

Presentation

1. Company Overview

Yantai Wanlong Vacuum Metallurgy Co., Ltd., founded in 2002 and headquartered in the China (Shandong) Free Trade Zone in Yantai, specializes in the development, production, and sale of high-performance specialty copper alloys. The company plays a significant role in the advancement of industries such as high-speed rail, nuclear power, aerospace, and military technology.

The company is recognized as a "specialized, refined, and innovative" enterprise, indicating its capability to address niche areas that require specialized expertise. With a focus on proprietary vacuum casting and unique alloy development, Yantai Wanlong has established itself as a leader in specific high-performance copper alloy products.

2. Key Products and Technological Strengths

Yantai Wanlong's product lineup is deeply embedded in the industrial and technological advancement of copper alloys. The company has developed proprietary processes that include:

- **High-Speed Rail Solutions:** The production of chromium-zirconium copper (Cr-Zr-Cu) contact wires, which can support the operation of trains at speeds up to 500 km/h. This innovation responds to the limitations of magnesium-copper wires at 350 km/h, offering enhanced electrical conductivity and tensile strength.
- **Nuclear Power and Aerospace Components:** The company is a key supplier of high-performance copper alloy components for nuclear reactors and space missions. Products such as rotors, end rings, and containment structures illustrate its capability to meet the demanding requirements of these sectors.
- **Industrial Equipment:** The development of products like large-diameter, seamless copper alloy tubes and specialty components that serve both military and civilian applications has positioned Yantai Wanlong as a strategic partner in advanced manufacturing.

3. Operational and Financial Performance

The company's revenue in 2022 reached ¥419.17 million, a 16.17% increase compared to the previous year. This growth was mainly driven by the expansion of core products and market presence, with primary business income experiencing a 31.56% growth.

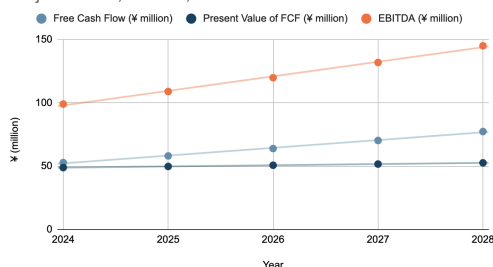
Key Financials:

- **2022 Revenue:** ¥419.17 million (up 16.17% YoY)
- **Net Profit:** ¥-12.82 million, reflecting ongoing heavy investments in research and infrastructure.
- **2023 Forecast:** Projected revenue of ¥600 million and a net profit of ¥30 million.

Projected Financial Data Table

Year	Projected Revenue (¥ million)	EBITDA (¥ million)	CAPEX (¥ million)	Depreciation & Amortization (¥ million)	Change in Working Capital (¥ million)	Free Cash Flow (¥ million)	Present Value of FCF (¥ million)
2024	660.0	99.0	19.8	13.2	13.2	52.8	48.8888888888889
2025	726.0	108.9	21.78	14.52	14.52	58.08	49.7942386831276
2026	792.6	119.79	23.958	15.972	15.972	63.888	50.7163542142966
2027	878.46	131.769	26.3538	17.5692	17.5692	70.2768	51.655459590058
2028	966.306	144.9459	28.98918	19.32612	19.32612	77.30448	52.6121301434318
Terminal Value	nan	nan	nan	nan	nan	1314.17616	894.406212438341

Projected FCF, PV FCF, and EBITDA



4. Industry Landscape

The global copper alloys market is experiencing significant growth, driven by increasing demand across various industries. According to a report by Grand View Research, the market size was valued at USD 79.24 billion in 2023 and is projected to grow at a CAGR (compound annual growth rate) of 6.5% from 2024 to 2030. This growth is attributed to the rising use of copper alloys in electrical and electronics applications, automotive industries, and infrastructure development.

In China, the government's emphasis on infrastructure projects, including high-speed rail expansion and renewable energy initiatives, has increased the demand for high-performance copper alloys. Yantai Wanlong's focus on producing specialized copper alloy components aligns with these national priorities, positioning the company favorably within the domestic market.

5. Industry Landscape

a. Domestic Competitors

- **Sichuan Xinju High Conductivity Material Co., Ltd.**
 - Strong focus on high-conductivity copper products used in electrical and power grid applications.
 - Limited specialization in high-strength alloys for niche applications like aerospace and military use.
 - Well-regarded within the domestic power grid sector but does not match Yantai Wanlong's specialization in high-speed rail and military-grade alloys.
- **Jintian Copper Group**
 - Large production capacity and a wide range of copper products.

- Primarily focused on standard copper products rather than high-performance alloys.
- One of the largest producers in China but with less emphasis on R&D-intensive, specialized products.
- **Nanjing Yunhai Special Metals Co., Ltd.**
 - Significant R&D investments and focus on specialty metals for automotive and aerospace sectors.
 - Does not possess the same level of expertise in vacuum casting or seamless large-diameter copper tubes.
 - A competitor in the aerospace sector but less diversified in rail and nuclear applications compared to Yantai Wanlong.

b. International Competitors

- **KME Group** (Germany)
 - Long-standing expertise in copper and copper-alloy products with a strong focus on R&D and advanced manufacturing technologies.
 - High production costs and limited penetration into the Chinese market.
 - A leader in European markets with a diversified product portfolio that includes electrical, industrial, and architectural applications.
- **Mitsubishi Materials Corporation** (Japan)
 - Advanced R&D and proprietary technologies in producing high-performance copper alloys.
 - Geopolitical and trade limitations can hinder market access in China.
 - Strong presence in the electronics and automotive sectors, competing with Yantai Wanlong in high-end alloy segments.

6. Strategic Industry Positioning

Yantai Wanlong operates in a niche sector that integrates the development of specialized copper alloys essential for high-performance applications. Key aspects of its market strategy include:

- **Import Substitution:** The company's focus on replacing imported components with domestically produced alternatives has reduced dependency on foreign suppliers. This strategic move not only ensures supply chain security but also positions Yantai Wanlong as a crucial supplier within China's "Made in China 2025" initiative.
- **Technological Barriers:** Yantai Wanlong's competitive advantage stems from proprietary vacuum casting and metal forming technologies. These capabilities provide it with substantial market entry barriers that competitors find difficult to breach.
- **Government Support:** The company's significant government-backed projects, such as the "Industrial Strong Foundation" program, highlight its alignment with national strategic goals. The firm has also received grants and support to enhance its technological capabilities.

7. Competitive Landscape

The competitive environment for high-performance copper alloys is marked by a limited number of players with similar technological prowess. Yantai Wanlong has differentiated itself by investing heavily in R&D and creating a unique value proposition centered on:

- **Proprietary Technology:** The only producer with an established large-scale production line for Cr-Zr-Cu contact wires, which supports high-speed rail operations above 350 km/h.
- **Strategic Partnerships:** Collaborations with high-profile clients such as China Railway Construction Corporation, Siemens, and the China National Nuclear Corporation reinforce its market presence.

8. Growth Opportunities and Challenges

Opportunities:

- **Expansion into New Markets:** Plans to export specialty products to Europe, North America, and Asia will provide a significant boost to the company's revenue streams.
- **IPO Strategy:** With plans to list on the STAR Market (Sci-Tech Innovation Board), Yantai Wanlong is poised to secure additional funding to scale production and further develop its R&D capabilities.

Challenges:

- **Profitability Pressure:** The firm's ongoing investments in R&D and infrastructure have weighed on profitability, necessitating a strategic shift toward optimizing operations and scaling profitable products.
- **Technical Complexity:** High production standards and the need for specialized processes limit operational scalability.

9. Risk

1. Supply Chain Disruptions

- **Risk:** Unreliable or limited supplier networks can lead to disruptions in the delivery of essential raw materials.
- **Potential Impact:** Delays in production, increased lead times, and inability to meet client demand.

2. Raw Material Price Volatility

- **Risk:** Fluctuating prices of copper and other alloy materials can impact cost structures and profitability.
- **Potential Impact:** Increased production costs, reduced margins, and financial instability.

3. Quality and Reliability of Inputs

- Risk: Variability in the quality of raw materials or semi-finished goods can affect product consistency and performance.
- Potential Impact: Higher defect rates, increased returns, and damage to reputation.

4. Geopolitical Risks

- Risk: Dependence on suppliers from regions with political instability, trade restrictions, or tariffs.
- Potential Impact: Sudden changes in regulations, trade wars, or sanctions impacting material supply.

5. Environmental and Regulatory Compliance

- Risk: Suppliers failing to adhere to environmental or local regulations can impact production and lead to legal issues.
- Potential Impact: Fines, production shutdowns, or damage to company reputation.

6. Supplier Financial Stability

- Risk: Suppliers facing financial instability or bankruptcy could suddenly stop operations or fail to deliver.
- Potential Impact: Production delays, increased costs for finding alternative suppliers.

7. Technological Dependence

- Risk: Dependence on suppliers for proprietary technologies or specialized materials that are not easily replaceable.
- Potential Impact: Limited flexibility in switching suppliers, potential delays in innovation or production.

10. Concluding Analysis

Yantai Wanlong stands as a premier example of innovation in the field of advanced metallurgy, leveraging its unique capabilities to serve critical sectors such as transportation and defense. Despite recent financial challenges linked to its aggressive investment strategy, the company's prospects for growth and leadership in the copper alloy market are promising. Continued emphasis on strategic partnerships, export growth, and successful IPO completion will be vital for realizing long-term profitability and market dominance.

Questions for due diligence:

1. Does the company have a diversified supplier network to mitigate the risk of supply chain disruptions, and are there long-term contracts in place to shield against raw material price volatility?
2. Are stringent quality control measures and regular supplier audits implemented to ensure the reliability and consistency of inputs?
3. How well does the company manage geopolitical risks—does it source materials from politically stable regions and maintain relationships with multiple international suppliers?
4. Has the company partnered with suppliers who adhere to environmental standards and are their compliance efforts actively monitored to prevent regulatory issues?
5. What is the company's approach to assessing the financial stability of its key suppliers, and does it have contingency plans with backup suppliers to handle potential disruptions?
6. For specialized materials or proprietary technologies, does the company rely heavily on single-source suppliers, or has it developed in-house capabilities or collaborative agreements that provide greater operational flexibility?
7. The documents mention significant investments in various projects. Can you provide a detailed breakdown of expected future CAPEX, specifically for projects beyond 2023?
8. What concrete steps is Yantai Wanlong taking to enter European, North American, and Asian markets? Are there established partnerships or distribution channels already in place for these regions?
9. What is Yantai Wanlong's current share in the domestic high-performance copper alloy market, particularly in high-speed rail and nuclear power applications?
10. What percentage of revenue comes from government contracts or large state-owned enterprises? How does the company plan to diversify its client base to reduce dependency on a few major customers?
11. *If the IPO is successful, how does Yantai Wanlong plan to allocate the raised funds? Will they be directed primarily toward expansion, R&D, or other strategic initiatives?*