

Industry trends Machines/Engineering



Global overview

Only modest production growth in 2024, sustained by the Asia Pacific region.

We expect global mechanical engineering output to increase by 0.5% in 2024. This modest expansion is mainly due to growth in Asia Pacific, while activity in North America and Europe is subdued. Apart from the general-purpose machinery segment, production in the main subsectors is forecast to contract this year (see chart on next page).

In the Eurozone and the US, tighter financing conditions and increased borrowing costs have had negative effect on capital expenditure, especially in the major buyer industries.

However, there are signs that activity is bottoming out in Europe and the US. We expect global mechanical engineering production to rebound by 5.1% in 2025, as growth in Asia Pacific accelerates and performance in the US and Europe recovers.

The ongoing shift towards electric vehicles will lead to changes in machinery supply to the automotive sector, with more emphasis on batteries and related electrical equipment. Demand for machinery to manufacture conventional powertrains will weaken.

Across all regions, we expect sector growth to decelerate in the long-term. This mainly affects Asia Pacific, where China's pivot to a more services-oriented economy will reduce demand for capital goods.

| Industry perfor | mance forecast | | | | | |
|-----------------|----------------|------------------|--------------|----------|---|--|
| Europe | | Asia and Oceania | | Americas | | |
| (Austria | Netherlands | Australia | Phillippines | Brazil | Excellent The credit risk situation in the sector is strong / | |
| Belgium | Poland | China | Singapore | Canada | business performance in the sector is strong compared to its long-term trend. | |
| Czech Republic | Portugal | (A) Hong Kong | South Korea | Mexico | Good The credit risk situation in the sector is benign / | |
| Denmark | Slovakia | [India | Taiwan | □ USA | business performance in the sector is above its long-term trend. | |
| France | Spain | (A) Indonesia | Thailand | | Fair The credit risk situation in the sector is average / business performance in the sector is stable. | |
| Germany | Sweden | S Japan | ⇔ UAE | | | |
| Hungary | Switzerland | (2) Malaysia | Vietnam | | The credit risk in the sector is relatively high / business performance in the | |
| [Ireland | Turkey | New Zealand | | | sector is below its long-term trend. Bleak The credit risk in the sector is poor / business performance in the sector is weak compared to its long-term trend. | |
| [Italy | © UK | | _ | | | |



Industry trends Machines/Engineering

| Mechanical engineering output: Global and per region | 2022 | 2023 | 2024* | 2025* |
|--|------|------|-------|-------|
| Global | 3.1 | 0.4 | 0.5 | 5.1 |
| North America | 5.8 | -1.2 | -0.9 | 3.5 |
| Asia-Pacific | 2.0 | 0.4 | 2.2 | 6.4 |
| European Union & UK | 3.9 | 1.5 | -2.9 | 3.1 |

Year-on-year, % change /*forecast - Source: Oxford Economics

Strengths and growth drivers

High entry barriers. blished players are able to take advantage of the need for major investment in technology to deliver new machines capable of supporting a wider variety of product mixes for their customers.

Automation. Many industries are increasingly using process automation and industrial robots, which should stimulate demand for related machinery equipment.

Technological advances. D printing, AI, IIoT (Industrial Internet of Things) and big data analytics are increasingly used in manufacturing. Businesses are learning how to take advantage of the massive amounts of data their machines generate. All this should result in higher productivity, lower operating costs and higher margins.

| Mechanical engineering output | 2022 | 2023 | 2024* | 2025* |
|--|------|------|-------|-------|
| per subsector | | | | |
| General purpose machinery | 1.0 | 0.6 | 0.9 | 5.1 |
| Agricultural machinery | 8.2 | -1.7 | -5.2 | 3.1 |
| Machinery for mining and construction | 3.2 | 0.8 | -4.1 | 4.6 |
| Machine tools | 4.9 | 0.4 | -6.2 | 4.8 |
| Year-on-year, % change /*forecast - Source: Oxford Economics | | | | |

Constraints and downside risks

Economic cycle. Many machinery segments depend on demand from cyclical sectors such as construction and automotive.

Capital-intensity. Machinery businesses often face large investments and R&D expenditures in order to provide tailor-made products in a market where the preferences of customers are constantly changing.

Commodity price volatility. The sector is highly susceptible to the price developments and availability of input materials like aluminium, copper and steel.





Machines/Engineering outlook Americas

| Mechanical engineering output | 2022 | 2023 | 2024* | 2025* |
|-------------------------------|------|------|-------|-------|
| Brazil | -2.9 | -7.5 | -1.3 | 5.1 |
| Canada | 8.6 | 7.1 | 1.0 | 4.8 |
| Mexico | 7.9 | 0.8 | -7.3 | -1.4 |
| United States | 5.5 | -2.0 | -0.7 | 3.7 |

Year-on-year, % change /*forecast - Source: Oxford Economics



Looser monetary policy should help to trigger a recovery next year

After a 2% contraction in 2023, we expect US mechanical engineering output to shrink again in 2024, by 0.7%. The main reason is the timetable for interest cuts by the Federal Reserve has been pushed back. The tighter lending conditions have created a spillover-effect of reduced business formation. Demand from automotive as a key buyer sector has slowed down. That said construction, in particular civil engineering, has been benefitting from fiscal spending for infrastructure improvement. This keeps up demand for the construction machinery subsector, which is forecast to grow 3% this year.

We expect US mechanical engineering output to rebound 3.7% in 2025, as macroeconomic factors become more favourable. Disinflation should allow the Federal Reserve to start monetary easing in H2 of 2024, which will help to increase investment in machinery, however with a laggard effect of about two to three quarters. Further public infrastructure investment and spending in strategic sectors will help to sustain demand for general purpose and special purpose machinery.

In the mid to long-term, demand for automation, digitalisation, and sustainable production solutions in manufacturing should support machinery demand. New technologies integrated in the manufacturing process will lead to efficiency gains in the mechanical engineering industry. That said, production of electric cars is less machinery-intensive than internal combustion engine vehicles.



Machinery demand affected by car production shutdowns

We expect mechanical engineering growth to slow down from 7% in 2023 to 1% this year, as adverse economic conditions, including higher interest rates, weigh on business spending. Machinery demand from automotive is affected by extended car production shutdowns (a result of significant model changeovers towards more electric vehicle production).

Construction activity is decreasing amid weaker new housing investment and lower infrastructure spending. However, as of Q4 of 2024 a rebound is expected to start, due to looser monetary policy. In 2025 mechanical engineering growth is forecast to accelerate by 4.8%, helped by rebounding demand from automotive and construction.





is below its long-term trend.

The credit risk in the sector is poor / business performance in the sector is weak compared to its long-term trend.



Machines/Engineering outlook **Asia Pacific**

| Mechanical engineering ouput | 2022 | 2023 | 2024* | 2025* |
|------------------------------|------|------|-------|-------|
| China | 0.9 | 3.4 | 4.1 | 6.2 |
| India | -2.3 | 14.1 | 2.4 | 6.9 |
| Japan | 5.9 | -7.9 | -4.4 | 7.2 |
| South Korea | 0.1 | -5.4 | -0.1 | 6.6 |

Year-on-year, % change /*forecast - Source: Oxford Economics



Robust growth, but issues in some machinery segments

We expect Chinese mechanical engineering output to increase by 4.1% in 2024 and by 6.2% in 2025. Growth is supported by fiscal expansion for the manufacturing sector to grow production capacity, and a loose monetary policy stance aimed at improving domestic financing conditions. Mechanical engineering is supported by government investment in strategic sectors such as high-tech, automation, and climate/energy, mainly benefitting the electrical machinery segment.

However, the property sector is still plagued by weak buyer demand for new homes and worsening financing difficulties affecting developers. As a result, production of construction machinery is forecast to contract by more than 19% this year. Additionally, private investment in machines is affected by low confidence, the issues in the property sector and uncertainty about the regulatory outlook. Automotive production is forecast to grow by 4.6% in 2024, supporting machinery demand. That said, the impact of the shift to electric vehicles on the machine tools subsector remains uncertain, due to the lower demand for related items compared to combustion engines production.

In the mid and long-term we expect Chinese annual mechanical engineering output to stabilise between 2.5% and 3%, as economic growth slows down and a shift to a more service-oriented economy will reduce demand for capital goods.

🔼 Japan

Downturn triggered by woes in the automotive industry

After a 7.9% contraction in Japanese mechanical engineering production last year, we expect another decrease of 4.4% in 2024. The main reason for the decline this year is a 16% output contraction in the automotive sector in Q1 of 2024, due to Daihatsu's suspension of production over safety issues. Therefore, downstream demand for machine tools suffered severely, and this subsector is forecast to contract by more than 12% this year.

The whole mechanical engineering sector is affected by weaker capital expenditure. Despite the Bank of Japan's accommodative monetary policy, investments have been hampered by high capital goods prices and sluggish global investment activity.

Domestic construction activity, which accounts for 13% of engineering demand, is slowing down, leading to a 5.7% decrease in construction-related machinery production in 2024. However, demand from the ICT segment is surging, supporting machinery demand. We expect that orders and demand for mechanical engineering goods will start to recover in the coming months, and a production rebound of about 7% in 2025 after two years of contraction.



| Ind | ustry performance forecast |
|----------|---|
| | Australia |
| | China |
| | Hong Kong |
| | India |
| | Indonesia |
| | Japan |
| P | Malaysia |
| | New Zealand |
| | Phillippines |
| | Singapore |
| | South Korea |
| | Taiwan |
| | Thailand |
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| - Sign | Excellent The credit risk situation in the sector is strong / business performance in the sector is strong compared to its long-term trend. |

compared to its long-term trend.

The credit risk situation in the is above its long-term trend.

The credit risk situation in the sector is average / business performance in the sector . is stable

is relatively high / business performance in the sector is below its long-term trend.

The credit risk in the sector is to its long-term trend.



Machines/Engineering outlook **Europe**

| Mechanical engineering output | 2022 | 2023 | 2024* | 2025* |
|-------------------------------|-------|------|-------|-------|
| France | -3.7 | 2.7 | -5.3 | 1.1 |
| Germany | 1.0 | 1.1 | -4.1 | 2.4 |
| Italy | 7.5 | 2.9 | -0.6 | 3.1 |
| United Kingdom | -12.5 | -3.6 | -4.7 | 4.7 |

Year-on-year, % change /*forecast - Source: Oxford Economics

Eurozone

Expected ECB interest rate cuts should drive a recovery in 2025

After growing 2.3% in 2023 we expect mechanical engineering output in the Eurozone to contract by 2.9% this year. Higher interest rates have weighed on the profit margins of manufacturing and construction businesses, negatively affecting their ability and willingness to invest in machines and related equipment. However, in 2025 we expect a rebound of about 3% in mechanical engineering production, as interest rates cuts by the ECB in H2 of 2024 should support additional machinery investment.



Lower subsidies weigh on the construction machinery segment

After an expected 0.6% contraction in 2024, Italian mechanical engineering output is forecast to grow by about 3% next year. Expected ECB interest rate cuts in H2 of 2024 should help to shore up private business investments. Additionally, the government has refinanced the so-called "Sabatini" law, which facilitates access to credit for SMEs in order to finance machinery purchases and leasing.

However, the construction machinery subsector will see only a 2.5% rebound in 2025 after a 15% contraction expected this year. The main reason is subdued demand from the building industry as the "superbonus" scheme (tax credits for renovations and energy efficiency improvements) is being phased out.



Germany

Machinery insolvencies continue to increase

Germany accounts for more than 45% of eurozone mechanical engineering output. German machinery production is expected to contract by more than 4% this year. The industry continues to struggle across all subsectors, due to weak demand from key buyer industries like automotive and construction and increased geopolitical uncertainties.

If it doesn't have to be 'Made in Germany' quality, competition from China is a serious issue. Except for defence, incoming orders declined from customers across the board. Non-payments have increased by double-digit rates in H1 of 2024. Last year, insolvencies among German mechanical engineering companies rose noticeably, and we expect another increase in the low double-digit percentage range 2024. While smaller companies with smaller financial cushions will be hit first, even larger businesses could fail.

However, we believe that the German mechanical engineering sector is still resilient and internationally competitive. 2024 will be difficult, but a production rebound of 2.4% is expected in 2025.



| Industry performance forecast |
|--|
| Austria |
| Belgium |
| Czech Republic |
| (C) Denmark |
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| Germany |
| Hungary |
| [Ireland |
| [Italy |
| Netherlands |
| Poland |
| Portugal |
| Slovakia |
| Spain |
| Sweden |
| Switzerland |
| Turkey |
| © UK |
| Excellent The credit risk situation in the |

sector is strong / business performance in the sector is strong compared to its long-term trend

The credit risk situation in the sector is benign / business performance in the sector is above its long-term trend.

The credit risk situation in the sector is average / busines performance in the sector . is stable

is relatively high / business performance in the sector . is below its long-term trend.

The credit risk in the sector is poor / business performance in the sector is weak compared to its long-term trend



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