

HEAVY ENGINEERING INDUSTRY



Mechanical engineering in the world



Smart factories and industry 4.0 initiatives, automation, IoT, AI, and real-time data analytics emerge as fundamentals of the manufacturing schema

Industrial machinery market

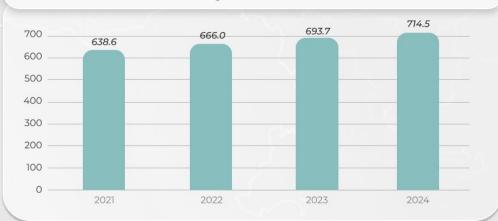


714 billion USD

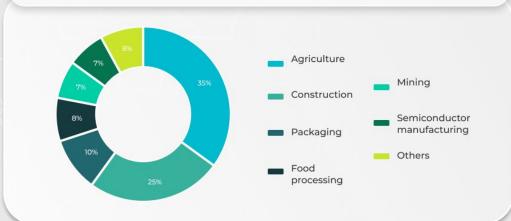
market value (2024)

9% CAGR (2025-2034)

World industrial machinery market size, 2021-2024, billion USD



World industiral machinery market share, by sectors, 2024, %



Sources: <u>Global Market Insights</u>



Industry overview in Ukraine

Historical concentration



Kramatorsk

blast furnace equipment, excavators



Horlivka

coal combines, compressors



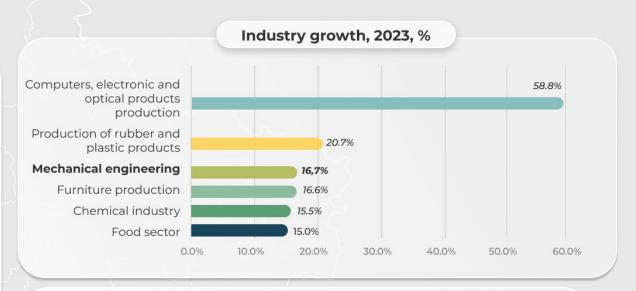
Kryvyi Rih, Dnipro

mining equipment



Kharkiv

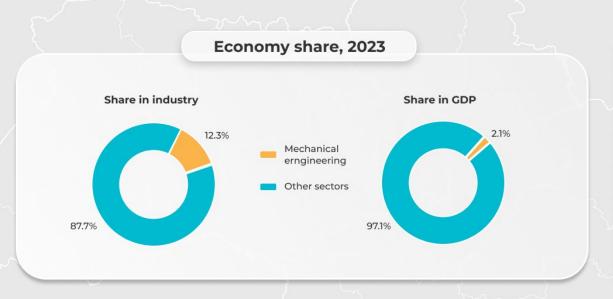
energy, lifting and transport machinery manufacturing



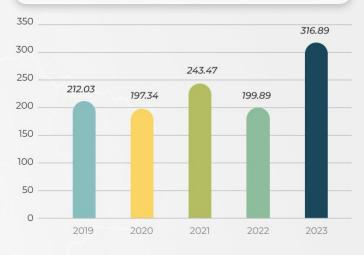
Geographical concentration – a weak point due to the war; key industrial centers have found themselves in the **conflict zone**. A rethinking of industrial policy is needed towards **decentralization** and **diversification**



Macroeconomy





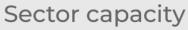


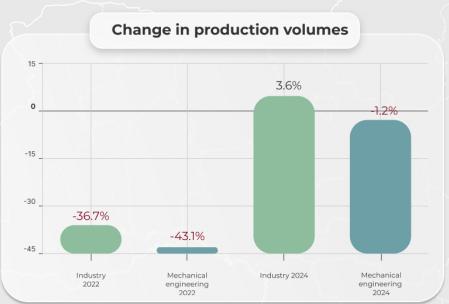


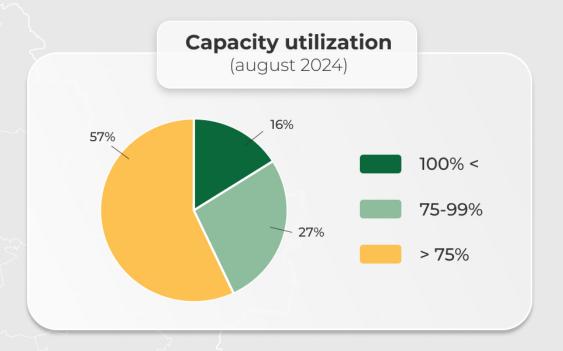
Operating profitability in mechanical engineering reached 11.4% for the period January–September 2023, which is one of the highest indicators in the industry (for comparison, the average across all industrial sectors was 8.3%).

Sources: New Voice, National bank of Ukraine









Implemented projected changes for 2024



Expected growth in production volumes

50.0% enterprises

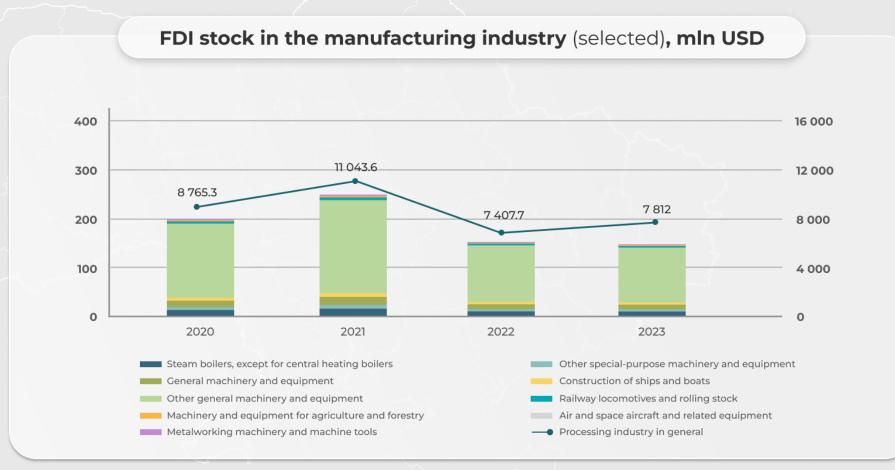


Expected growth in sales volumes

53.3% enterprises



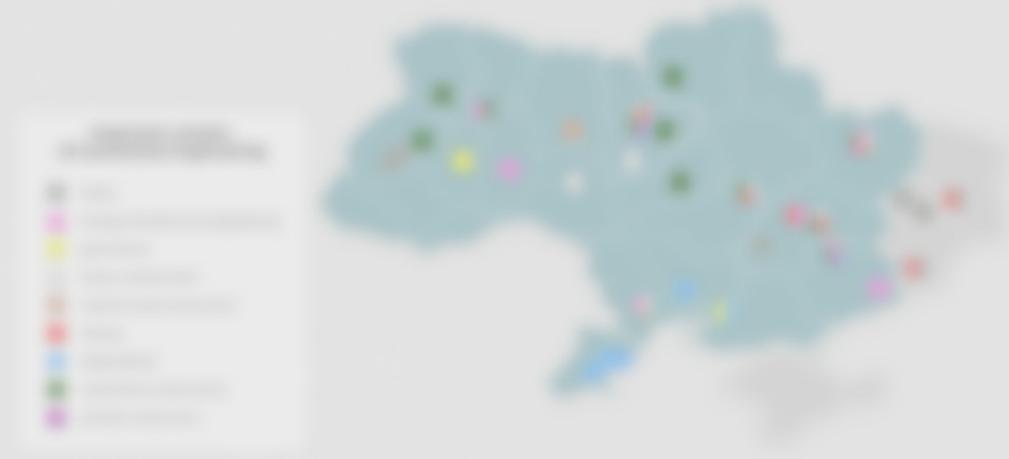
FDI snapshot



Sources: National bank of Ukraine



Ukrainian mechanical engineering centers





Railway locomotives or motor trams





Tractors





Reactors, boilers, machinery and mechanical appliances





Mining and underground engineering

This subsector specializes in equipment for the mining and metallurgical industries. It has faced stagnation due to the halt in coal extraction and the loss of assets in the East, but at the same time is finding new niches, such as the production of demining equipment, and is supported by demand from the defense industry.

Novokramatorsky MZ (NKMZ)



One of the largest plants partially resumed operations in 2023. In 2024, revenue increased 3.2 times to 82% of which was from exports. It returned to profitability after significant losses.

Kryvyi Rih Mining and Processing Plants (GZK)





Key players, such as **ArcelorMittal** and **Metinvest**, are investing in maintaining production. Metinvest plans to invest 5.7 billion UAH in 2025 to support extraction and achieve energy independence.

Corum Group (DTEK)



Continues the production and modernization of mining equipment. In 2024, it introduced the updated tunneling combine RH110. In the first months of 2025, over 1,100 units of equipment have been manufactured and repaired.

Sources: Open4Business, GMK Center



Metallurgical engineering

The metallurgical equipment sub-sector has been hit hard by the destruction in Donbas and the occupation of Mariupol. The main challenges include energy shortages, expensive logistics and a lack of personnel. At the same time, demand from the defense industry is driving the steel market.

ArcelorMittal Kryvyi Rih



The largest company in the sector was unable to break even in 2024 due to high energy and logistics costs. The mining division is operating at 70–75% capacity.

Power engineering

JSC "Ukrenergomashyny" (Turboatom)

A key turbine manufacturer, whose revenue in 2024 fell by **2.7 times**. It is actively relocating, establishing branches in Western Ukraine. Future demand is tied to the restoration of energy facilities.

Metinvest Group



Plans significant investments in Kryvyi Rih's mining and processing plants, but Inhuletskyi GZK is idle, and Pivdennyi GZK is on the verge of shutdown

Future demand

Energy restoration is a priority. The EBRD plans to provide **1 EUR bln** to support the sector. The focus on small gas turbines, solar, and wind energy is creating new demand for appropriate equipment.



Military transport engineering

Production has increased 35 times, with an expected volume of 35 USD bln in 2025. Ukraine produces 40% of the required weaponry.

LLC Ukrainian Armor

UKRAINIAN ARMOR Design and Manufacturing Company

The leader in revenue among Kyiv's engineering enterprises. Specializes in the production of military vehicles.

Revenue 2024: 58.24 UAH bin

LLC SPA Practice



A significant manufacturer of motor vehicles for military needs.

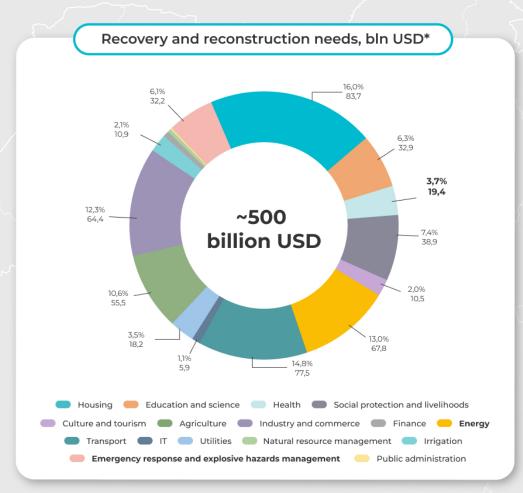
Revenue 2024: 7.47 UAH bin

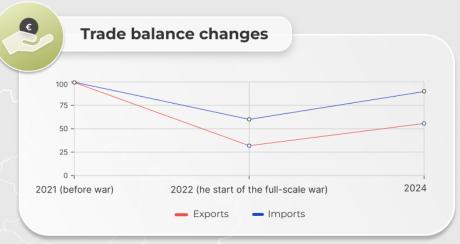
The industry is highly dependent on imported components, especially for heavy weaponry (air defense systems) and key elements such as microelectronics, explosives, and rocket fuel. Additionally, enterprises face logistical challenges and the need to ensure production security.

Sources: El Pais, Congress.gov, Sipri, YC.Market



Full-scale invasion impact





A significant loss of domestic production capacity was compensated by increased imports since 2022. The EU has become the main export destination (73,9% of companies in August 2024).



-70% exports of engineering products compared to 2021

40,7%

of exporters reported a decrease



Sector issues and challenges



Funds obsolescence

~ 70%

wear and tear of equipment at most enterprises, which limits production capacity and product quality



Low innovation activity

~ 10%

share of enterprises implementing innovations mainly at their own expense



Skilled labor shortage

↓12%

reduction of the labor force since the beginning of the war, chronic shortage of engineers and workers, exacerbated by mobilization



Working capital shortage

~ 5%

industry profitability, which leads to low solvency and reduced competitiveness





"Industry 4.0" Strategy

Identifies mechanical engineering, the defense industry, and the aerospace sector as key high-tech segments. The goal is reindustrialization (reshoring), creation of jobs based on new technologies, and support for SMEs.



International cooperation

UkraineInvest and EU4Business promote the attraction of foreign investors and support for SMEs. However, there is a gap in export support tools (insurance, lending) compared to other countries.

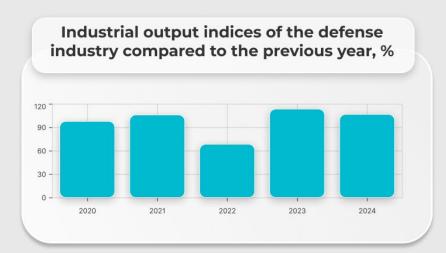
Reducing import dependence	Development of domestic production capabilities, especially in the defense industry
Green industrial recovery	Integrating sustainability into industrial development (Program 2024-2028)
High-tech production	Prioritization of military-oriented production, which stimulates technological achievements
Strengthening supply chains	Growth in domestic demand for steel products driven by the defense industry



Defense industry and dual-use technologies



Growth in defense production, acting as a locomotive for the entire engineering sector. Investments in the defense industry not only address urgent national security needs but also lay the foundation for the development of high-tech manufacturing with potential civilian applications after the war.



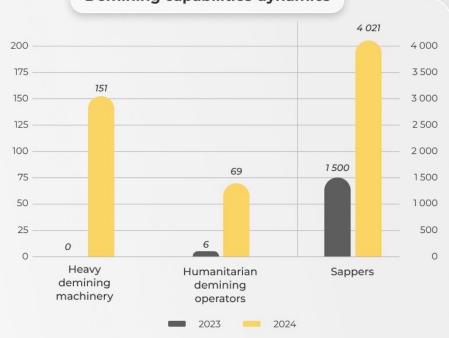
	key drivers
Production growth	Defense industry output has increased 35-fold , with a projected volume of 35 USD bln by 2025. Ukraine now produces 40% of the required weaponry.
Government support	Substantial government spending on arms production (55 UAH bln in 2025), support programs for defense tech, and the involvement of foreign companies in modernization efforts.
Technological advancement	The demand for precision weaponry, armored vehicles, and aviation equipment is driving innovation and the modernization of manufacturing processes.

Vov. drivers

Sources: Ekonomichna pravda, The page

Demining equipment





Emergence of a new, critically important niche in heavy engineering as a direct response to the consequences of war and urgent humanitarian needs



Demining needs

37 billion USD

10 thsd sappers



Key drivers

Large-scale demand

Ukraine is one of the most heavily mined countries in the world, creating a massive and long-term demand for specialized demining machinery

Lack of pre-war production

Before 2022, no domestically produced demining machines existed in Ukraine, opening a "blue ocean" of opportunity for new manufacturers

Export potential

Ukrainian experience and developments in this field can be exported to other mineaffected countries

Sources: Suspilne.News, AutoConsulting



Power engineering machinery

The large-scale destruction of Ukraine's energy infrastructure is generating significant future demand for equipment aimed at its restoration and modernization, with a focus on decentralization and green technologies.

Potential benefits

- Long-term and stable demand for products
- 2. Opportunity to invest in green technologies and energy-efficient production
- 3. Contribution to Ukraine's energy security and independence
- 4. Attraction of international investment and partnerships

Key drivers
The energy sector has suffered 14.6 billion USD in damages, which will require substantial volumes of new equipment (turbines, generators, transformers, etc.)
The shift from large centralized power plants to distributed energy systems (solar wind, and small modular gas turbines) is generating new, specialized demand
Ukraine's Green Industrial Recovery Program (2024–2028) supports the sustainable development of industry

Sources: <u>UNIDO</u>, <u>Ukrinform</u>



Agricultural machinery manufacturing

A resilient sector supported by the critical role of agricultural exports for Ukraine's economy and by government programs that promote production localization.

Potential benefits

- 1. Stable domestic market
- 2. Government incentives and support for local production
- 3. Opportunities for innovation in smart and sustainable agriculture
- 4. Contribution to food security and the country's export potential

Key drivers

Resilience of the agricultural sector	Agricultural exports remain a primary source of state revenue (around 60%), ensuring sustained demand for agricultural machinery
Government support for localization	A government program that reimburses 25% of the cost of domestically produced agricultural machinery (with over 60% Ukrainian content) stimulates local manufacturing
Need for modernization	There is a growing need to implement modern, resource-efficient technologies (e.g., watersaving sprayers) to enhance productivity and efficiency

Sources: Ministry of Economy of Ukraine 20

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Skilled and competitive labor force

Ukraine is known for skilled labor force and high education level

In 2024, **Ukraine was ranked 27th** in the Global Skills Index, largely due to its skills in computer science, applied mathematics, software engineering, Big Data, and machine learning



Ukraine has a potential to become a regional leader in the field of complex and science-intensive engineering services such as:



industrial automation and complex engineering;



programming in the field of industrial high-tech;



industrial design (electrical, mechanical, electronic etc.).

Sources: <u>Coursera, UkraineInvest</u>

INVESTMENT INCENTIVES

Significant investments

REQUIREMENTS FOR INVESTMENT PROJECT



12+ EUR mln of investment



10+ of new jobs



up to 5 years***
of project

implementation



construction, modernization

technical and/or technological reequipment of objects

FORMS OF SUPPORT



CIT exemption* (for 5 years by choice)

Lease of state or

communal land

plots without

land auctions



Exemption from VAT

for importing new equipment and components to it **

Compensation for costs

of connection to

engineering and

transport networks



Exemption from **import duties** for new

equipment

equipment and components to it **



Construction/compensation for built **engineering and transport infrastructure** (highways, communication lines.utilities, etc.).

Land tax exemption/ reduced land tax rates



Exemption from compensation for losses of forestry production

AMOUNT OF SUPPORT

up to 30% CAPEX



For more detailed information, we recommend paying attention to the following regulatory acts

* Not applicable to projects in the field of extraction for the purpose of further processing and/or enrichment of natural resources.

** List and volume of equipment is approved by the CMU for each project.

*** The applicant, not earlier than 18 months before the date of submission of the application to the authorized body, may make investments in investment facilities in the amount not exceeding 30% of the total amount of significant investments required for the implementation of an investment project with significant investments

INVESTMENT INCENTIVES

The implementation of investment projects on the territory of industrial parks does not exclude the opportunity to receive additional incentives, in particular, provided for by the Law of Ukraine "On State Support for Investment Projects with Significant Investments" or the legal regime of Diia.City.

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Industrial parks



non-refundable financing for arranging an industrial park and/or construction of related infrastructure facilities* **up to UAH 150 million****



exemption from compensation for losses of **forestry production*****



full or partial compensation of interest rates on loans for arranging an industrial park, carrying out economic activity****



compensation for connecting 1 to engineering and transport infrastructure **up to UAH 150 million** (during martial law - only to power grids 2)



exemption from **real estate tax** for industrial buildings



land tax exemption / reduced land tax rates



CIT exemption for 10 years (only if reinvestment)



exemption from **import duties** for new equipment



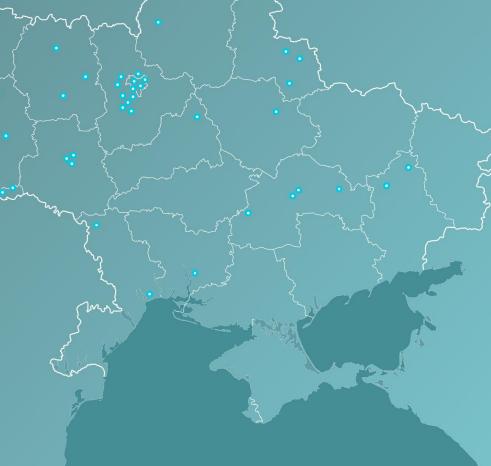
VAT exemption for importing new equipment



2500+ ha of zoned industrial land avaliable for manufacturing projects



Guide: State support for Industrial Parks



^{* -} Provided to managing companies and initiators of creation of industrial parks.

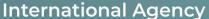
^{** -} According to the Procedure for the provision of funds for the arrangement of industrial parks, approved by the Resolution of the Cabinet of Minister of Ukraine dated June 4, 2024 No. 644.

^{*** -} Regarding the use of land plots with a change in purpose for the establishment of industrial parks according to Article 208 of the Land Code...

^{*** -} During the period of martial law and for six months after it ends or canceled, the Procedure for providing full or partial compensation of interest ates on loans for the establishment and/or implementation of economic activities within industrial parks has been suspended.

INVESTMENT INSURANCE

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A formalized agreement on the implementation of the investment insurance mechanism for foreign investments: 2022

Annual rate: 2-3%

Insurance period: 10 years

Coverage of the amount of losses: **up to 90% Sure Trust Fund:** USD 110 mln, goal - USD 330 mln



Law No. 9015 "On Amendments to the Law of Ukraine "On financial mechanisms for stimulating export activity" regarding insurance of investments in Ukraine against military risks": 2023

Annual rate: **0.49% - 8.05%**

Insurance amount: UAH 200 mln

Insured for 5 months in 2024: UAH 2.93 bln



Property insurance against war risks: 2024 Implemented cases: Grain elevators



Ship insurance in the Black Sea: 2023

Containers with grain, iron ore, and steel, electrical equipment, fodder

Annual rate: 0.75%

Coverage amount: USD 50 mln



and Ukrainian investments in Ukraine: 2023 Coverage of the amount of losses: up to 85% Insurance for SMEs: USD 50 mln

Insurance for SMES. **USD 50 min**Insurance of the agricultural sector, manufacture: **USD 300 min**

Memorandum on coverage of American, international



Insurance of the agricultural sector, manufacture: USD 300 min

22 export-import agencies: Germany, WB, USA, Japan, Canada, Italy, Poland, Norway, Slovakia, France, Bulgaria, Estonia, Latvia, Lithuania, Czech Republic, Austria, UAE, Portugal, Spain, Sweden, Finland. Denmark

Volume of the collected fund: EUR 1 bln

