

# The Impact of U.S. “Reciprocal Tariffs” on Taiwan's Machine Tool Industry

In Aug. 2025, the US officially imposed “reciprocal tariffs” on Taiwan, resulting in a sharp increase in the tariff rate for Taiwanese machine tools exported to the US from the original 4.7% to 24.7%, far exceeding the rate of 15% applied to Japan, S. Korea, and the EU, which has dealt a severe blow to Taiwan's export competitiveness. As a key pillar supporting Taiwan's manufacturing sector upgrade, the machine tool industry has long been a cornerstone of global supply chains and high-end processing demands. It now faces unprecedented challenges.

Although the Presidential Office and Executive Yuan of Taiwan have emphasized that this is a temporary measure and continue to negotiate for reasonable tax rates and the elimination of cumulative calculation methods, the industry has already felt the pressure from policy risks and market uncertainties. This situation has not only drawn significant attention from the int'l trade community, but has also forced Taiwanese businesses to rethink their global strategic deployment. Facing high tariff barriers, Taiwan's machine tool industry must accelerate technological upgrades, strengthen brand differentiation, and actively expand into emerging markets such as India, Mexico, and Southeast Asia. By combining government support with the advantages of low-carbon manufacturing, the industry can maintain resilience and competitiveness amid the turmoil.

This article classifies Taiwan's major exported machine tools into 7 categories based on the globally recognized HS Code classification system. **Table 1** shows Taiwanese machine tool exports, organized by machine tool type and total export value in 2024.

Table 1. Taiwanese Machine Tool Exports in 2024

Unit: 1,000 US\$

Ranking	HS Code	Machine Tool Type	Value
1	8457	Machining centers, unit construction machine (single station) and multi-station transfer machines, for working metal	658,288
2	8458	Lathes (incl. turning centers) for removing metal	533,625
3	8462	Machine tools (incl. presses) for working metal by forging, hammering or die forging	309,627
4	8460	Machine tools for deburring, sharpening, grinding, honing, lapping, polishing or otherwise finishing metal or cermets by means of grinding stones, abrasives or polishing products	214,590
5	8459	Machine tools (incl. way-type unit head machines) for drilling, boring, milling, threading or tapping by removing metal, other than lathes (incl. turning centers) of heading 8458	157,047
6	8461	Machine tools for planing, shaping, slotting, broaching, gear cutting, gear grinding or gear finishing, sawing, cutting-off and other machine tools working by removing metal or cermets, not elsewhere specified or included	112,892
7	8463	Other machine tools for working stone, ceramics, concrete, asbestos-cement or like mineral materials or for cold working glass	73,723



Table 2. U.S. Top 10 Import Origins of Machine Tools (HS8457) from 2020 to 2024

Unit: 1,000 US\$

Country	2024		2023		2022		2021		2020	
	Import Value	Ranking	Import Value	Ranking	Import Value	Ranking	Import Value	Ranking	Import Value	Ranking
Japan	528,527	1	679,309	1	708,814	1	585,592	1	441,595	1
Germany	436,075	2	373,070	2	2,594,289	2	288,794	2	293,230	2
S. Korea	194,282	3	182,760	3	169,608	3	113,089	3	97,605	3
Taiwan	97,991	4	117,639	4	167,449	4	97,173	4	78,537	4
Italy	68,163	5	63,650	5	47,380	5	40,097	5	59,624	5
Switzerland	39,391	6	37,156	6	39,204	6	29,290	7	29,122	6
Netherlands	23,119	7	25,920	7	6,912		9,611	9	6,415	8
Spain	23,027	8	10,817	8	7,400	10	20,942	8	5,760	9
Austria	12,463	9	1,849		9,326	9	141		9,662	7
Brazil	11,514	10	8,048	9	11,571	8	6,645		2,497	

Table 3. U.S. Top 10 Import Origins of Machine Tools (HS8458) from 2020 to 2024

Unit: 1,000 US\$

Country	2024		2023		2022		2021		2020	
	Import Value	Ranking	Import Value	Ranking	Import Value	Ranking	Import Value	Ranking	Import Value	Ranking
Japan	446,068	1	572,629	1	550,414	1	380,918	1	390,237	1
S. Korea	273,103	2	241,609	2	238,379	2	177,175	2	128,865	2
Germany	103,517	3	92,839	4	107,540	4	82,827	3	89,173	3
Taiwan	98,151	4	104,829	3	115,274	3	68,503	4	71,729	4
Thailand	30,330	5	63,136	6	65,832	5	43,561	5	37,284	6
Italy	25,605	6	68,191	5	44,822	6	34,700	6	54,140	5
China	21,192	7	24,230	7	25,907	7	20,552	7	23,052	7
Spain	17,911	8	19,348	8	8,564	9	9,432	9	6,444	8
Austria	15,442	9	3,807		593		5,575		6,251	9
Switzerland	14,585	10	10,105	10	6,811	10	6,904	10	5,916	10

Overall, Taiwan's machine tool industry not only boasts a comprehensive product line and technical depth, but also plays a key role in the global manufacturing transformation and smart factory trend. In the past, through continuous innovation and int'l expansion, Taiwan's machine tool industry has gradually established a brand image for mid- to high-end machine tools and cultivated strong export competitiveness and industrial resilience.

This article will focus on **the top 3 Taiwanese machine tool exports, namely 8457, 8458, and 8462, as the primary analysis subjects**. First, based on U.S. Customs import value statistics, the 3 machine tool categories (8457, 8458, and 8462) imported into the US from 2020 to 2024 are organized into **Tables 2, 3, and 4**, respectively, and ranked by the 2024 data.

**Statistics on US imports of machine tools (HS8457) from 2020 to 2024 show that Japan and Germany remained the top 2 suppliers**, maintaining their dominant positions over the past five years. In 2024, the US imported US\$ 528,527,000 and US\$ 436,075,000 worth of machine tools from Japan and Germany, respectively, reflecting their technological maturity and brand trustworthiness. S. Korea also remained in third place, demonstrating its stable supply capacity for processing equipment.

**Taiwan ranked 4th for five consecutive years**, but the import value had declined annually since peaking at US\$ 167,449,000 in 2022, falling to US\$ 97,991,000 in 2024. This indicates that the US market's demand for Taiwanese machine tools is limited, possibly due to high tariffs and competitive pressures. Italy and Switzerland remained in 5th and 6th place, respectively, with European brands still holding a significant market share.

It is worth noting that countries such as the Netherlands, Spain, Austria, and Brazil have risen in the rankings in recent years, indicating that the US market is becoming increasingly diversified in terms of supply sources. Overall, the US machine tool market is highly concentrated among technologically advanced countries. If Taiwan wishes to maintain its competitiveness, it must strengthen its technological differentiation, enhance its brand image, and actively seek tariff preferences and mutual recognition of technology to avoid being marginalized.



Table 4. U.S. Top 10 Import Origins of Machine Tools (HS8462) from 2020 to 2024

Unit: 1,000 US\$

Country	2024		2023		2022		2021		2020	
	Import Value	Ranking	Import Value	Ranking	Import Value	Ranking	Import Value	Ranking	Import Value	Ranking
Germany	270,845	1	250,961	1	135,764	3	146,503	3	126,100	3
Italy	255,811	2	227,173	2	197,239	1	157,762	2	154,080	2
Japan	208,790	3	182,554	3	154,862	2	175,356	1	226,602	1
S. Korea	193,157	4	113,115	4	69,349	7	45,479	7	64,448	5
Austria	133,582	5	105,292	5	94,118	5	81,593	4	68,148	4
Canada	122,291	6	97,596	7	99,594	4	77,900	5	62,953	7
Switzerland	77,035	7	57,550	10	39,532	11	39,186	9	38,742	8
China	73,088	8	99,561	6	69,407	6	57,405	6	63,640	6
Taiwan	59,759	9	59,820	9	58,416	8	43,845	8	38,623	9
Turkey	47,246	10	67,457	8	52,569	9	22,345		17,685	

**Statistics on U.S. imports of machine tools (HS8458) from 2020 to 2024 show that Japan and S. Korea have consistently ranked as the top 2 suppliers**, maintaining their dominance in the market over the past five years. In 2024, their respective import values reached US\$ 446,068,000 and US\$ 273,103,000, demonstrating their technical advantages in high-precision machining equipment and stable supply capabilities. **Germany and Taiwan have alternated between the 3rd and the 4th places**. Taiwan reached a peak of US\$ 115,274,000 in 2022, but declined to US\$ 98,151,000 in 2024, indicating that competitive pressure and U.S. tariff policies may have impacted export performance.

Thailand and Italy ranked the 5th and the 6th, respectively. Thailand has grown rapidly in recent years and maintained its ranking in 2024 despite a decline in the import value, reflecting its penetration in the mid-range processing equipment market. China remained in the 7th place, with stable import values but no significant growth. Spain, Austria, and Switzerland fluctuated between the 8th and the 10th places, indicating that the US market is becoming increasingly diversified in terms of supply sources.

Overall, the US machine tool market is still dominated by technologically advanced countries. If Taiwan wishes to maintain its competitiveness, it needs to strengthen its technological differentiation, enhance its brand image, and actively seek tariff reductions and green manufacturing certification in order to solidify its position in the US market.

**Statistics on US imports of machine tools (HS8462) from 2020 to 2024 show that** European technological powerhouses maintained their dominant position, with **Germany and Italy ranking the 1st and 2nd for five consecutive years**. In 2024, their respective values reached US\$ 270,845,000 and US\$ 255,811,000, demonstrating their technological advantages and market credibility in the field of high-end processing equipment. Japan, however, has seen its market share decline from the 1st place in 2020 to the 3rd place in 2024, indicating that its competitiveness in the U.S. market is being squeezed by European brands.

S. Korea and Austria performed exceptionally well, with significant growth in import values over the past five years. In 2024, they ranked 4th and 5th, respectively, reflecting the effectiveness of their technological upgrades and supply chain integration. Canada remained stable in the 6th place, demonstrating the stability of N. American supply. Switzerland and China maintained their mid-range positions, with fluctuating import values but no significant breakthroughs.

**Taiwan has ranked 9th for five consecutive years**, with limited growth in the import value since 2020, reaching only US\$ 59,759,000 in 2024. This indicates that Taiwan still needs to strengthen its technological differentiation and brand positioning in the high-end processing equipment sector. Overall, the US market for HS8462 is highly competitive. If Taiwan wishes to increase its market share, it must combine low-carbon manufacturing, smart processing, and policy initiatives to secure mutual recognition of technology and tariff reductions.

On the other hand, this article discusses the future strategy formulation of the machine tool industry based on the export values of three machine tool categories in Taiwan, namely 8457, 8458, and 8462. The results are summarized in **Tables 5, 6, and 7**, and explained as follows.

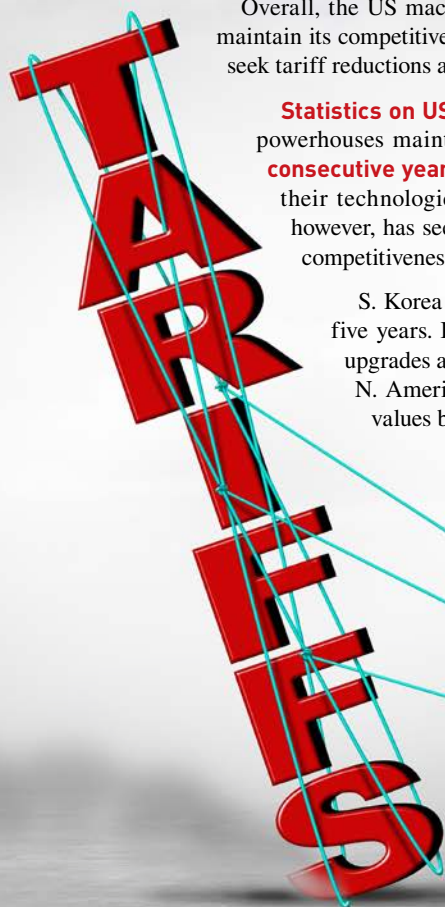




Table 5. Taiwan's Top 10 Export Destinations of Machine Tools (HS8457) from 2020 to 2024

Unit: 1,000 US\$

Country	2024		2023		2022		2021		2020	
	Export Value	Ranking	Export Value	Ranking	Export Value	Ranking	Export Value	Ranking	Export Value	Ranking
China	151,469	1	175,995	1	184,828	1	235,070	1	199,081	1
Turkey	98,794	2	159,214	2	116,590	3	129,945	2	89,856	2
USA	87,206	3	112,894	3	152,990	2	107,380	3	79,520	3
India	45,281	4	40,359	6	33,247	10	32,323	8	21,946	6
S. Korea	28,891	5	17,578	9	12,978		19,063		20,613	8
Germany	27,524	6	44,163	5	42,538	8	27,600	9	19,024	
Netherlands	26,233	7	52,849	4	70,058	4	49,680	4	29,790	4
Italy	19,567	8	36,153	7	51,751	5	44,097	5	21,252	7
Vietnam	19,115	9	12,201		31,594		20,660		21,252	7
Japan	16,477	10	30,648	8	36,617	9	26,476	10	19,123	

Table 6. Taiwan's Top 10 Export Destinations of Machine Tools (HS 8458) from 2020 to 2024

Unit: 1,000 US\$

Country	2024		2023		2022		2021		2020	
	Export Value	Ranking	Export Value	Ranking	Export Value	Ranking	Export Value	Ranking	Export Value	Ranking
China	168,428	1	207,042	1	180,468	1	193,389	1	139,369	1
USA	81,061	2	94,032	2	104,759	2	67,553	2	66,153	2
Turkey	61,034	3	77,297	3	75,091	3	65,962	3	45,763	3
India	25,227	4	22,274	4	12,181		16,771	8	10,965	7
UK	16,682	5	15,274	7	19,208	7	15,898	9	9,968	10
Netherlands	15,945	6	15,275	6	21,231	6	16,697	7	11,189	5
Thailand	13,253	7	16,504	8	18,155	9	17,672	6	10,263	8
Vietnam	10,939	8	11,786		18,813	8	14,768	10	11,105	6
Italy	10,211	9	17,351	5	26,034	5	26,034	5	7,973	
Australia	7,181	10	10,113		9,506		9,911		7,975	

**Statistics on Taiwan's exports of machine tools (HS8457) from 2020 to 2024 show that** the structure of the export market is gradually transforming, with a trend of "China maintaining its leading position, India rapidly rising, Europe fluctuating, and the US declining." Although **China has maintained its top position for five consecutive years**, its export value has declined annually since reaching a peak in 2021, dropping to just US\$ 151,469,000 in 2024, reflecting the market saturation and the impact of geopolitical risks. Turkey, however, has demonstrated strong growth momentum, securing the second position since 2022. Despite a decline in the export value in 2024, it has maintained its ranking, reflecting its manufacturing sector upgrade and the competitiveness of Taiwanese products.

The US market has shown a significant decline, peaking at US\$ 152,990,000 in 2022 and dropping to US\$ 87,206,000 in 2024, indicating that high tariffs and policy uncertainties have severely impacted export performance. Notably, the Indian market has performed exceptionally well, with the export value doubling over the past five years, reaching US\$ 45,281,000 in 2024 and rising to the 4th place, reflecting strong demand for high-end processing equipment. European markets such as the Netherlands, Italy, and Germany have experienced greater volatility, reflecting the impact of local economic conditions and ESG policy directions.

Overall, **Taiwan's machine tool (HS 8457) export market is shifting from traditional powerhouses to emerging manufacturing countries**. Manufacturers should accelerate their expansion into promising markets such as India, Southeast Asia, and Mexico, and combine low-carbon technology and smart manufacturing to strengthen their global competitiveness.

**Statistics on Taiwan's exports of machine tools (HS8458) from 2020 to 2024 show that** the export market structure has remained stable with some changes, presenting a pattern of "three strong markets remaining stable, India rising, and Europe fluctuating." **China has maintained its top position for five consecutive years**. Although the export value dropped to US\$ 168,428,000 in 2024, it remained significantly higher than other markets, indicating that its manufacturing industry scale remained attractive. The US and Turkey consistently held the 2nd and 3rd positions, respectively. Despite slight fluctuations in export values, they continued to demonstrate stable demand and a solid foundation for long-term cooperation.



Table 7. Taiwan's Top 10 Export Destinations of Machine Tools (HS 8462) from 2020 to 2024

Unit: 1,000 US\$

Country	2024		2023		2022		2021		2020	
	Export Value	Ranking	Export Value	Ranking	Export Value	Ranking	Export Value	Ranking	Export Value	Ranking
China	60,789	1	75,216	1	104,505	1	138,101	1	92,024	1
USA	57,643	2	49,574	2	61,756	2	45,630	2	45,039	2
India	33,061	3	21,299	4	14,129	7	14,553	6	10,783	7
Vietnam	29,240	4	24,324	3	24,991	3	29,794	3	23,792	3
Thailand	22,947	5	13,304	8	18,802	6	15,464	5	14,036	4
Mexico	15,868	6	14,182	7	21,073	4	20,860	4	1,877	/
Indonesia	11,257	7	15,079	5	9,621	10	8,364	10	11,886	
Malaysia	8,482	8	10,595	9	12,284	8	8,460	9	8,115	10
Japan	8,438	9	9,945	10	10,990	9	9,847	8	13,419	5
Turkey	6,708	10	14,822	6	19,413	5	12,478	7	8,138	9

Notably, the Indian market has experienced rapid growth, with the export value reaching US\$ 25,227,000 in 2024, doubling over five years and maintaining its position as the 4th-largest market. This reflects the country's manufacturing sector upgrade and expanding demand for high-end processing equipment. European markets such as the UK, the Netherlands, and Italy showed fluctuations, significantly influenced by economic conditions and policies, but they remained within the top 10. Southeast Asian markets such as Thailand and Vietnam demonstrated stable growth potential, making them suitable for medium- to long-term investments.

Overall, Taiwan's machine tool (HS8458) export market is diversifying. Manufacturers should strengthen their technical adaptation and local services in India, Southeast Asia, and Europe, and combine government resources to promote low-carbon and smart manufacturing upgrades to enhance global competitiveness.

Statistics on Taiwan's exports of machine tools (HS8462) from 2020 to 2024 show that the market focus is gradually shifting from traditional powerhouses to emerging manufacturing countries. Although China has remained in the 1st place for five consecutive years, its export value has declined year by year since peaking in 2021, falling to just US\$ 60,789,000 in 2024, reflecting market saturation and geopolitical risks. The US remained firmly in the 2nd place, with relatively stable fluctuations in the export value, indicating sustained demand for high-end processing equipment.

India's market performance has been impressive, with the export value doubling over the past five years to reach US\$ 33,061,000 in 2024, rising to the 3rd place and demonstrating the strong momentum of its manufacturing upgrade and infrastructure expansion. Vietnam and Thailand also maintained steady growth, ranking 4th and 5th, respectively, indicating the long-term potential of the Southeast Asian market. Mexico, meanwhile, saw rapid growth from US\$ 1,877,000 in 2020 to US\$ 15,868,000 in 2024, reflecting the impact of the shift in the US supply chain and the trend toward nearshoring manufacturing.

Overall, Taiwan's machine tool (HS 8462) export market is diversifying. Manufacturers should accelerate their expansion into India, Mexico, and Southeast Asia, and combine smart manufacturing and low-carbon technologies to strengthen local services and technical compatibility, thereby enhancing global competitiveness and export resilience.

Strategic Recommendations for Taiwan's Machine Tool Industry in Response to U.S. "Reciprocal Tariffs"

In the face of drastic changes in the global trade landscape, Taiwan's machine tool industry is struggling to maintain a reasonable ROI due to the 24.7% tariff imposed by the US. Compared to the 15% tariff applied to Japan, S. Korea, and the EU, Taiwanese products face significant constraints on price competitiveness in the U.S, resulting in compressed profit margins. Rather than continuing to invest resources in a market characterized by high policy risks and uncertain trade conditions, it would be more prudent to adjust strategies and shift focus toward more promising and stable markets. Of course, if Taiwanese government can secure competitive tariff treatment, the U.S. could still serve as an important target market for development.

Emerging manufacturing countries such as India, Mexico, and Vietnam have risen rapidly in recent years, with strong demand for infrastructure and industrial upgrade. Export data has already shown significant growth. India's exports of HS8462 reached US\$ 33,061,000 in 2024, making it the 3rd largest market, with other items also continuing to rise. Mexico has become an alternative gateway to N. America due to the relocation of US supply chains.

Southeast Asian countries such as Vietnam, Thailand, and Indonesia possess labor and policy advantages, making them suitable for medium- to long-term investments. In Europe, ESG and carbon neutrality policies are driving increased demand for high-efficiency, low-carbon emission equipment. If Taiwan introduces a low-carbon industrial chain, it'll gain an advantage in green procurement. Not focusing on the US market too much isn't a retreat, but a strategic reallocation. Only by proactively shifting lanes can we seize new opportunities. ■

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