

# U.S. Fastener Trade with China in the 1<sup>st</sup> Half of 2020

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Have the recently imposed tariffs on Chinese exports to the US impacted fastener trade, or has COVID-19 impacted the fastener supply chain? Has China been able to maintain itself as the U. S's number one trading partner despite the trade wars?

Data note: The data for this article is derived from the US Census trade statistics. US Import and Export Census trade statistics is based on all modes of transportation. That value is calculated in USD by CIF (imports) and USD by FOB (exports). In this article fasteners are defined as any product under HS Code 7318 (screws, bolts, nuts, coach screws, rivets, cotters, cotter pins, washers and similar articles of iron or steel).

As a result of COVID-19, today's supply chain has faced an incredibly challenging year. Beginning in Wuhan China and quickly spreading across the globe, COVID-19 has impacted international trade on a multitude of levels. China has continuously ranked as one of the top producers of iron and steel in the world and one of the U.S.'s key trading partners. Most recently, the current U.S. administration-imposed tariffs on Chinese exports of steel and aluminum. The first obvious impact of high tariffs is a complete supply chain disruption, not only for the manufacturers, but also for the importers. Ultimately the trade wars will impact US importers and consumers, causing steel goods to be taxed at a higher rate.

U.S. automobile manufacturers, industrial supplies wholesalers and hardware distributors are amongst a few of the top industries sourcing fastener products from foreign manufacturers. While several large U.S. steel manufacturers continue producing fasteners, the vast majority of U.S. based companies are internationally procuring their supply to keep up with the steady demand. It could be said that the tariffs imposed on Chinese goods have caused U.S. fastener importers to shift their sourcing and product procurements to other countries. For

many, this could be a temporary shift in their supply chain until the current trade war comes to an end, but for others this could be seen as a permanent change in sourcing.

## U.S. Imports of Fasteners from China

Fastener imports into the U.S. from China decreased a notable 30% during the first half of 2020 by comparison to the first half of 2019. (Table 1) The first few months of the year proved to be the most fluctuating, possibly due to the COVID-19 lockdowns in Wuhan. April imports not only showed a promising increase, but also the beginning of a more stable trend in fastener imports. Interestingly enough, January has remained the month with the highest CIF value of 2020, followed by June with the second highest CIF of 2020.

By taking a closer look at the subcategories of fasteners, it is evident how 731815 (threaded screws and bolts) remained the top fastener import from China in both H1 2019 and H1 2020. 731815 imports during H1 2020 were nearly double that of 731816 (nuts, threaded or iron or steel). All but one fastener subcategory of 7318 showed a decrease in imports during the first half of 2020, and that subcategory is 731813 (screws hooks and screw rings). H1 of 2020 imports of 731813 increased by 22% by comparison to H1 2019. Once again, April 2020 appears to be the month with the biggest uptick of U.S. fastener imports from China, and only till June 2020 was there a slight decrease of \$1,676,355 USD. (Table 3)

Alternative to China, the U.S. is sourcing the most volume of fasteners from Taiwan. Despite the 13.5% decrease of imports during the first half of 2020, Taiwan remains as the number one trading partner of the U.S both during the first half of 2019 and the first half of 2020. Except for Vietnam, Spain and a few other countries, most countries supplying fasteners to the U.S. showed a significant drop during the first half of 2020 by comparison to 2019. Overall, the U.S. imported nearly 17% less fasteners during the first 6 months of 2020 which accounted for 510,565,943 USD by comparison to the first 6 months of 2019. (Table 2)

Table 1. U.S. Fastener Import from China in H1 2020

Country of Origin	2019 - H1		2020 - H1		Volume Change			
	Quantity (KG)	Total Value CIF (USD)	Quantity (KG)	Total Value CIF (USD)	Quantity (KG)	%	Total Value CIF (USD)	%
China	277,216,494	649,858,422	209,137,784	452,473,142	-68,078,710	-24.56	-197,385,280	-30.38



Table 2. U.S Fastener Import from Top 10 Countries (H1 2019 vs. H1 2020)

Country of Origin	2019 - H1				2020 - H1				Volume Change			
	Total Value CIF (USD)	%	Quantity (KG)	%	Total Value CIF (USD)	%	Quantity (KG)	%	Total Value CIF (USD)	%	Quantity (KG)	%
Taiwan	1,055,338,649	34.83	341,682,284	39.65	912,146,687	36.20	297,706,830	40.46	-143,191,962	-13.57	-43,975,454	-12.88
China	649,858,422	21.45	277,216,494	32.17	452,473,142	17.96	209,137,784	28.43	-197,385,280	-30.38	-68,078,710	-24.56
Japan	325,670,729	10.75	50,410,285	5.85	267,600,275	10.62	41,149,069	5.60	-58,070,454	-17.84	-9,261,216	-18.38
Germany	190,532,141	6.29	22,447,438	2.61	180,746,644	7.18	21,379,593	2.91	-9,785,497	-5.14	-1,067,845	-4.76
Canada	169,723,769	5.60	40,799,725	4.74	128,257,854	5.09	27,844,950	3.79	-41,465,915	-24.44	-12,954,775	-31.76
South Korea	98,379,148	3.25	21,394,703	2.49	91,755,761	3.65	33,015,729	4.49	-6,623,387	-6.74	11,621,026	54.32
India	78,792,238	2.60	34,780,762	4.04	52,546,697	2.09	25,709,083	3.50	-26,245,541	-33.31	-9,071,679	-26.09
Italy	78,084,788	2.58	9,733,852	1.13	68,748,155	2.73	8,040,253	1.10	-9,336,633	-11.96	-1,693,599	-17.40
Mexico	66,344,872	2.19	6,339,402	0.74	56,081,818	2.23	6,543,151	0.89	-10,263,054	-15.47	203,749	3.22
Thailand	47,488,829	1.57	16,596,919	1.93	43,347,509	1.72	15,151,462	2.06	-4,141,320	-8.73	-1,445,457	-8.71

Table 3. U.S. Import of Fastener Subcategories (H1 2019 vs. H1 2020)

Product HS (6)	2019 - H1				2020 - H1				Volume Change			
	Quantity (KG)	%	Total Value CIF (USD)	%	Quantity (KG)	%	Total Value CIF (USD)	%	Quantity (KG)	%	Total Value CIF (USD)	%
731815 - Threaded Screws and Bolts Others, With or Without Their Nuts or Washers, of Iron or Steel	149,858,710	54.06	308,617,303	47.49	104,114,853	49.79	201,787,567	44.60	-45,743,857	-30.53	-106,829,736	-34.62
731816 - Nuts, Threaded, of Iron or Steel	62,246,799	22.46	156,079,115	24.02	48,271,792	23.09	111,115,631	24.56	-13,975,007	-22.46	-44,963,484	-28.81
731822 - Washers, Other than Lock Washers, of Iron or Steel	23,885,094	8.62	48,593,793	7.48	22,798,559	10.91	40,500,908	8.96	-1,086,535	-4.55	-8,092,885	-16.66
731814 - Self-Tapping Screws, Threaded, of Iron or Steel	18,083,786	6.53	47,600,024	7.33	13,691,027	6.55	29,893,333	6.61	-4,392,759	-24.30	-17,706,691	-37.20
731829 - Nonthreaded Articles (Fasteners) Others, of Iron or Steel	6,789,576	2.45	36,295,400	5.59	5,196,849	2.49	26,774,841	5.92	-1,592,727	-23.46	-9,520,559	-26.24
731811 - Coach Screws, Threaded, of Iron or Steel	5,198,716	1.88	7,310,677	1.13	4,904,943	2.35	6,127,267	1.36	-293,773	-5.66	-1,183,410	-16.19
731819 - Threaded Articles of Iron or Steel Others	3,363,679	1.22	18,148,341	2.80	2,958,747	1.42	13,187,661	2.92	-404,932	-12.04	-4,960,680	-27.34
731812 - Wood Screws Other than Coach Screws, Threaded, of Iron or Steel	2,005,274	0.73	5,002,705	0.77	1,812,368	0.87	4,356,556	0.97	-192,906	-9.62	-646,149	-12.92
731821 - Spring Washers and Other Lock Washers, of Iron or Steel	1,853,975	0.67	5,405,991	0.84	1,353,076	0.65	4,262,317	0.95	-500,899	-27.02	-1,143,674	-21.16
731813 - Screw Hooks and Screw Rings, Threaded, of Iron or Steel	1,665,604	0.61	5,665,243	0.88	2,034,718	0.98	5,941,097	1.32	369,114	22.17	275,854	4.87
731824 - Cotters and Cotter Pins, of Iron or Steel	1,367,271	0.50	6,811,137	1.05	1,249,811	0.60	4,711,449	1.05	-117,460	-8.60	-2,099,688	-30.83
731823 - Rivets of Iron or Steel	898,010	0.33	4,328,693	0.67	751,041	0.36	3,814,515	0.85	-146,969	-16.37	-514,178	-11.88
<b>Total</b>	<b>277,216,494</b>	<b>100</b>	<b>649,858,422</b>	<b>100</b>	<b>209,137,784</b>	<b>100</b>	<b>452,473,142</b>	<b>100</b>	<b>-68,078,710</b>	<b>-24.56</b>	<b>-197,385,280</b>	<b>-30.38</b>



## U.S. Exports of Fasteners to China

Fastener exports to China peaked in March 2020 and continued to fluctuate during the later months of H1 resulting in little signs of stability. Considering how the U.S. was first starting to experience lockdowns and port closures in April, the most significant decrease in exports was in April 2020. In March 2020 there was a total value of \$18,994,711 USD of fasteners being exported, and then in April the total value dropped to \$14,720,336 USD. (Table 4)

Most subcategories of 7318 showed an increase in exports during H1 2020 by comparison to H1 2019. Of those subcategories, the most notable increases were 731812 (wood screws other than coach screws, threaded, of iron or steel) with an increase of nearly 500% in H1 2020, and 731811 (coach screws, threaded, or iron or steel) with a staggering increase of 802% in H1 2020. Other subcategories show a decline in exports during H1 2020, for example, 731823 (rivets of iron or steel) and 731816 (nuts, threaded, or iron or steel), and other subcategories remained relatively stable. (Table 6)

Surprisingly enough, the U.S. remains as the 4th largest steel producing country and has over 160 global trading partners. U.S. exports of fasteners dropped by nearly 21% during the first half of 2020 by comparison to the first half of 2019, accounting for a total decrease of \$463,430,836 USD. The U.S top fastener trading partner is Mexico, followed by Canada; however, US exports to these two countries dropped during the first 6 months of 2020. US exports of fasteners to China slightly increased during the first 6 months of 2020 by less than 1%, leaving China as the 4th largest fastener trading partner with the U.S. (Table 5)

**Table 4. U.S. Fastener Export to China in H1 2020**

Country of Destination	2019 - H1		2020 - H1		Volume Change		
	Quantity(KG)	FOB Value (USD)	Quantity(KG)	FOB Value (USD)	Quantity(KG)	%	FOB Value (USD)
<b>China</b>	4,703,344	87,992,797	5,479,790	88,750,989	776,446	16.51	758,192

**Table 5. U.S Fastener Export to Top 10 Countries (H1 2019 vs. H1 2020)**

Country of Destination	2019 - H1				2020 - H1				Volume Change			
	FOB Value (USD)	%	Quantity (KG)	%	FOB Value (USD)	%	Quantity (KG)	%	FOB Value (USD)	%	Quantity (KG)	%
<b>Mexico</b>	789,740,247	35.39	114,777,720	28.21	538,941,406	30.48	71,714,002	23.11	-250,798,841	-31.76	-43,063,718	-37.52
<b>Canada</b>	583,725,704	26.16	242,430,636	59.57	440,956,268	24.94	196,231,799	63.22	-142,769,436	-24.46	-46,198,837	-19.06
<b>China</b>	87,992,797	3.95	4,703,344	1.16	88,750,989	5.02	5,479,790	1.77	758,192	0.87	776,446	16.51
<b>United Kingdom</b>	80,696,900	3.62	4,007,311	0.99	75,381,275	4.27	3,081,618	1.00	-5,315,625	-6.59	-925,693	-23.11
<b>Germany</b>	59,307,220	2.66	4,188,304	1.03	54,054,178	3.06	2,811,734	0.91	-5,253,042	-8.86	-1,376,570	-32.87
<b>Singapore</b>	53,540,600	2.40	1,799,176	0.45	43,055,818	2.44	1,486,634	0.48	-10,484,782	-19.59	-312,542	-17.38
<b>Brazil</b>	53,184,266	2.39	4,838,751	1.19	46,032,488	2.61	4,165,398	1.35	-7,151,778	-13.45	-673,353	-13.92
<b>Japan</b>	49,714,452	2.23	1,634,422	0.41	46,822,024	2.65	1,525,375	0.50	-2,892,428	-5.82	-109,047	-6.68
<b>South Korea</b>	45,407,228	2.04	1,803,061	0.45	38,387,076	2.18	1,589,227	0.52	-7,020,152	-15.47	-213,834	-11.86
<b>France</b>	43,080,286	1.93	1,222,536	0.31	40,206,618	2.28	1,064,510	0.35	-2,873,668	-6.68	-158,026	-12.93

## The Future of US Fastener Trade with China

China will need to make strong efforts in the coming years to surpass Taiwan as the current number one fastener exporter to the U.S. Meanwhile, the U.S. will likely continue fastener trade with its closest neighbors, Mexico, and Canada, especially considering how the United States-Mexico-Canada Agreement (USMCA) became effective July 1, 2020. Given that the U.S. will be hosting a presidential election later this year, many trade relations are expected to be altered, whether a new president enters The White House, or if the current presidential administration remains in office. As we have witnessed over the last several years, trade negotiations can have significant impacts on trade, supply chain and the overall global market.



Table 6. U.S. Export of Fastener Subcategories (H1 2019 vs. H1 2020)

Product HS (6)	2019 - H1				2020 - H1				Volume Change			
	Quantity (KG)	%	FOB Value (USD)	%	Quantity (KG)	%	FOB Value (USD)	%	Quantity (KG)	%	FOB Value (USD)	%
731815 - Threaded Screws and Bolts Others, With or Without Their Nuts or Washers, of Iron or Steel	2,382,651	50.66	37,118,911	42.19	3,137,740	57.27	39,042,644	44.00	755,089	31.70	1,923,733	5.19
731816 - Nuts, Threaded, of Iron or Steel	559,588	11.90	17,568,033	19.97	673,076	12.29	14,848,309	16.74	113,488	20.29	-2,719,724	-15.49
731829 - Nonthreaded Articles (Fasteners) Others, of Iron or Steel	399,690	8.50	12,757,925	14.50	357,028	6.52	12,872,225	14.51	-42,662	-10.68	114,300	0.90
731822 - Washers, Other than Lock Washers, of Iron or Steel	352,036	7.49	3,975,868	4.52	322,242	5.89	3,725,665	4.20	-29,794	-8.47	-250,203	-6.30
731819 - Threaded Articles of Iron or Steel Others	295,721	6.29	6,151,336	7.00	319,851	5.84	7,956,555	8.97	24,130	8.16	1,805,219	29.35
731824 - Cotter Pins, Of Iron Or Steel	228,086	4.85	3,109,880	3.54	250,342	4.57	3,408,739	3.85	22,256	9.76	298,859	9.61
731814 - Self-Tapping Screws, Threaded, of Iron or Steel	228,071	4.85	1,937,665	2.21	161,415	2.95	2,180,297	2.46	-66,656	-29.23	242,632	12.53
731823 - Rivets of Iron or Steel	203,811	4.34	3,898,698	4.44	129,099	2.36	2,558,619	2.89	-74,712	-36.66	-1,340,079	-34.38
731821 - Spring Washers and Other Lock Washers, of Iron or Steel	37,038	0.79	1,297,242	1.48	50,327	0.92	1,574,253	1.78	13,289	35.88	277,011	21.36
731812 - Wood Screws Other than Coach Screws, Threaded, of Iron or Steel	7,375	0.16	32,720	0.04	47,209	0.87	195,485	0.23	39,834	540.13	162,765	497.45
731813 - Screw Hooks and Screw Rings, Threaded, of Iron or Steel	5,827	0.13	108,501	0.13	4,375	0.08	63,051	0.08	-1,452	-24.92	-45,450	-41.89
731811 - Coach Screws, Threaded, of Iron or Steel	3,450	0.08	36,018	0.05	27,086	0.50	325,147	0.37	23,636	685.11	289,129	802.74
<b>Total</b>	<b>4,703,344</b>	<b>100</b>	<b>87,992,797</b>	<b>100</b>	<b>5,479,790</b>	<b>100</b>	<b>88,750,989</b>	<b>100</b>	<b>776,446</b>	<b>16.51</b>	<b>758,192</b>	<b>0.87</b>

It is wildly unlikely to have predicted the current state of international trade and the global economy, much less the lasting impacts of COVID-19. The second half of 2020 will truly determine whether the trade war between the US and China will leave a lasting impact on the fastener market. Whether or not fastener trade becomes more stable in the second half of 2020 remains to be seen. Supply chain disruptions such as imposed tariffs and a global pandemic can have lasting impacts on international trade. Lucky for our generation, we are living in a digital era where data is constantly being collected to continuously monitor import and export global trends. □

