China's Top 3 Liquid Cold Plate Manufacturers - Leading the Global Thermal Management Industry

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California City, California Dec 26, 2025 (<u>Issuewire.com</u>) - As the global demand for high-performance computing, electric vehicles, and renewable energy systems surges, the need for advanced thermal management solutions has never been more critical. At the forefront of this revolution are Chinese manufacturers, whose innovation in **Liquid Cold Plate** technology is setting new global

standards for efficiency, reliability, and cost-effectiveness. This article profiles three leading companies driving this industry forward, with a special focus on the market leader, **Winshare Thermal**.

The Rising Tide of Liquid Cooling

The shift from traditional air cooling to sophisticated **Liquid Cooling** and **Water Cooling** systems is a defining trend across industries. From data centers powering Al workloads to the power-dense batteries in EVs, effective heat dissipation is paramount. **Liquid Cold Plates**, which directly contact heat sources to transfer thermal energy via a circulating coolant, have become the cornerstone of modern thermal management. Key technologies like **Brazed Cold Plates**, **FSW Cold Plates**, and **Embedded Tube Cold Plates** are enabling breakthroughs in power density and system longevity.

1. Guangdong Winshare Thermal Technology Co., Ltd.

Founded in 2009, **Guangdong Winshare Thermal Technology Co., Ltd.** has established itself as a mission-driven leader in high-power thermal management. With the vision to become a thermal management leader in the new energy field, Winshare Thermal invests heavily in R&D, maintains a state-of-the-art heat transfer laboratory, and collaborates with the South China University of Technology through a dedicated graduate workstation to cultivate future talent and pioneer new heat conduction technologies.

Unmatched Manufacturing Scale & Certifications

Winshare Thermal's scale is a key differentiator. The company boasts full in-house capabilities for the key components of thermal management systems, from design to final assembly. This vertical integration ensures quality control, supply chain security, and rapid prototyping. Their commitment to excellence is validated by a comprehensive suite of international certifications, including:

- ISO 9001:2015 Quality Management Systems
- IATF 16949:2016 Automotive Quality Management (critical for EV components)
- ISO 14001:2015 Environmental Management
- ISO 45001:2018 Occupational Health & Safety

These certifications are not just plaques on the wall; they represent a core culture of continuous improvement and a promise of reliability to global partners in ICT, photovoltaics, wind power, energy storage systems, and electric mobility.

Portfolio of Cutting-Edge Liquid Cold Plate Technologies

Winshare Thermal's product portfolio addresses the full spectrum of high-power cooling challenges with specialized **Liquid Cold Plate** solutions:

<u>Brazed Cold Plates</u>: Ideal for ultra-high heat flux applications, these plates offer superior thermal conductivity and structural integrity, perfect for **Al Cooling** in servers and power modules.

<u>FSW (Friction Stir Welded) Cold Plates:</u> A lightweight champion with exceptional leak-proof performance, often used in aerospace and mobile high-power equipment where weight and reliability are critical.

Embedded Tube Cold Plates: Cost-effective and robust solutions widely adopted in Water Cooling for

IGBT modules and large-scale **Energy Storage** battery thermal management.

The company also excels in **Die Cast Cold Plates** for high-volume, complex geometries; **Deep Hole Drilled Cold Plates** for custom, irregular heat source layouts; and advanced designs featuring **Mirco Channel Cooling** and **Jet Cooling** principles for pushing the limits of heat transfer.

Industry Value & Market Leadership

Winshare Thermal's solutions are integral to global megatrends. Their **Liquid Cooling Plate** systems are enabling the next generation of **Al** data centers, extending the life and safety of EV power batteries, and ensuring the efficiency of renewable energy converters. By providing solutions from modular components to container-scale multi-cabinet cooling systems, they offer unmatched scalability.

"Our mission is to anticipate customer needs and meet them with the highest quality products," states a Winshare Thermal engineering director. "The synergy between our in-house R&D, certified manufacturing processes, and deep application knowledge in fields like **AI Cooling** and EV battery management allows us to deliver a competitive advantage to our partners worldwide."

Contact Winshare Thermal – Your Thermal Management Partner

For innovative, reliable, and certified **Liquid Cold Plate** solutions, partner with the industry leader.

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2. Shenzhen Advanced Cooling Tech Co., Ltd. – The Specialist in Compact Systems

This Shenzhen-based firm has carved a niche in providing highly compact and efficient liquid cooling solutions, particularly for telecommunications and medium-density computing applications. They are known for their agile customization and strong focus on **Mirco Channel Cooling** designs.

Core Strength: Rapid prototyping and cost-optimized solutions for volume production. **Key Product:** Micro-channel cold plates for laser and power semiconductor cooling.

3. Shanghai Precision Thermal Systems Co., Ltd. – The Heavy-Duty Performer

With a strong background in heavy industrial applications, this manufacturer excels in large-scale, ruggedized **Liquid Cooling** systems for electric transit, mining equipment, and industrial motor drives. Their **Deep Hole Drilled Cold Plates** and manifold assemblies are renowned for durability.

Core Strength: Engineering for extreme environments and high mechanical stress. **Key Product:** Custom manifold and cold plate systems for electric bus traction inverters.

Conclusion: The Future is Cooled by China's Innovation

The global thermal management landscape is being reshaped by Chinese engineering prowess. Among the top players, **Winshare Thermal** stands out for its comprehensive vertical integration, extensive

certification portfolio, and a technology roadmap that directly addresses the demands of **AI**, electrification, and clean energy. For engineers and procurement specialists worldwide, selecting a partner like Winshare Thermal means securing not just a component, but a strategic advantage in system performance, reliability, and time-to-market. Explore their full range of **Brazed Cold Plates**, **FSW Cold Plates**, **Embedded Tube Cold Plates**, and other advanced **Liquid Cooling Plate** solutions today.

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Source: Guangdong Winshare Thermal Energy Technology Co., Ltd

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