

2020-2022 Fastening Tool Trade Statistics of **Taiwan** / **Japan** / **Brazil**

2020-2022台灣/日本/巴西緊固工具進出口統計

Taiwan

* in descending order according to weight figures of 2022

Export

| HS 820411 Non-adjustable hand-operated spanners, wrenches, and parts | | | | | | | |
|--|---------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
| | Global | 14,763,540 | 17,489,280 | 16,941,305 | 173,069,760 | 218,971,362 | 248,327,886 |
| 1 | USA | 4,605,803 | 5,341,398 | 6,263,166 | 59,771,918 | 73,632,510 | 95,834,401 |
| 2 | China | 2,405,748 | 2,810,988 | 1,727,127 | 10,672,076 | 15,824,738 | 16,171,532 |
| 3 | Germany | 767,660 | 915,621 | 975,653 | 14,994,335 | 18,587,964 | 21,417,869 |
| 4 | Japan | 700,274 | 890,321 | 925,710 | 10,182,505 | 12,832,405 | 14,057,953 |
| 5 | France | 539,039 | 855,354 | 737,268 | 10,120,057 | 17,581,314 | 14,932,477 |
| 6 | Indonesia | 353,268 | 354,308 | 518,026 | 2,072,119 | 2,382,545 | 3,435,230 |
| 7 | Netherlands | 558,380 | 636,264 | 461,728 | 10,000,899 | 10,504,082 | 9,808,716 |
| 8 | Australia | 281,174 | 401,570 | 450,176 | 4,004,516 | 6,311,739 | 8,145,218 |
| 9 | Italy | 245,005 | 363,858 | 372,886 | 3,528,735 | 5,129,061 | 6,125,403 |
| 10 | Russia | 225,060 | 288,038 | 366,312 | 2,666,293 | 3,337,603 | 5,117,960 |

| HS 820412 Adjustable hand-operated spanners, wrenches, and parts | | | | | | | |
|--|---------------|------------------|-------------------|------------------|--------------------|--------------------|--------------------|
| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
| | Global | 8,932,098 | 10,056,700 | 9,712,891 | 101,588,499 | 125,281,158 | 133,993,268 |
| 1 | USA | 3,315,140 | 3,372,700 | 3,669,791 | 36,629,618 | 43,400,898 | 49,545,707 |
| 2 | Vietnam | 573,307 | 604,882 | 801,763 | 1,359,189 | 1,499,141 | 1,945,872 |
| 3 | China | 754,102 | 952,357 | 496,486 | 8,576,650 | 11,860,696 | 8,634,702 |
| 4 | Germany | 479,448 | 493,449 | 427,510 | 5,196,553 | 6,419,924 | 6,493,064 |
| 5 | Australia | 315,081 | 428,594 | 389,905 | 4,523,387 | 6,287,858 | 6,655,864 |
| 6 | Japan | 443,262 | 541,924 | 382,058 | 5,438,826 | 6,450,420 | 6,212,936 |
| 7 | Netherlands | 330,708 | 396,319 | 371,963 | 3,625,370 | 4,544,440 | 5,472,497 |
| 8 | Russian | 226,559 | 313,907 | 302,922 | 3,052,825 | 5,015,195 | 5,515,461 |
| 9 | Belgium | 195,176 | 167,636 | 217,795 | 2,825,802 | 2,328,244 | 3,146,636 |
| 10 | France | 210,330 | 259,599 | 212,939 | 3,686,622 | 4,493,093 | 3,692,881 |

| HS 820420 Socket wrenches with/without handles, drives, extensions, and parts | | | | | | | |
|---|---------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
| | Global | 55,379,663 | 70,265,536 | 61,900,896 | 343,068,376 | 462,628,925 | 467,668,894 |
| 1 | USA | 23,522,946 | 31,219,229 | 29,255,742 | 158,108,524 | 218,667,988 | 222,591,134 |
| 2 | China | 12,452,624 | 15,060,858 | 10,725,241 | 41,669,900 | 50,305,032 | 42,617,237 |
| 3 | Australia | 1,374,714 | 2,099,392 | 2,193,407 | 10,896,760 | 16,693,067 | 21,044,765 |
| 4 | Netherlands | 1,837,711 | 2,586,061 | 2,175,341 | 14,995,678 | 22,692,277 | 20,883,428 |
| 5 | Germany | 2,443,601 | 2,627,556 | 2,051,874 | 18,323,675 | 22,986,981 | 21,341,349 |
| 6 | Russia | 1,046,457 | 2,047,410 | 1,774,987 | 7,721,972 | 15,720,921 | 15,927,658 |
| 7 | France | 766,647 | 1,273,231 | 1,182,530 | 6,651,307 | 11,443,070 | 13,047,406 |
| 8 | U. K. | 622,480 | 805,670 | 860,775 | 5,213,030 | 7,507,668 | 9,019,167 |
| 9 | Brazil | 613,074 | 551,725 | 716,526 | 3,992,265 | 4,141,711 | 5,549,999 |
| 10 | Italy | 451,803 | 861,296 | 684,420 | 3,796,284 | 6,831,336 | 6,528,242 |

HS 820540 Screwdrivers and parts

| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
|------|---------------|------------------|------------------|------------------|-------------------|--------------------|--------------------|
| | Global | 6,327,402 | 7,371,783 | 7,349,634 | 78,367,182 | 101,703,594 | 111,962,433 |
| 1 | USA | 3,368,908 | 3,914,701 | 4,400,107 | 44,550,343 | 58,521,952 | 72,650,058 |
| 2 | Russian | 116,413 | 165,887 | 245,577 | 1,356,273 | 2,025,849 | 3,164,467 |
| 3 | China | 308,487 | 285,425 | 229,988 | 3,448,303 | 3,530,694 | 3,195,959 |
| 4 | Australia | 313,026 | 279,159 | 219,304 | 2,240,672 | 2,382,069 | 2,255,848 |
| 5 | Japan | 221,135 | 214,097 | 210,827 | 3,179,571 | 3,432,288 | 3,382,704 |
| 6 | U. K. | 142,932 | 285,081 | 202,092 | 1,944,490 | 3,754,327 | 2,874,403 |
| 7 | Italy | 124,173 | 219,534 | 196,749 | 1,592,586 | 2,862,236 | 2,701,917 |
| 8 | Germany | 216,408 | 166,020 | 156,100 | 2,660,500 | 2,760,924 | 2,928,726 |
| 9 | Netherlands | 92,551 | 163,157 | 107,422 | 1,196,110 | 1,999,323 | 1,355,573 |
| 10 | France | 57,768 | 82,514 | 92,876 | 879,320 | 1,280,780 | 1,455,364 |

HS 820790 Screwdriver bits, tapping tools, and other interchangeable tools

| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
|------|---------------|------------------|------------------|------------------|--------------------|--------------------|--------------------|
| | Global | 9,114,665 | 9,176,975 | 8,063,998 | 104,561,139 | 121,534,559 | 114,768,320 |
| 1 | USA | 2,913,691 | 3,405,477 | 3,104,267 | 37,891,625 | 46,810,146 | 42,860,272 |
| 2 | China | 1,580,714 | 1,582,135 | 869,456 | 11,978,332 | 15,488,568 | 9,997,258 |
| 3 | Russia | 271,267 | 356,644 | 445,598 | 3,558,478 | 4,736,915 | 6,571,700 |
| 4 | Vietnam | 886,050 | 768,341 | 365,589 | 6,226,338 | 5,612,442 | 2,680,662 |
| 5 | Germany | 758,430 | 385,847 | 364,916 | 10,158,866 | 10,217,197 | 7,991,598 |
| 6 | Canada | 364,344 | 434,344 | 340,389 | 4,251,137 | 5,281,375 | 5,034,157 |
| 7 | Netherlands | 78,585 | 253,388 | 260,760 | 1,202,137 | 2,528,436 | 2,458,241 |
| 8 | Austria | 3,821 | 610 | 255,905 | 58,767 | 19,028 | 2,262,379 |
| 9 | Spain | 184,936 | 36,633 | 202,314 | 1,406,649 | 542,791 | 2,159,397 |
| 10 | Sweden | 198,165 | 184,437 | 150,320 | 2,370,422 | 2,451,433 | 2,219,868 |

Import

HS 820411 Non-adjustable hand-operated spanners, wrenches, and parts

| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
|------|----------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|
| | Global | 4,502,950 | 5,550,328 | 4,362,690 | 22,909,342 | 31,731,301 | 26,636,932 |
| 1 | China | 4,056,579 | 5,066,023 | 3,794,514 | 17,505,579 | 25,999,459 | 20,186,351 |
| 2 | Vietnam | 143,126 | 230,838 | 290,293 | 836,843 | 1,291,263 | 1,529,838 |
| 3 | Japan | 102,805 | 121,499 | 134,934 | 1,849,672 | 2,310,277 | 2,319,278 |
| 4 | India | 53,427 | 61,593 | 64,402 | 245,791 | 291,557 | 338,256 |
| 5 | Türkiye | 35,723 | 39,814 | 34,342 | 325,988 | 367,855 | 299,560 |
| 6 | USA | 17,232 | 11,026 | 18,736 | 523,528 | 441,046 | 641,184 |
| 7 | Germany | 3,162 | 2,855 | 5,041 | 399,762 | 320,991 | 381,916 |
| 8 | Switzerland | 233 | 239 | 1,861 | 27,333 | 38,427 | 198,656 |
| 9 | Netherlands | 2,471 | 1,874 | 1,498 | 241,440 | 140,921 | 174,758 |
| 10 | Czech Republic | 760 | 855 | 1,339 | 46,867 | 50,945 | 71,218 |

HS 820412 Adjustable hand-operated spanners, wrenches, and parts

| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
|------|----------------|------------------|------------------|------------------|------------------|------------------|-------------------|
| | Global | 1,444,571 | 1,886,342 | 1,997,959 | 8,618,436 | 1,444,571 | 11,603,187 |
| 1 | Vietnam | 676,164 | 728,803 | 973,584 | 3,238,040 | 676,164 | 5,005,189 |
| 2 | China | 709,121 | 1,093,937 | 964,800 | 3,846,367 | 709,121 | 4,906,292 |
| 3 | India | 9,659 | 25,785 | 22,348 | 48,952 | 9,659 | 128,345 |
| 4 | Japan | 21,901 | 26,129 | 21,996 | 650,799 | 676,127 | 622,945 |
| 5 | Philippines | N/A | 14 | 5,261 | N/A | 143 | 8,344 |
| 6 | USA | 5,242 | 3,274 | 2,715 | 341,826 | 458,388 | 329,454 |
| 7 | Germany | 1,712 | 1,392 | 1,760 | 118,882 | 78,581 | 138,353 |
| 8 | Spain | 305 | 500 | 1,088 | 6,267 | 10,747 | 30,793 |
| 9 | U. K. | 109 | 447 | 669 | 13,700 | 40,044 | 53,598 |
| 10 | Czech Republic | 136 | 325 | 508 | 8,198 | 19,430 | 27,147 |

| HS 820420 Socket wrenches with/without handles, drives, extensions, and parts | | | | | | | |
|---|----------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
| Global | | 1,557,618 | 2,208,649 | 1,271,434 | 7,308,401 | 8,448,273 | 5,828,139 |
| 1 | China | 1,339,573 | 1,964,190 | 1,066,395 | 5,125,498 | 5,850,532 | 3,463,584 |
| 2 | Vietnam | 184,606 | 149,686 | 169,515 | 732,162 | 537,007 | 474,272 |
| 3 | Italy | 8,372 | 15,406 | 13,096 | 85,999 | 168,523 | 111,341 |
| 4 | Japan | 5,509 | 6,338 | 7,169 | 483,716 | 307,087 | 505,093 |
| 5 | Germany | 2,461 | 2,439 | 2,393 | 193,666 | 196,889 | 275,187 |
| 6 | USA | 1,691 | 2,652 | 2,040 | 277,617 | 307,087 | 375,608 |
| 7 | Netherlands | 821 | 531 | 1,072 | 126,323 | 113,531 | 157,719 |
| 8 | Sweden | 184 | 91 | 1,029 | 13,006 | 6,954 | 73,591 |
| 9 | Czech Republic | 37 | 40 | 862 | 2,148 | 2,658 | 40,391 |
| 10 | Denmark | 319 | 491 | 403 | 17,711 | 17,233 | 39,380 |

| HS 820540 Screwdrivers and parts | | | | | | | |
|----------------------------------|----------------|------------------|------------------|----------------|------------------|------------------|------------------|
| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
| Global | | 1,300,531 | 1,091,729 | 709,775 | 8,075,931 | 7,270,117 | 5,758,007 |
| 1 | China | 1,227,316 | 1,058,551 | 676,090 | 6,463,016 | 5,748,715 | 4,129,625 |
| 2 | Japan | 16,251 | 16,463 | 18,831 | 692,062 | 696,016 | 689,840 |
| 3 | Czech Republic | 2,391 | 2,522 | 4,005 | 135,714 | 143,071 | 210,420 |
| 4 | France | 1,351 | 1,570 | 3,325 | 35,135 | 53,506 | 98,077 |
| 5 | Germany | 4,458 | 3,187 | 2,641 | 176,985 | 205,484 | 194,798 |
| 6 | USA | 3,074 | 727 | 2,343 | 144,287 | 122,383 | 250,512 |
| 7 | Indonesia | 51 | 13 | 453 | 681 | 177 | 3,777 |
| 8 | S. Korea | 0 | 21 | 261 | 33 | 501 | 10,712 |
| 9 | U. K. | 124 | 150 | 187 | 39,084 | 65,747 | 60,455 |
| 10 | Poland | 29 | 341 | 172 | 1,255 | 10,773 | 4,999 |

| HS 820790 Screwdriver bits, tapping tools, and other interchangeable tools | | | | | | | |
|--|----------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|
| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
| Global | | 2,246,683 | 2,770,054 | 1,998,817 | 22,951,410 | 27,234,194 | 23,317,415 |
| 1 | China | 1,526,925 | 2,154,853 | 1,421,931 | 7,353,303 | 11,398,216 | 7,572,918 |
| 2 | Vietnam | 339,346 | 319,767 | 260,947 | 2,181,195 | 1,632,285 | 1,803,637 |
| 3 | Germany | 312,565 | 203,299 | 246,183 | 4,225,203 | 3,033,393 | 3,624,908 |
| 4 | Japan | 32,279 | 43,965 | 37,517 | 3,933,182 | 4,757,215 | 4,184,444 |
| 5 | USA | 11,269 | 9,536 | 8,338 | 1,752,411 | 1,765,290 | 1,350,618 |
| 6 | Thailand | 215 | 9,461 | 5,947 | 16,851 | 695,362 | 667,596 |
| 7 | S. Korea | 2,870 | 3,183 | 3,520 | 870,912 | 2,870 | 1,168,861 |
| 8 | Israel | 295 | 849 | 1,867 | 88,947 | 295 | 272,447 |
| 9 | Switzerland | 800 | 1,708 | 1,465 | 463,012 | 708,870 | 697,196 |
| 10 | Czech Republic | 518 | 720 | 1,236 | 52,241 | 46,607 | 73,675 |

Source: Bureau of Foreign Trade (Taiwan)

According to the 2022 figures of the import sector of Taiwan, we can see that the top 3 imported fastening tools related product categories were HS 820411 Non-adjustable hand-operated spanners, wrenches, and parts, HS 820790 Screwdriver bits, tapping tools, and other interchangeable tools, and HS 820412 Adjustable hand-operated spanners, wrenches, and parts, respectively reaching the volume of around 4,362 tons, 1,998 tons, and 1,997 tons and the value of around 26.63 million USD, 23.31 million USD, and 11.60 million USD. The imported product categories falling within HS codes 820411, 820412, 820420, 820540, 820790 of Taiwan were mainly imported from China, Vietnam, Japan, the U.S., Germany, etc. Compared to the figures recorded in 2021, in the sector of volume, the product category showing growth was HS 820412 only, while in the sector of value, HS 820412 was the only product category showing a significant growth.

Then, let's take a look at the part of export. The top 3 exported fastening tools related product categories were HS 820420 Socket wrenches with/without handles, drives, extensions, and parts, HS 820411 Non-adjustable hand-operated spanners, wrenches, and parts, and HS 820412 Adjustable hand-operated spanners, wrenches, and parts, respectively reaching the volume of around 61.9 thousand tons, 16.94 thousand tons, and 9.71 thousand tons and the value of around 0.46 billion USD, 0.24 billion USD, and 0.13 billion USD. The exported product categories falling within HS codes 820411, 820412, 820420, 820540, 820790 of Taiwan were mainly exported to the U.S., China, Germany, Japan, France, etc. Compared to the figures recorded in 2021, in the sector of volume, all product categories in 2022 showed a decline, while in the sector of value, only HS 820790 showed a slight drop.

Japan

* in descending order according to weight figures of 2022

Export

| Japan P.C. Code 61511 All hand tools | | | | | | | |
|--------------------------------------|---------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
| | Global | 78,394,421 | 75,079,680 | 68,548,318 | 340,904,559 | 404,015,317 | 419,097,290 |
| 1 | USA | 27,093,194 | 23,993,442 | 20,080,067 | 77,007,127 | 84,528,578 | 88,635,671 |
| 2 | China | 13,276,172 | 11,761,062 | 9,351,367 | 74,644,909 | 87,872,637 | 84,668,692 |
| 3 | Indonesia | 2,663,261 | 3,091,310 | 4,726,743 | 8,126,441 | 10,799,090 | 14,129,429 |
| 4 | Canada | 1,406,111 | 3,302,644 | 3,951,669 | 2,826,098 | 6,178,015 | 7,241,160 |
| 5 | Thailand | 3,642,217 | 4,034,935 | 3,891,912 | 23,550,148 | 30,126,961 | 30,820,941 |
| 6 | S. Korea | 3,433,050 | 3,887,006 | 3,827,459 | 19,849,260 | 23,343,089 | 24,068,711 |
| 7 | India | 1,858,639 | 1,834,119 | 3,379,587 | 9,135,020 | 12,365,344 | 16,861,378 |
| 8 | Mexico | 3,193,600 | 4,514,442 | 3,137,203 | 10,704,647 | 13,213,631 | 11,480,190 |
| 9 | Malaysia | 1,803,922 | 1,854,557 | 1,870,035 | 4,549,982 | 4,716,342 | 5,541,608 |
| 10 | Taiwan | 1,524,683 | 1,804,964 | 1,860,643 | 17,649,945 | 21,696,748 | 23,040,190 |

Import

| Japan P.C. Code 61705 All hand tools | | | | | | | |
|--------------------------------------|---------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
| | Global | 65,373,142 | 69,965,202 | 67,514,099 | 133,967,471 | 157,877,357 | 182,430,797 |
| 1 | China | 38,534,220 | 41,132,589 | 38,741,560 | 48,515,864 | 58,885,928 | 68,164,579 |
| 2 | S. Korea | 9,821,969 | 10,221,387 | 10,260,825 | 16,822,864 | 18,379,151 | 19,921,588 |
| 3 | Taiwan | 8,891,858 | 9,706,140 | 9,612,115 | 14,258,187 | 17,552,353 | 21,096,306 |
| 4 | Vietnam | 1,341,422 | 1,571,344 | 1,516,880 | 5,493,305 | 6,965,762 | 9,052,259 |
| 5 | Thailand | 1,373,377 | 1,554,479 | 1,460,098 | 7,543,186 | 8,505,157 | 9,377,105 |
| 6 | Germany | 1,243,667 | 1,319,022 | 1,377,687 | 8,158,838 | 9,835,466 | 11,303,093 |
| 7 | USA | 1,100,847 | 1,066,379 | 1,131,445 | 9,390,470 | 9,519,858 | 10,760,129 |
| 8 | Indonesia | 376,590 | 428,404 | 486,468 | 1,994,952 | 2,145,383 | 2,746,491 |
| 9 | Switzerland | 237,478 | 316,778 | 336,039 | 2,417,654 | 3,229,949 | 3,886,425 |
| 10 | Philippines | 254,591 | 286,112 | 320,757 | 825,547 | 951,482 | 1,226,311 |

Source: Ministry of Finance, Japan

Japan adopts a different product code system (P. C. Code) for the import and export of its fastening tools related products. The code for the export of “All Hand Tools” is 61511, and the code for the import of all hand tools is 61705.

According to the figures of 2022, in the export sector of all hand tools of Japan, we can see that the top 3 exported destinations were the U.S., China, and Indonesia. Its total export in 2022 reached 0.68 million tons and around 419 billion Japanese yens. Nearly 30% of Japanese hand tools in 2022 (equivalent to the value of 88.62 billion Japanese yens) were exported to the U.S. Amongst the top 10 trade partner of Japanese exported hand tools, compared to the volume of 2021, only the U.S., China, and India showed a decline, however, if compared to the value of 2021, only China and Mexico were down from the previous year.

Then, in the import sector of Japan, we can see that the top 3 imported origins were China, S. Korea, and Taiwan. Its total import of hand tools in 2022 landed at around 0.67 million tons and around 182.43 billion Japanese yens. Almost 60% of Japan’s hand tool imports (equivalent to the value of 68.16 billion Japanese yens) were from China. Amongst the top 10 trade partner of Japanese imported hand tools, compared to the volume of 2021, only China, Taiwan, Vietnam, and Thailand showed a drop, and if compared to the value of 2021, all of them showed an obvious growth.

Brazil

* in descending order according to weight figures of 2022

Export

| HS 820411 Non-adjustable hand-operated spanners, wrenches, and parts | | | | | | | |
|--|---------------|----------------|----------------|----------------|------------------|------------------|------------------|
| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
| | Global | 568,373 | 903,433 | 812,064 | 3,959,292 | 5,937,029 | 6,123,822 |
| 1 | Bolivia | 218,983 | 351,199 | 310,060 | 1,342,810 | 2,035,991 | 2,052,283 |
| 2 | Paraguay | 114,127 | 200,633 | 173,536 | 785,029 | 1,420,032 | 1,339,639 |
| 3 | Argentina | 62,198 | 57,540 | 89,987 | 466,957 | 338,582 | 617,571 |
| 4 | Peru | 58,792 | 134,124 | 70,915 | 280,730 | 665,873 | 373,067 |
| 5 | Uruguay | 23,954 | 38,496 | 34,773 | 188,362 | 316,401 | 282,803 |
| 6 | Chile | 16,463 | 16,340 | 28,591 | 133,914 | 140,100 | 306,231 |
| 7 | South Africa | 4,885 | 6,823 | 12,045 | 60,499 | 99,252 | 218,922 |
| 8 | Guatemala | 11,309 | 16,090 | 10,962 | 96,948 | 109,748 | 86,402 |
| 9 | Ecuador | 8,155 | 15,525 | 10,530 | 75,001 | 94,550 | 75,650 |
| 10 | Colombia | 5,844 | 8,670 | 8,254 | 50,080 | 75,340 | 88,184 |

| HS 820412 Adjustable hand-operated spanners, wrenches, and parts | | | | | | | |
|--|---------------|---------------|---------------|---------------|----------------|----------------|----------------|
| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
| | Global | 32,959 | 54,707 | 58,154 | 333,674 | 491,903 | 609,843 |
| 1 | Paraguay | 9,050 | 15,430 | 13,953 | 79,660 | 155,925 | 149,400 |
| 2 | Chile | 4,105 | 5,704 | 6,704 | 34,166 | 43,759 | 53,412 |
| 3 | Uruguay | 4,218 | 5,354 | 6,390 | 40,706 | 56,777 | 68,692 |
| 4 | Bolivia | 2,037 | 3,875 | 5,804 | 16,876 | 32,289 | 50,674 |
| 5 | Argentina | 2,246 | 3,298 | 5,031 | 28,566 | 38,131 | 72,391 |
| 6 | Peru | 1,422 | 2,618 | 4,913 | 15,035 | 26,668 | 51,845 |
| 7 | Mexico | 594 | 3,861 | 3,096 | 2,653 | 17,885 | 14,836 |
| 8 | South Africa | 477 | 612 | 1,264 | 6,531 | 8,819 | 25,315 |
| 9 | Dominica | 864 | 949 | 1,248 | 5,935 | 7,462 | 8,934 |
| 10 | Philippines | 715 | 1,943 | 1,155 | 3,756 | 11,243 | 13,427 |

| HS 820420 Socket wrenches with/without handles, drives, extensions, and parts | | | | | | | |
|---|------------------|----------------|----------------|----------------|------------------|------------------|------------------|
| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
| | Global | 110,173 | 161,416 | 207,276 | 1,165,466 | 1,648,385 | 2,283,102 |
| 1 | Paraguay | 26,696 | 37,450 | 52,279 | 248,198 | 399,565 | 563,099 |
| 2 | Bolivia | 30,408 | 30,633 | 41,843 | 233,022 | 281,249 | 450,249 |
| 3 | Germany | 28 | 1 | 23,672 | 1,515 | 8 | 105,566 |
| 4 | Chile | 9,218 | 14,135 | 19,489 | 85,090 | 112,421 | 231,817 |
| 5 | Peru | 6,652 | 24,021 | 16,057 | 57,627 | 179,541 | 165,084 |
| 6 | Uruguay | 8,548 | 17,950 | 14,439 | 84,627 | 169,734 | 157,024 |
| 7 | Argentina | 9,804 | 3,548 | 9,801 | 139,635 | 73,329 | 164,872 |
| 8 | Mexico | 2,735 | 4,211 | 4,890 | 11,714 | 25,162 | 47,253 |
| 9 | Papua New Guinea | 539 | 1,952 | 4,012 | 5,005 | 15,789 | 40,787 |
| 10 | South Africa | 1,743 | 3,508 | 3,454 | 22,497 | 53,462 | 79,714 |

| HS 820540 Screwdrivers and parts | | | | | | | |
|----------------------------------|---------------|---------------|----------------|----------------|----------------|------------------|------------------|
| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
| | Global | 97,035 | 146,256 | 166,693 | 863,805 | 1,198,408 | 1,501,545 |
| 1 | Paraguay | 26,029 | 44,860 | 48,612 | 210,991 | 396,071 | 455,489 |
| 2 | Russia | 0 | 0 | 31,193 | 0 | 0 | 220,939 |
| 3 | Argentina | 11,140 | 10,812 | 18,914 | 111,863 | 95,282 | 170,519 |
| 4 | Uruguay | 14,260 | 12,829 | 11,174 | 120,623 | 117,151 | 105,845 |
| 5 | Bolivia | 7,744 | 10,845 | 10,746 | 64,894 | 93,333 | 97,630 |
| 6 | Colombia | 3,694 | 6,639 | 7,669 | 12,470 | 24,995 | 34,778 |
| 7 | Ecuador | 4,275 | 9,662 | 6,262 | 32,982 | 60,588 | 46,995 |
| 8 | Chile | 4,443 | 9,643 | 5,305 | 39,344 | 71,093 | 79,021 |
| 9 | Cuba | 17 | 3,922 | 3,851 | 501 | 39,067 | 35,717 |
| 10 | Guatemala | 5,446 | 7,997 | 3,379 | 43,190 | 64,722 | 25,720 |

HS 820790 Screwdriver bits, tapping tools, and other interchangeable tools

| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
|------|---------------|---------------|---------------|---------------|------------------|------------------|------------------|
| | Global | 56,952 | 85,906 | 56,561 | 4,271,868 | 4,725,616 | 5,030,868 |
| 1 | Paraguay | 13,012 | 16,904 | 15,359 | 162,037 | 229,014 | 227,928 |
| 2 | USA | 10,371 | 16,956 | 8,790 | 1,437,686 | 1,632,443 | 990,155 |
| 3 | Argentina | 11,668 | 5,141 | 6,041 | 692,607 | 336,057 | 940,772 |
| 4 | Mexico | 3,949 | 1,388 | 4,881 | 474,678 | 505,371 | 756,889 |
| 5 | Uruguay | 2,436 | 5,142 | 3,095 | 65,058 | 70,158 | 91,579 |
| 6 | Colombia | 3,988 | 1,141 | 2,740 | 89,638 | 75,729 | 186,472 |
| 7 | Chile | 1,544 | 3,767 | 1,990 | 119,108 | 132,224 | 181,679 |
| 8 | Bolivia | 934 | 1,056 | 1,930 | 14,175 | 36,339 | 58,697 |
| 9 | India | 166 | 29 | 1,451 | 7,544 | 12,132 | 106,367 |
| 10 | U. K. | 1,376 | 3,503 | 1,208 | 162,481 | 662,815 | 249,181 |

Import

HS 820411 Non-adjustable hand-operated spanners, wrenches, and parts

| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
|------|---------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|
| | Global | 4,075,224 | 5,618,391 | 5,216,985 | 16,819,656 | 25,538,008 | 23,600,434 |
| 1 | India | 1,944,161 | 2,743,950 | 2,104,732 | 6,484,908 | 9,865,264 | 8,232,922 |
| 2 | China | 1,690,785 | 2,203,572 | 1,879,540 | 6,164,376 | 9,108,670 | 8,304,093 |
| 3 | Japan | 16,541 | 43,378 | 565,675 | 151,190 | 321,410 | 353,281 |
| 4 | Taiwan | 127,078 | 165,236 | 223,952 | 1,569,436 | 2,088,060 | 2,802,964 |
| 5 | Italy | 133,156 | 238,180 | 174,107 | 643,278 | 1,193,536 | 860,909 |
| 6 | Germany | 12,289 | 16,952 | 72,378 | 489,741 | 927,559 | 792,716 |
| 7 | Hong Kong | 12,203 | 30,434 | 40,595 | 38,421 | 54,420 | 150,830 |
| 8 | Spain | 13,759 | 22,851 | 29,682 | 101,229 | 159,068 | 160,893 |
| 9 | Romania | 31,886 | 31,703 | 26,029 | 101,660 | 104,704 | 95,510 |
| 10 | Sweden | 15,555 | 20,127 | 20,119 | 181,981 | 207,075 | 174,845 |

HS 820412 Adjustable hand-operated spanners, wrenches, and parts

| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
|------|---------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | Global | 1,465,466 | 2,190,969 | 2,102,214 | 5,576,832 | 7,647,840 | 9,171,716 |
| 1 | China | 1,048,551 | 1,465,975 | 1,600,298 | 3,416,952 | 5,085,849 | 6,157,564 |
| 2 | India | 355,385 | 626,551 | 387,996 | 836,203 | 1,567,649 | 1,230,482 |
| 3 | Netherlands | 30,394 | 44,776 | 48,434 | 191,621 | 309,821 | 318,903 |
| 4 | Taiwan | 13,312 | 15,064 | 22,213 | 113,442 | 165,121 | 259,625 |
| 5 | Hong Kong | 7,126 | 27,162 | 17,700 | 10,105 | 33,784 | 51,034 |
| 6 | USA | 7,430 | 7,414 | 14,321 | 194,286 | 199,744 | 417,534 |
| 7 | Chile | 0 | 0 | 5,373 | 0 | 0 | 459,478 |
| 8 | Spain | 1,317 | 408 | 1,792 | 135,012 | 7,869 | 19,813 |
| 9 | Germany | 614 | 991 | 1,383 | 41,759 | 71,568 | 80,409 |
| 10 | Austria | 407 | 875 | 785 | 15,993 | 33,885 | 24,545 |

HS 820420 Socket wrenches with/without handles, drives, extensions, and parts

| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
|------|---------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|
| | Global | 3,090,317 | 4,411,331 | 4,162,944 | 11,695,556 | 19,104,773 | 18,752,484 |
| 1 | China | 2,432,992 | 3,470,532 | 3,506,947 | 7,419,213 | 11,288,547 | 12,348,619 |
| 2 | Taiwan | 601,444 | 832,532 | 535,172 | 2,943,278 | 5,697,401 | 4,375,307 |
| 3 | USA | 4,707 | 5,705 | 7,071 | 345,829 | 418,105 | 560,485 |
| 4 | Germany | 7,401 | 9,184 | 10,448 | 476,376 | 548,701 | 455,415 |
| 5 | Hong Kong | 14,548 | 49,752 | 74,765 | 24,247 | 77,827 | 284,692 |
| 6 | Japan | 1,400 | 1,652 | 1,792 | 191,286 | 170,395 | 234,157 |
| 7 | Sweden | 1,204 | 1,283 | 1,670 | 76,520 | 93,793 | 123,638 |
| 8 | Belgium | 2 | 285 | 1,232 | 3,446 | 27,563 | 78,777 |
| 9 | South Korea | 22,106 | 20,352 | 19,630 | 66,074 | 75,242 | 67,469 |
| 10 | Italy | 192 | 636 | 595 | 15,918 | 46,104 | 47,294 |



| HS 820540 Screwdrivers and parts | | | | | | | |
|----------------------------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
| | Global | 1,548,458 | 1,932,511 | 1,829,793 | 7,331,983 | 8,728,166 | 8,366,649 |
| 1 | China | 1,477,234 | 1,786,436 | 1,642,303 | 6,449,371 | 7,274,621 | 6,545,896 |
| 2 | Taiwan | 30,200 | 52,844 | 106,326 | 152,655 | 306,433 | 646,190 |
| 3 | Hong Kong | 9,480 | 58,951 | 40,275 | 46,842 | 267,497 | 161,860 |
| 4 | Slovenia | 7,500 | 13,704 | 16,504 | 150,396 | 263,499 | 305,999 |
| 5 | Italy | 16,712 | 11,094 | 12,194 | 197,522 | 175,991 | 181,678 |
| 6 | Germany | 3,959 | 4,143 | 5,185 | 173,769 | 188,002 | 236,609 |
| 7 | USA | 2,668 | 3,519 | 4,754 | 109,910 | 168,024 | 176,008 |
| 8 | Austria | 0 | 0 | 567 | 56 | 347 | 5,908 |
| 9 | India | 81 | 949 | 466 | 2,802 | 5,111 | 4,332 |
| 10 | Czech Republic | 91 | 179 | 303 | 7,934 | 23,749 | 25,946 |

| HS 820790 Screwdriver bits, tapping tools, and other interchangeable tools | | | | | | | |
|--|---------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|
| Rank | Country | 2020 (kg) | 2021 (kg) | *2022 (kg) | 2020 (USD) | 2021 (USD) | 2022 (USD) |
| | Global | 2,264,269 | 2,784,925 | 2,534,702 | 18,409,218 | 25,470,137 | 23,519,889 |
| 1 | China | 1,892,815 | 2,346,276 | 2,092,838 | 8,620,781 | 10,475,880 | 9,556,245 |
| 2 | Taiwan | 73,149 | 123,365 | 115,750 | 632,805 | 1,232,118 | 1,417,681 |
| 3 | Italy | 90,596 | 75,106 | 98,656 | 828,413 | 2,931,595 | 808,503 |
| 4 | Germany | 35,123 | 41,102 | 63,056 | 2,167,052 | 3,245,853 | 3,260,699 |
| 5 | USA | 38,077 | 33,540 | 33,421 | 2,277,498 | 2,285,238 | 3,066,802 |
| 6 | Hong Kong | 22,776 | 38,751 | 32,241 | 76,333 | 99,259 | 142,162 |
| 7 | Hungary | 13,530 | 21,994 | 25,414 | 77,292 | 188,370 | 481,543 |
| 8 | Vietnam | 4,268 | 5,440 | 12,024 | 86,588 | 92,700 | 197,993 |
| 9 | Japan | 13,129 | 13,243 | 10,338 | 628,740 | 1,070,573 | 856,081 |
| 10 | Finland | 10,014 | 15,478 | 9,565 | 123,493 | 142,041 | 69,576 |

Source: Ministry of Finance, Japan

The statistics of the import and export of major fastening tools related product categories of Brazil show a fact that Brazil, instead of satisfying the demand for fastening tools by itself, is a country dependent upon the import of fastening tools from the world, which can be proved by the drastic difference between its import and export scale of product categories falling within HS codes 820411, 820412, 820420, 820540, and 820790.

According to the volumes of 2022, the top 3 imported fastening tools of Brazil were HS 820411 Non-adjustable hand-operated spanners, wrenches, and parts, HS 820420 Socket wrenches with/without handles, drives, extensions, and parts, and HS 820790 Screwdriver bits, tapping tools, and other interchangeable tools, respectively reaching the volume of around 5,216 tons, 4,162 tons, and 2,534 tons and the value of around 23.60 million USD, 18.75 million USD, and 23.51 million USD. China, India, Japan, China, Germany, the U.S., and etc. were its major import origins. In terms of volume, all product categories appeared a drop from 2021, while in terms of value, only HS 820412 showed a significant growth from 2021.

Although Brazil did not export similar scale of fastening tools to the whole world as its Taiwan or Japan counterparts, it has established a strong trade tie with its neighboring countries in its fastening tools export, such as Mexico, Argentina, Chile, Peru, Bolivia, Paraguay, Uruguay, Guatemala, Ecuador, and Colombia.

In the export sector and according to the volumes in 2022, the top 3 exported fastening tools of Brazil were HS 820411 Non-adjustable hand-operated spanners, wrenches, and parts, HS 820420 Socket wrenches with/without handles, drives, extensions, and parts, and HS 820540 Screwdrivers and parts, respectively reaching around 812 tons, 207 tons, and 166 tons and the value of around 6.12 million USD, 2.28 million USD, 1.50 million USD. Compared to the volumes of 2021, HS 820412, HS 820420, and HS 820540 Screwdrivers and parts revealed growth. If compared to the values of 2021, all product categories revealed an increase. □