Introduction

China's machinery industry is emerging as a global leader, as it enters a new phase of producing high-end products. According to China Machinery Industry Federation, the industry achieved a sales revenue of 12.95 trillion yuan (USD1.87 trillion) in the first half of 2022, showing a 5.44 percent increase compared to 2021. The sales revenue and total profits of the strategic emerging subcategories accounted for 79.3 percent and 76.64 percent of the overall machinery industry, respectively, reflecting growths of 3.38 percent and 2.67 percent.

After years of efforts made by Chinese enterprises, the global engineering machinery market formerly dominated by manufacturers from Taiwan, Germany, Italy, the United States, and Japan is opening the door for Chinese players, as the key to such a situation is competitiveness.

Undoubtedly, in the past few years, the level of China's manufacturing industrial chain in general and machinery industry in specific experienced a swift growth in development. This was the result of the systematic improvement of China's comprehensive national strength and the qualitative leap in innovation capability.

In addition to that, the government's beneficial policies promoted the development of China's high-end smart manufacturing. Good examples are the development plans for Hunan and Jiangsu Provinces.

During the 13th Five-Year Plan period (2016-20), Hunan Province witnessed a significant growth in its R&D investment, with the total investment doubling. Furthermore, the sales revenue of the sector in Hunan exceeded one-quarter of the national level, and the total

added value of high-tech industries in the province reached an impressive 1 trillion yuan. Hunan provincial government has continued to prioritize technological innovation during the 14th Five-Year Plan (2021-25), as evident in the draft guideline issued in 2021. The focus of the guideline is on making key technological breakthroughs, refining the technological innovation system, enhancing enterprises' capacity for independent innovation, and consolidating technological foundation.

Xuzhou, located in Jiangsu province, is renowned for its engineering machinery and is actively working to promote the industry to a world-class level. The engineering machinery cluster in Xuzhou was among the first batch of national advanced manufacturing clusters. Over the years, the government has been dedicated to building the cluster into one with a complete industrial chain. As of 2021, the output value of the machinery industry for enterprises whose annual business income hits 20 million yuan each in Xuzhou made up 30 percent of the city's total industrial output value in the same category. Furthermore, in the first half of the year, the output value reached an impressive 77.5 billion yuan.

Fastener Machinery

As stated above, Chinese fastener machinery market is currently undergoing a shift towards high-quality development. Chinese manufacturers are proving their ability to produce not only highquality products, but also to exercise advanced management skills, thereby transforming the label of "made in China" into "smart fastener machinery manufacturing".



There are no shortcuts in the machinery industry; only by persistently striving towards innovation and development can enterprises lead the way towards the future of manufacturing. Chinese fastener machinery enterprises have seized domestic development opportunities and have demonstrated their prowess in enhancing technological innovation capabilities, manufacturing highend machinery products equipped with independent core technologies.

China is one of the largest producers and exporters of fasteners in the world. The country has a highly fragmented market with many small and medium-sized enterprises. In the last few years, Chinese fastener machinery market was growing at a steady pace due to the high demand for fasteners from the construction and automotive industries.

The market is driven by the growing demand for fasteners in various industries, including automotive, construction, aerospace, and electronics, among others. According to a report by Grand View Research, the fastener machinery market in China was valued at USD 2.47 billion in 2020 and is expected to grow at a compound annual growth rate [CAGR] of 4.8% from 2021 to 2028.

The market is highly competitive, with many domestic and international players vying for market share. The fastener machinery market in China is characterized by intense competition, rapid technological advancements, and increasing automation. Many players in the market are investing heavily in research and development to improve the efficiency and quality of their machinery.

Chinese government has also been promoting the development of the fastener machinery industry, providing various incentives and policies to support domestic manufacturers. For example, in 2019, the government launched the "Made in China 2025" initiative, which aims to upgrade the country's manufacturing industry, including the fastener machinery sector, through innovation and technology.

Despite steady growth, the fastener machinery market has been facing some challenges due to various factors such as rising labour costs, environmental regulations, and increasing competition from other countries. In response, like any other industry, industrial fastener machinery manufacturers in China are increasing their efforts to explore international high-end machinery markets by constructing international levels and growing market shares.

Sources:

- Machinery sector ups high-end transformation, ChinaDaily
- Market Analysis Report, Grand View Research

Fastener machines have been drastically transformed by leveraging on disruptive technologies and become much smarter than before. Machines can assist fastener manufacturers in solving some of their key production issues, such as low automation rates, and poor production line flexibility. Chinese manufacturers have been investing in advanced technology and automation to improve efficiency and reduce costs.

The COVID-19 pandemic also had an impact on the market, with a slowdown in demand and disruptions in the supply chain. However, as the pandemic is brought under control, the market is expected to rebound and continue its growth trajectory in the coming years.

Overall, the outlook for the fastener machinery market in China remains positive, with a continued focus on innovation and technology likely to drive growth in the industry. Chinese fastener machinery market is expected to constantly increase its strength and performance through technical innovation and industrial upgrade. The increasing use of lightweight materials in the manufacturing of vehicles, coupled with the need for fasteners that are stronger, more durable, and corrosion-resistant, is also contributing to the growth of the market in 2023 and beyond.

