, the development of the W. European market deserves the continuous attention of Taiwan fastener industry.



## Taiwan Fasteners' Import and Export to W. European Countries:

### (1) Import

In 2021, Taiwan's fastener imports from major W. European countries amounted to NT\$760 million, with a 9.6% CAGR over the past six years, but the overall amount was not significant. The countries with the highest import CAGR were Germany (NTD 0.41 bn) and the Netherlands (NTD 0.15 bn).

### (2) Export

The top three countries for Taiwan's fastener exports to W. Europe were: Germany (NT\$12.74 billion), the Netherlands (NT\$8.17 billion), and UK (NT\$5.86 billion), and the overall CAGR of Taiwan's fastener exports to W. Europe in the past six years was 2.9%. The top three exporting countries with the highest CAGR were Austria (12.5%), Switzerland (7.5%), and the Netherlands (4.3%).

## Import and Export Market Analysis of Various Fasteners in Major W. European Countries

### (I) Germany

In terms of imports, the imported fastener value of Germany in 2021 was about 4.51 billion U.S. dollars, and the CAGR of imports in the past five years was 3.1%. The top five importing sources, amounts and import shares were: Italy (US\$636 million / 14.1%), Taiwan (US\$581 million / 12.9%), China (US\$567 million / 12.6%), Switzerland (US\$296 million / 6.6%), the Netherlands (US\$227 million/5.0%). Germany's main fasteners imported from the world in 2021 were: other types of steel screws and bolts (US\$2.02 billion) and steel nuts (US\$680 million). Imported fasteners with the highest CAGR were other steel and iron wood screws (7.7%) and steel self-tapping screws (5.9%).

Table 1. Fasteners Imported by Western Europe from the World in 2017-2021

W. European Countries	2017	2018	2019	2020	2021	CAGR
Germany	39.9	44.5	40.7	35.5	45.1	3.1%
France	17.1	18.8	17.7	14.8	17.8	1.1%
UK	13.0	14.1	13.7	10.6	14.4	2.6%
Netherlands	9.1	10.1	9.5	8.7	11.4	5.6%
Austria	7.4	8.2	7.8	7.1	10.1	7.9%
Belgium	6.5	6.9	6.2	5.6	7.0	1.7%
Switzerland	5.0	5.5	4.9	4.6	5.6	2.9%
Luxembourg	0.3	0.4	0.4	0.3	0.4	7.7%
Total	98.1	108.0	100.5	87.0	111.4	3.2%

Unit: USD 0.1 billion; %

Source: ITC/MIRDC

Table 2. Fastener Exports from Western Europe to the World in 2017-2021

W. European Countries	2017	2018	2019	2020	2021	CAGR
Germany	61.9	68.9	65.5	60.9	73.21	4.3%
France	14.9	16.4	15.9	13.1	14.35	-1.0%
Switzerland	9.5	9.6	8.7	8.0	9.41	-0.4%
Netherlands	8.3	8.3	7.9	7.3	8.90	1.8%
UK	8.3	9.2	9.2	7.6	8.81	1.5%
Austria	3.9	4.3	4.2	4.2	5.78	10.0%
Belgium	4.9	5.3	4.8	4.3	5.45	2.9%
Luxembourg	0.1	0.1	0.1	0.1	0.09	11.5%
Total	111.8	122.0	116.1	105.3	125.91	3.0%

Unit: USD 0.1 billion; %

Source: ITC/MIRDC

Table 3. Fasteners Imported by Taiwan from W. European Countries in 2016-2021

W. European Countries	2016	2017	2018	2019	2020	2021	CAGR
Germany	2.5	2.9	3.1	3.7	3.0	4.1	10.4%
Netherlands	0.6	0.4	0.9	1.0	1.2	1.5	21.2%
Switzerland	0.5	0.5	0.7	0.6	0.6	0.8	11.9%
UK	0.8	0.5	0.4	0.5	0.6	0.7	-0.6%
France	0.4	0.3	0.3	0.6	0.3	0.3	-2.6%
Belgium	0.1	0.1	0.0	0.1	0.1	0.1	-0.7%
Austria	0.0	0.0	0.3	0.1	0.0	0.0	4.9%
Luxembourg	0.0	0.0	0.0	0.0	0.0	0.0	23.1%
Total	4.8	4.9	5.7	6.7	5.9	7.6	9.6%

Unit: NTD 0.1 billion; %

Source: Import and export from Taiwan Customs / MIRDC

Table 4. Taiwan's Fastener Exports to W. European Countries in 2016-2021

W. European Countries	2016	2017	2018	2019	2020	2021	CAGR
Germany	109.5	120.3	136.4	121.2	100.6	127.4	3.1%
Netherlands	66.2	72.0	78.7	70.2	57.6	81.7	4.3%
UK	52.5	54.3	53.8	53.0	40.4	58.6	2.2%
France	22.5	23.9	25.3	24.9	20.2	23.2	0.6%
Belgium	15.6	16.9	17.8	16.0	11.8	14.8	-1.0%
Switzerland	2.3	2.7	3.3	2.9	2.8	3.3	7.5%
Austria	1.7	2.1	2.0	2.4	2.0	3.0	12.5%
Luxembourg	0.0	0.0	0.0	0.0	0.0	0.0	-100.0%
Total	270.3	292.4	317.4	290.7	235.4	312.0	2.9%

Unit: NTD 0.1 billion; %

Source: Import and export from Taiwan Customs / MIRDC



**Table 5. Germany's Main Imported Fasteners by Product Type in 2017-2021**

Table 5. Germany's Main Imported Fasteners by Product Type in 2017-2021					Unit: USD 0.1 billion; %	
Product	2017	2018	2019	2020	2021	CAGR
Other steel screws and bolts	18.3	20.4	18.2	15.5	20.2	2.4%
Steel nuts	5.8	6.5	5.9	5.3	6.8	4.1%
Steel self-tapping screws	3.8	4.1	4.0	3.9	4.8	5.9%
Other steel non-threaded products	4.2	4.7	4.3	3.4	4.3	0.4%
Other steel threaded products	2.4	2.7	2.6	2.3	2.8	3.8%
Other steel threaded washers	1.8	2.1	2.0	1.7	2.0	2.0%
Other steel wood screws	1.1	1.3	1.1	1.3	1.5	7.7%
Other steel spring locking washers	1.0	1.0	1.0	0.9	1.1	4.2%
Steel rivets	0.5	0.6	0.6	0.5	0.6	4.0%
Steel spiral hooks and spiral rings	0.3	0.4	0.4	0.3	0.4	5.6%
Steel pins and cotter pins	0.3	0.4	0.4	0.3	0.4	1.3%
Steel automotive screws	0.3	0.3	0.2	0.2	0.2	-1.3%
<b>Total</b>	<b>39.9</b>	<b>44.5</b>	<b>40.7</b>	<b>35.5</b>	<b>45.1</b>	<b>3.1%</b>

Source: ITC/MIRDC

**Table 6. Germany's Main Exported Fasteners by Product Type in 2017-2021**

Table 6. Germany's Main Exported Fasteners by Product Type in 2017-2021					Unit: USD 0.1 billion; %	
Product	2017	2018	2019	2020	2021	CAGR
Other steel screws and bolts	27.6	30.3	28.4	26.2	31.1	3.0%
Steel nuts	8.3	9.2	9.1	8.2	9.9	4.5%
Steel self-tapping screws	5.8	6.7	6.7	6.5	8.1	8.5%
Other steel non-threaded products	6.9	7.6	7.1	6.4	7.6	2.5%
Other threaded steel products	4.3	4.9	4.7	4.5	5.4	6.0%
Other steel washers	2.7	3.0	2.7	2.6	3.1	3.3%
Other steel spring locking washers	2.3	2.6	2.4	2.2	2.7	3.6%
Other steel wood screws	1.6	1.9	1.7	1.8	2.2	9.3%
Steel rivets	1.4	1.6	1.5	1.3	1.6	3.3%
Steel spiral hooks and spiral rings	0.3	0.4	0.5	0.4	0.5	12.2%
Steel pins and cotter pins	0.4	0.4	0.4	0.4	0.5	8.8%
Steel automotive screws	0.3	0.3	0.3	0.3	0.4	13.5%
<b>Total</b>	<b>61.9</b>	<b>68.9</b>	<b>65.5</b>	<b>60.9</b>	<b>73.2</b>	<b>4.3%</b>

Source: ITC/MIRDC

In terms of exports, the exported fastener value of Germany in 2021 was 7.32 billion U.S. dollars, and the CAGR of exports in the past five years was 4.3%. The top five exporting destinations, amounts and export shares in top-down sequence were: China (US\$839 million / 11.5%), the US (US\$561 million / 7.7%), France (US\$555 million / 7.6%), Austria (US\$456 million / 6.2%), Czech Rep. (US\$450 million / 6.1%). The main exported products were: other types of steel screws and bolts (US\$3.11 billion) and steel nuts (US\$990 million). Fasteners with the highest CAGR were steel automotive screws (13.5%) and steel spiral hooks and spiral rings (12.2%), but the amounts were not significant.

Germany's gross GDP in 2021 was approximately US\$4.223 trillion. The products related to fasteners were automobiles and auto parts, which have been Germany's most important export commodities for years, with a total export value of about EUR 185 billion in 2021, and machinery and equipment ranking second (EUR 1.62 billion). In terms of imports, automobiles and their parts and components were the second largest imported products (import value of about EUR 102 billion), showing that Germany's vehicle market demand potential is amazing. The automotive and parts manufacturing industry is Germany's leading industry, with nearly 1,000 manufacturers and more than 820,000 people working in the industry, and is Germany's largest export-oriented industry in terms of output value; EU is implementing vehicle emission standards (Euro 7) under the framework of the Paris

Agreement, and Germany, as EU's leading country for electric vehicles, will continue to develop under the trend of energy and carbon reduction. According to the data of the German Federal Statistical Office, Germany will be able to achieve the highest level of electric vehicle emissions by 2025. According to the data of German Federal Statistical Office, Germany will invest up to 150 billion euros in electric vehicles, various new drive vehicles and digital technology by 2025, and **Taiwan fastener industry can take advantage of the trend of energy saving, carbon reduction and green energy to develop European standard vehicle fasteners that meet the EU emission standards and expand to the vehicle fastener market in the EU.**

## (I) France

In terms of imports, the imported fastener value of France in 2021 was 1.78 billion USD, with a CAGR of about 1.1% in the last five years. The top five importing sources, amounts and import shares were: Germany (US\$457 million / 25.7%), Italy (US\$287 million / 16.1%), China (US\$180 million / 10.1%), Taiwan (US\$156 million / 8.8%), and the US (US\$156 million/8.8%). The main imported products were: other types of steel screws and bolts (USD 760 million) and steel nuts (USD 220 million). Imported fasteners with the highest CAGR were steel rivets (13.7%) and other steel spring locking washers (11.2%).

Table 7. French Main Imported Fasteners by Product Type in 2017-2021					Unit: USD 0.1 billion; %	
Product	2017	2018	2019	2020	2021	CAGR
Other steel screws and bolts	7.2	7.9	7.8	6.2	7.6	1.3%
Steel nuts	2.5	2.7	2.5	2.1	2.2	-3.2%
Other steel threaded products	1.6	1.7	1.6	1.4	1.8	3.3%
Steel self-tapping screws	1.5	1.6	1.4	1.3	1.6	0.9%
Other steel threaded products	1.8	2.0	1.7	1.3	1.4	-5.6%
Other steel wood screw	0.8	1.0	0.9	0.9	1.1	7.9%
Other steel washers	0.7	0.8	0.7	0.6	0.7	1.9%
Steel pins and cotter pins	0.3	0.4	0.4	0.4	0.4	5.8%
Other steel spring locking washers	0.3	0.3	0.3	0.3	0.4	11.2%
Steel rivets	0.2	0.2	0.3	0.3	0.3	13.7%
Steel automotive screws	0.1	0.1	0.1	0.1	0.1	10.7%
Steel spiral hooks and spiral rings	0.1	0.1	0.1	0.1	0.1	-1.0%
Total	17.1	18.8	17.7	14.8	17.8	1.1%

Source: ITC/MIRDC

Table 8. French Fastener Export Market Analysis by Product Type from 2017 to 2021					Unit: USD 0.1 billion; %	
Product	2017	2018	2019	2020	2021	CAGR
Other steel screws and bolts	6.1	7.0	6.7	5.5	5.8	-1.0%
Steel nuts	3.1	3.5	3.3	2.7	2.8	-2.6%
Other steel non-threaded products	2.0	2.2	2.3	1.8	1.9	-0.9%
Other steel threaded products	1.5	1.5	1.3	1.2	1.4	-1.4%
Other steel washers	0.6	0.7	0.7	0.5	0.7	1.0%
Steel self-tapping screws	0.7	0.6	0.6	0.6	0.7	-2.8%
Steel pins and cotter pins	0.3	0.3	0.3	0.3	0.4	5.7%
Other steel spring locking washers	0.3	0.3	0.3	0.2	0.4	10.1%
Steel rivets	0.2	0.2	0.2	0.1	0.1	-8.0%
Other steel wood screws	0.1	0.1	0.1	0.1	0.1	0.0%
Steel automotive screws	0.0	0.0	0.0	0.0	0.0	14.9%
Steel spiral hooks and spiral rings	0.0	0.0	0.0	0.0	0.0	2.7%
Total	14.9	16.4	15.9	13.1	14.4	-1.0%

Source: ITC/MIRDC

In terms of exports, French fastener exports amounted to USD 1.44 billion in 2021, with a CAGR of -1.0% over the last five years. The top five exporting destinations, in terms of value and share of exports, were: Germany (US\$207 million/14.4%), Spain (US\$203 million/14.1%), the US (US\$124 million/8.7%), Morocco (US\$75 million/5.3%), and UK (US\$73 million/5.1%). The main exported products were: other steel screws and bolts (US\$580 million) and steel nuts (US\$280 million), and the fasteners with the highest CAGR were: steel automotive screws (14.9%) and other steel spring locking washers (10.1%).

In 2021, France's GDP was about US\$2.937 trillion. French hi-tech industry is well developed and the fastener industries in France and Taiwan have the potential to cooperate or complement with each other in the following areas: automotive parts, aerospace and defense, medical equipment, composite materials, green energy, etc. Take French automobile, bicycle, aerospace, and defense industries as example, the global production of two major automobile groups, Renault and BPS Citroën, reached 7.8 million vehicles in 2021, of which the turnover of BPS Citroën reached 74.03 billion euros; in addition, French bicycle industry has an annual production of about 2.8 million vehicles, and if bicycle parts are included, the annual sales amount reaches 2 billion euros; and French aerospace & defense industry has an annual turnover of 75 billion euros. The annual turnover of French aerospace and defense industry is as high as 75 billion euros, and the ratio of commercial to military use is about 3:1. It can be seen that the **French fastener market has considerable potential, and based on the principle of decentralizing the export market and spreading risks, Taiwan fastener industry can also extend the current market deployment (mostly in the US) to cover the French market.**

## Conclusion

As the global political and economic situation has changed dramatically in recent years, the impact of the COVID-19 epidemic and the Russia-Ukraine war at the beginning of 2022 have had a significant impact on the global economy and energy production, and Russia has mastered the natural gas supply of many European countries, which has deepened the economic tug-of-war between W. Europe and Russia. However, some W. European countries (e.g., Germany and Italy) are potential competitors of Taiwan fastener products in their countries, which will make the deployment more difficult; **besides automotive fasteners, it is suggested that Taiwan fastener manufacturers should also combine W. Europe's fastener supply to Ukraine for reconstruction to create opportunities for Taiwan to expand fastener sales to W. Europe.** ■

by Dr. Arthur Hsu  
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