

## **CHINESE MACHINE TOOL MARKET - WEEKLY BULLETIN**

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**【Made in China 2025】**

1. More supply-side reform on agenda

**【Macro Economy】**

2. Slower but sustainable growth for Chinese economy in 2018
3. Foreign direct investment logs 7.9% growth in 2017
4. Chinese business owners satisfied with political environment

**【Customer Update】**

5. BYD bets on Xi'an to reach annual output of 300,000 new energy vehicles
6. Subsidies for new energy cars to be cut again
7. Major Chinese steel producer chooses NEXTSENSE quality

**【Local Competitors】**

8. Siemens wins its first gas engine order in China
9. Farsoon and COMAC collaborate to develop aircraft polymer parts
10. Sinomach deepens cooperation with Schneider

## More supply-side reform on agenda

China will take more concrete steps to further its supply-side structural reform and push for high-quality development in 2018, focusing on cutting overcapacity and fostering new growth drivers in the real economy, said officials and analysts.

"The country will establish development funds to further the Made in China 2025 strategy and direct more private capital into the real economy, in order to better finance important manufacturing projects," said Miao Wei, minister of industry and information technology (MIIT), at the ministry's annual conference, without elaborating on the size of the funds.

According to Miao, China will establish three new national innovation centers in 2018, and aims to tackle 50 bottlenecks that impede industrial development such as high-performance batteries for electric vehicles.

China has established three centers in 2017 to promote R&D of optoelectronic information technology, printed flexible display screen and robotics, said Qu Xianming, an expert with the National Manufacturing Strategy Advisory Committee.

Supply-side structural reform will continue to be the main theme of China's economic work in this year, said Yang Weimin, deputy head of the Office of the Central Leading Group on Financial and Economic Affairs during the annual conference of the China Center for International Economic Exchanges.

"The country will focus on shutting down debt-ridden, loss-making zombie enterprises and reducing overcapacity through market-based and legal methods this year," Yang said.

Great headway has been made in cutting overcapacity, reducing the number of unsold homes, curbing debt levels, lowering business costs and dealing with weak links in 2017, said Ning Jizhe, head of the National Bureau of Statistics at the CCIIE's annual conference.

Annual targets of cutting steel capacity by 50 million metric tons and coal capacity by 150 million tons were accomplished in August and October last year respectively, according to the bureau.

More than 1 trillion yuan (\$154 billion) were saved for Chinese businesses last year, on top of the 1 trillion yuan cost reduction achieved in 2016, Ning said.

By the end of November, the debt-to-asset ratio of major industrial firms dropped to 55.8 percent, 0.5 percentage point lower than in 2016.

## **Slower but sustainable growth for Chinese economy in 2018**

CHINA'S economic performance beat market expectations in 2017, but will the bullish momentum continue into the new year?

A moderation in GDP growth is the popular view among global investors given a high comparison base, while a more balanced and sustainable economy is expected to take shape faster.

China's economy totaled 82.7 trillion yuan (US\$13 trillion) in 2017, expanding 6.9 percent as it picked up pace for the first time in seven years.

Stronger-than-expected growth data may indicate a further tightening of macro-prudential policy, but that does not change Japanese securities trader Nomura's economic view for China this year. It has raised its 2018 GDP growth forecast by 0.1 percentage point to 6.5 percent, with a gradual growth slowdown in coming quarters.

Global investment banks JP Morgan and UBS expect China's economy to expand about 6.7 percent and 6.4 percent this year respectively.

No collapse or major loosening of property market management is in sight this year, but government policies including supporting rental housing and a faster-than-expected legislative progress for property tax might complicate market sentiment, according to Zhu Haibin, JP Morgan chief China economist.

UBS China economist Wang Tao estimated that property sales might lose momentum in 2018, while property investment and construction growth stay robust or soften only modestly until late this year.

Meanwhile, as the government's ongoing environmental protection and clean-up efforts kick into full swing through the peak heating season, industrial production and related investment activities should soften more visibly this quarter, Wang pointed out.

Externally, the normalization of monetary policies in developed economies might weigh upon the exchange rate and capital flow balance while more protectionist practices from the United States might dampen China's exports.

China's cross-border capital flows hit a turning point in 2017 as foreign currency reserves stabilized after two years of decline.

Zhu estimated that the basic equilibrium of capital flow will continue in 2018 with a stronger yuan, steady economy and improved market sentiment due to financial risk control efforts and other reforms.

Better manufacturing investment and robust external demand due to the recovering global economy may help to partly offset some upstream sector weakness, according to UBS.

Iris Pang, economist at ING, believes 2018 will be another good year for China, supported by consumption of goods and services and infrastructure investments.

ING expects manufacturing of high-tech products and parts to grow by more than 50 percent this year, cushioning the loss of production from overcapacity cuts in non-ferrous metals, shipbuilding and building materials.

Data from December and fourth quarter point to resilient growth momentum, which Nomura believes was driven by a robust expansion of the services sector, as it continued to benefit from China's economic rebalancing toward consumption and the Internet-led "new economy."

## **Foreign direct investment logs 7.9% growth in 2017**

Foreign direct investment into the Chinese mainland soared to an all-time high of 877.56 billion yuan (\$136.36 billion) in 2017, up 7.9 percent from 2016, official data showed on January 16th.

The substantial rise in FDI illustrates the country's continued efforts to improve the overall business environment for foreign investors, the Ministry of Commerce said in a statement on its website.

FDI into the high technology industry was notably strong, up 61.7 percent from a year earlier, the data showed. High-tech businesses such as electric, telecommunication and medical device manufacturing have become popular investment choices for global companies as China is undergoing an industrial and service upgrading boom.

"The steady momentum of FDI was attributed to government measures like easing restrictions in its 11 free trade zones and simplified procedures for investment entrance," said Tang Wenhong, director general of the Ministry of Commerce's Department of Foreign Investment Administration.

The number of newly established foreign companies rose to 35,652 last year, up 27.8 percent year-on-year, the ministry said in the statement.

Foreign companies, which comprised less than 3 percent of the total firms operating in the mainland, contributed to a quarter of the country's manufacturing business profits and one-fifth of tax revenue, it said.

Last December, FDI into the Chinese mainland fell 9.2 percent year-on-year to 73.94 billion yuan.

The country would face relatively large external pressures to attract foreign investment in 2018, the ministry said in the statement.

As for non-financial outbound direct investment in 2017, the ministry's data showed the figure decreased nearly 30 percent year-on-year to \$120.08 billion, which covers 6,236 overseas businesses from 174 countries and regions.

"The sharp decline reflects the effective reining in of irrational outbound investment," said Li Guanghui, vice-president of the Chinese Academy of International Trade and Economic Cooperation in Beijing.

Han Yong, commercial counselor at the Department of Outward Investment and Economic Cooperation of the Ministry of Commerce, said outbound investment mainly flowed into sectors such as leasing and business services, wholesale and retail, manufacturing and information transmission last year. It did not go to the property, sports or entertainment industries.

China has been taking a host of measures to curb irrational offshore investment activities and ensure the authenticity of outbound investment.

In a document released last August, the State Council said overseas investment in areas including real estate, hotels, cinemas and entertainment would be limited, while investment in sectors such as gambling would be banned.

The National Development and Reform Commission, China's economic policy regulator, released a new draft rule last November on outbound investment, including stipulations on the investment activities of firms established overseas by domestic companies.

Outbound investment to countries and regions involved in the Belt and Road Initiative totaled \$14.36 billion in 2017.

## **Chinese business owners satisfied with political environment**

Chinese business owners were satisfied with the political environment in the localities where their enterprises are based, according to a survey on private businesses.

Respondents gave the political environment a score of 3.98 out of 5.0 total points, with five representing "very satisfied," according to the survey.

Factors taken into consideration when rating the political environment include the efficiency of local governments in administrative approval and the integrity of officials, it said.

The survey found that the respondents were more satisfied with the political environment than the marketing environment, which scored 3.38 on the five-point system, with 3 representing "average."

The entrepreneurs surveyed generally remained optimistic about China's five-year outlook, indicating that economic and social crises were unlikely to occur.

The business owners gave scores of 2.51 and 3.24 for economic and social risks, respectively, the survey showed.

The survey interviewed people from 8,111 private enterprises, with 47.7 percent of the surveyed in the service industry and 29.6 percent in the manufacturing industry.

## **BYD bets on Xi'an to reach annual output of 300,000 new energy vehicles**



China's largest electric carmaker BYD is making an ambitious plan to expand production at its base at the Xi'an Hi-tech Industries Development Zone.

According to an agreement signed on Jan 11, 2 billion yuan (\$308.5 million) will be invested to further expand production capacity to achieve an annual output of more than 300,000 new energy passenger cars, with its turnover reaching 40 billion yuan.

The vehicle giant has invested 17.2 billion yuan in Xi'an, gross industrial output value of 206.7 billion yuan, providing jobs to over 40,000 people by the end of 2017. Since settling in the Xi'an Hi-tech Zone in 2003, it has set up businesses in automobiles, IT, and rail transit.

As BYD's biggest and most advanced production base, the Caotang Production Base has fully automatic production facilities and cutting-edge technologies, which will build Xi'an into the company's key new energy vehicles production base.

The company has also stridden into the monorail business by developing its SkyRail system. The 2-billion yuan project, which started in the beginning of 2017, plans to go into operation in the first quarter of 2018.

BYD is a private enterprise in China that was founded in 1995. It primarily engages in the fields of IT, automobiles, new energy industries and cell phones. The company has complete in-house design, R & D and production teams.

## **Subsidies for new energy cars to be cut again**

Subsidies for new energy cars will be cut further this year before being phased out in China altogether by the end of 2020, a source close to the matter said on January 17th. The move would accelerate the exit of uncompetitive players from the fast-growing sector.

"The move was scheduled to be released by the end of 2017, but there was some controversy and hence has been delayed for a while," said Wu Zhixin, vice-president of the China Automotive Technology & Research Center, which participated in drafting the plan.

"The ministries concerned, including the Ministry of Finance and the Ministry of Industry and Information Technology, have reached a consensus on the final draft and submitted it for final approval, so I believe it will be released soon," he told China Daily during a new energy car forum held in Liuzhou, the Guangxi Zhuang autonomous region.

Wu did not give details about how much the current subsidies would be cut but said cars qualified for subsidies in 2017 would have their eligibility extended for around four months into this year.

A rumored version said passenger cars with a range between 100 km and 150 km, which now enjoy a subsidy of 20,000 yuan (\$3,026), will no longer be subsidized in 2018, the Economic Observer newspaper had reported late last year.

China has been offering financial incentives since 2010 to stimulate the popularity of new energy cars. Bloomberg reported that the subsidies had cost the Chinese government 59 billion yuan by 2015, and it may need to set aside 83 billion yuan more for 2016 and 2017.

Wu said subsidy cuts will see small and uncompetitive players wiped out faster than expected but outstanding performers would not be affected much.

"Good selling brands have good bargains from suppliers, and some are raising the prices of their cars a little bit, but the customers still love them."

The China Association of Automobile Manufacturers estimated that new energy car sales would grow at around 40 percent to exceed 1 million units in 2018. More than 777,000 units were sold last year in China, a 53 percent surge year-on-year.

## **Major Chinese steel producer chooses NEXTSENSE quality**

The Graz-based specialist in optical measurement technology will support China's second largest steel producer in the rail manufacturing sector using its system for profile measurement and surface inspection in order to further expand its quality advantage on the Chinese market.

NEXTSENSE is tackling the ever growing quality requirements in rail manufacturing together with Panzhihua New Steel & Vanadium Co. Ltd., a subsidiary of Panzhihua Iron and Steel (Pangang). Based on non-contact measurement technology, the laser-measurement system from this company in Graz will in the future achieve extremely accurate measuring results in China and, as a combined system, will identify both profile deviations and surface defects in one step.

The stationary measurement systems OSIRIS HOT and OSIRIS COLD kill two birds with one stone and simultaneously monitor surface quality and the dimensional accuracy of rolling profiles. It's all in the name: While OSIRIS HOT performs measurements in hot conditions, OSIRIS COLD checks for profile deviations and surface defects on rolled materials that are already cold. Using state-of-the-art laser light section technology and high sampling rates, the OSIRIS measuring systems from NEXTSENSE create a complete 3D reconstruction of the long objects to be measured – in real time and during production.

By introducing corrective measures as quickly as possible, the reject rate in the manufacturing of steel products can be significantly reduced, for example. "The

OSIRIS HOT measuring system from NEXTSENSE helps us – by means of its excellent accuracy and functionality – to manufacture rails of outstanding quality particularly efficiently and, as a result, to continually expand our advantage over competitors," says Gong Ming Tao, Chief Technical Engineer at Pangang Group Panzhihua Steel & Vanadium Co. Ltd. By working together with the Chinese Pangang Group, the measurement technology specialist from Graz can add another industry leader to customer portfolio. Since 2010, the latter has been part of the Ansteel Group Corporation, the seventh largest steel manufacturer in the world.

Clemens Gasser, Managing Director of NEXTSENSE GmbH, adds: "The benefits of our combined measurement system, namely the low space requirements and the reduced time and money spent on maintenance, are significant particularly from an economic point of view." This combined functionality makes it possible to halve the size of the construction site compared with two separate systems and simultaneously reduces the time and money spent on maintenance. To summarize, Gasser explains that this results in lower procurement costs and minimized maintenance costs.

## **Siemens wins its first gas engine order in China**

Siemens Power and Gas Division will provide three SGE-56HM gas engines for a CCHP distributed energy project for a company in the economic development zone of Anshan, Liaoning province in the northeastern region of China. This order represents the first CCHP project launched in Anshan, and marks the debut of Siemens' gas engine in the China market. Anshan, an industrial city noted for its steel production, opens the curtain of energy transformation from coal to gas. Beijing Huashenghuanneng Technology Co., Ltd. will lead the design, construction and operation of the entire project.

With a power output of 1.2 MW, Siemens SGE-56HM gas engine features an innovative design, a small footprint and high energy efficiency. Moreover, it performs well in terms of overall efficiency, fuel flexibility and operational availability. Boosting power generation efficiency of 42.5%, a thermal efficiency of 47.5% and energy efficiency up to 90%, the engine is fuel- and cost-effective. Siemens gas engines are widely used in fields such as industrial utilities and services, bio and biomass energy plants, and in oil and gas applications.

Following project completion, the power generation technology of both the ORC turbine and gas engine are expected to provide energy-efficient generating units for China's distributed energy project and provide the customer with power, heating and cooling. The project can provide 18,825,000 kW/h of electricity per year, while

meeting the heating demand of 60,000 square meters. In addition, the project will enable the customer to save about 7,530 tons of coal, and reduce its carbon dioxide emissions by approximately 19,500 tons per year, yielding a positive and significant effect on controlling air pollution, conserving energy and reducing emissions.

"It's a great honor for us to bring our cutting-edge gas engine technology to Anshan, echoing the coal-to-gas project promoted by the government in response to climate challenges", said Zhang Tianguai, Senior Vice President of Siemens Ltd., China and General Manager of Dresser-Rand, Power and Gas Division. "Siemens has dedicated to offer our advanced gas engine and gas turbine technology to China, supporting the country's transformation from coal to clean energy. This cooperation also fully reflects the customer's trust in Siemens' global experience and advanced technologies. We will continue to give full play to the high reliability, efficiency and quality of Siemens products to ultimately help the customer reduce its overall lifecycle costs ecologically."

## **Farsoon and COMAC collaborate to develop aircraft polymer parts**



Farsoon Technologies entered into a three year collaboration agreement with COMAC (Commercial Aircraft of China) Shanghai Aircraft Design and Research Institute for the development of high-performance additive manufactured parts to be used on commercial aircraft.

Farsoon and COMAC will cooperate in the development of optimal designs, suitable materials, and stable processes to manufacture performance polymer parts to meet CCAR (China Civil Aviation Regulations) regulations for commercial aircraft. Both parties will combine resources to develop final parts which will be placed on the latest generation of COMAC aircraft.

"Farsoon Technologies has invested heavily in the development of equipment, services, and new metal and polymer materials for additive manufacturing with heavy emphasis on industrializing the technology," says Farsoon Technologies General Manager, Hou Peilin. "For the past two years, Farsoon has had close collaboration with COMAC and we are extremely happy that both parties have come together in this partnership to develop additive applications for the Chinese domestic civil aviation industry which will meet CCAR airworthiness requirements."

Additive manufacturing technology (3d printing), also known as AM, is a layered based manufacturing method. This technology allows for the production of complex geometries without the need of molds or intensive machining. For the aerospace industry, additive allows for enhanced design freedom to produce otherwise impossible to manufacture parts. These plastic and metal parts can offer greatly improved performance with reduced weight and cost.

## **Sinomach deepens cooperation with Schneider**

China National Machinery Industry Co (Sinomach) signed a strategic cooperation memo with Schneider Electric SA, a French electrical equipment and automation company, at the Great Hall of the People in Beijing on Jan 9 during French's president Mr. Macron's state visit to China.

According to the memo, the two sides will work together on expanding markets in China and overseas, improving management efficiency, overseas EPC (engineering, procurement and construction), intelligent manufacturing, and the training of senior executives.

Sinomach has maintained a long-term partnership with Schneider, especially in electric power projects in Africa, South America and Southeast Asia. Schneider has helped Sinomach expand overseas EPC business through its operation network in more than 130 countries.

The company will also cooperate with scientific research institutes affiliated to Sinomach in the research, development and manufacturing of electrical products.