

Statistics of China's Fastening Tool Trade in 2024

2024中国紧固工具贸易统计

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Overview of China

China, the world's most populous nation, experienced a demographic shift in 2024, with its population decreasing by approximately 1.39 million to reach 1.408 billion by the year's end. This figure represents about 17.2% of the global population, underscoring China's significant presence on the world stage. Economically, China maintained its position as the second-largest economy globally, with a Gross Domestic Product (GDP) estimated at US\$17.8 trillion in 2023. In 2024, the country reported a GDP growth rate of 5.0%, reflecting its ongoing economic resilience and development. This growth trajectory highlights China's pivotal role in shaping global economic trends and underscores its influence within the international marketplace.¹

Fastening Tool Industry Statistics²

China's fastening tool industry, encompassing products such as electric screwdrivers, rivet guns, nail guns, and torque wrenches, plays a pivotal role in both domestic manufacturing and global supply chains. In 2024, the sector demonstrated notable trends in production, exports, and imports, reflecting broader economic dynamics and market demands.

Production Trends

In 2024, China's production of interchangeable tools for hand tools, a category that includes various fastening tools, was estimated at approximately 939,000 tons, maintaining levels similar to the previous year. This steady output indicates the industry's resilience amidst fluctuating global demand and supply chain challenges. **The production value was estimated at US\$10.5 billion**, reflecting a consistent performance over the period.

Import Dynamics

China's import of interchangeable tools for hand tools saw significant activity in 2024. The country imported approximately 34,000 tons of these tools, marking a 29% increase from the previous year. This surge suggests a

growing domestic demand for specialized or high-quality fastening tools not readily available through local production. **In value terms, imports totalled around US\$1.1 billion, indicating a modest increase. Germany emerged as the leading supplier, accounting for 41% of the total import volume, followed by Japan and Taiwan.**

Import Challenges

◆ The fastening tool trade between the European Union (EU) and China:

It is characterized by regulatory complexities and import restrictions, which often serve as challenges for Chinese exporters. The EU has stringent environmental and quality standards, which require Chinese manufacturers to meet specific certifications for their fastening tools to enter the market. Moreover, tariffs and anti-dumping measures have occasionally made Chinese products less competitive compared to those from European or other international suppliers. Despite these barriers, **China's cost-effective production remains an attractive selling point, particularly in construction and automotive industries, where there is continuous demand for affordable yet durable tools.** China can explore opportunities by aligning its products with EU standards, focusing on eco-friendly manufacturing practices, and expanding partnerships within the EU's large-scale infrastructure projects, which are expected to rise in the coming years.

◆ The trade of fastening tools between China and Japan:

It presents unique challenges due to Japan's preference for high-quality and precision tools, a demand that often outpaces what Chinese manufacturers currently offer. Additionally, Japan's robust domestic industry limits reliance on imports for certain types of fastening tools, particularly those requiring high precision or innovation. However, this presents a significant opportunity for China to tap into a niche market by providing cost-effective solutions for basic and medium-precision tools. As Japan looks to modernize its manufacturing sectors and pursue more automated solutions in industries like automotive, electronics, and robotics, China can expand its market share by offering innovative, efficient, and competitively priced fastening tools that help streamline production processes. The key opportunity lies in adapting to Japan's high standards while leveraging affordable production capabilities to cater to growing automation demands.

¹<https://www.statista.com/statistics/263616/gross-domestic-product-gdp-growth-rate-in-china/>

²<https://app.indexbox.io/table/8207/156/>



◆ The relationship between Taiwan and China in fastening tool trade:

It is influenced by the political dynamics and competitive pressures between the two economies. Taiwan boasts a highly advanced manufacturing sector, with its local tool production often setting the standard for quality and innovation. Chinese manufacturers face stiff competition from Taiwan's established brands, especially in high-end tools for precision industries like electronics. However, Taiwan's demand for affordable, mass-produced fastening tools opens the door for China to provide cost-effective alternatives. By focusing on technological upgrades and providing tools that complement Taiwan's high-tech industries, Chinese manufacturers can strengthen their position as suppliers of value-oriented fastening solutions. Additionally, trade agreements between China and Taiwan could help facilitate smoother trade flows, creating potential for increased market penetration in the Taiwanese market.

Export Dynamics

In 2024, China's fastening tool industry demonstrated strong export growth, reinforcing its position as a key supplier in the global market. **The country exported approximately 449,000 tons of interchangeable tools for hand tools, including fastening tools such as electric screwdrivers, rivet guns, and nail guns. This marked a 9.4% increase compared to the previous year,** highlighting the sector's expanding international demand. The total export value of these tools reached US\$4.8 billion, reflecting China's competitive pricing and large-scale manufacturing capabilities. **The primary destinations for these exports included the United States (57,000 tons), Russia (33,000 tons), and India (27,000 tons), collectively accounting for 26% of China's total fastening tool exports.** This steady growth indicates China's continued dominance in the fastening tool trade, driven by its extensive production capacity and ability to meet diverse market needs.

Export Challenges

◆ The trade relationship between China and the United States in fastening tools remains complex:

Shaped by tariffs, technological competition, and shifting supply chains. **One of the biggest challenges is the ongoing U.S.-China trade tensions,** which have led to high tariffs on Chinese-made fastening tools, making them less competitive in the U.S. market. Additionally, the United States has been actively reshoring manufacturing and investing in domestic tool production to reduce reliance on Chinese imports. However, despite these obstacles, China remains the largest supplier of fastening tools to the U.S., benefiting from its cost-effective production and large-scale manufacturing capabilities. **The growing demand for electric fastening tools in the U.S. construction and automotive sectors presents an opportunity for Chinese manufacturers** to innovate and produce higher-quality, precision fastening tools that align with U.S. industry standards.

◆ The fastening tool trade between China and Russia:

It has seen significant growth, particularly as Russia shifts its supply chain away from Western countries due to sanctions and geopolitical tensions. The primary challenge in this trade relationship is logistics and payment difficulties, as international banking restrictions have affected transactions. Additionally, Russia's preference for European-quality tools poses a challenge for Chinese manufacturers, who must meet stringent performance expectations. However, China has a

major opportunity to expand its market share in Russia by offering cost-effective, high-quality fastening tools, particularly for the infrastructure, energy, and defense industries. With Russian companies looking for reliable suppliers outside of Europe, Chinese fastening tool manufacturers can capitalize on this demand by establishing local partnerships and improving product reliability.

◆ The fastening tool trade between China and India:

It faces hurdles related to import restrictions and local manufacturing policies. The Indian government has implemented measures to boost domestic production under the "Make in India" initiative, leading to higher import duties on Chinese tools. Additionally, political tensions and border disputes occasionally disrupt trade flows. However, China remains a dominant supplier of fastening tools to India, given its competitive pricing and ability to supply in bulk. The rapid growth of India's construction, infrastructure, and automotive sectors presents a major opportunity for Chinese fastening tool manufacturers. By investing in localized production units, joint ventures, or technology transfer agreements, Chinese firms can strengthen their foothold in the Indian market while navigating trade restrictions more effectively.

Future Outlook

The Chinese fastening tool industry is poised for transformation, with projections indicating a compound annual growth rate (CAGR) of 2.2% through 2035. This anticipated growth is likely to be driven by increased investments in research and development, a focus on producing high-end tools, and strategies aimed at reducing reliance on foreign technology. Additionally, the expanding domestic and international demand for advanced fastening solutions presents opportunities for Chinese manufacturers to innovate and capture larger market shares. Addressing challenges related to high-end tool manufacturing and leveraging growth opportunities.

Looking ahead, China's fastening tool industry is poised for transformation:

- **Technological Innovation:** Continued emphasis on R&D is expected to yield more advanced and specialized products, catering to evolving global demands.
- **Market Diversification:** Expanding into emerging markets and reducing reliance on traditional partners will mitigate risks associated with geopolitical tensions.
- **Environmental Compliance:** Adhering to stringent environmental regulations. ■