

KLARM Scales Up Precision Machining Capabilities to Support the Fast-Growing Electric Vehicle Fast Charging Industry



Guangzhou, Guangdong Apr 20, 2025 ([IssueWire.com](https://www.issuewire.com)) - As the world transitions to an electrified transportation future, one of the most critical enablers of this movement—the fast charging infrastructure for electric vehicles—is witnessing unprecedented growth. At the center of this rapidly evolving ecosystem stands **KLARM**, a global [precision machining company in China](#), which has officially

announced the expansion of its production capacity, technical capabilities, and industry alignment efforts to meet the increasing demands of the **electric vehicle (EV) fast charging industry**.

The electric vehicle revolution is no longer on the horizon—it is here. Automakers worldwide are committing to all-electric lineups, and governments are enacting regulations and incentives that favor the rapid adoption of EVs. However, the viability of this shift depends not just on the cars themselves but on the **supporting infrastructure**, particularly **ultra-fast and high-power EV charging systems** that can dramatically reduce charging time and facilitate long-distance travel. To function efficiently and safely, these systems rely on a range of highly specialized, precision-engineered components—components that KLARM is uniquely positioned to provide.

With its reputation for manufacturing excellence, KLARM has been supplying precision parts to industries such as aerospace, medical devices, automation, and renewable energy for over a decade. Now, with the explosive expansion of the electric mobility sector, the company is bringing its full engineering, machining, and materials science expertise to bear on the specific challenges presented by high-speed EV charging infrastructure.

At the heart of KLARM's announcement is a **comprehensive scale-up strategy** that encompasses advanced equipment procurement, materials processing innovations, workflow automation, and vertical integration of quality control systems. The goal is to support the full range of component needs across the EV fast charging supply chain—from thermal management modules and high-voltage connectors to power electronics housings and ruggedized enclosures capable of withstanding harsh outdoor environments and extreme electrical loads.

EV fast chargers, especially those operating at 150 kW, 350 kW, or higher, are more than just plug-and-play devices. They are **complex electromechanical systems** that require precision cooling channels, electromagnetic shielding, precise mounting mechanisms, and fail-safe power delivery infrastructure. All these aspects demand **tight tolerances, stable performance over thousands of duty cycles, and resilience to heat, corrosion, and electrical arcing**. KLARM has responded by expanding both its [high-precision CNC machining](#) capacity and its ability to work with exotic, high-performance materials such as aluminum alloys, copper, stainless steels, nickel-based superalloys, and engineering-grade plastics with excellent thermal and electrical properties.

The transition to fast charging not only requires more sophisticated component design but also faster production cycles and higher volumes. The EV boom is already creating tight deadlines and increased complexity across the manufacturing chain. OEMs and Tier 1 suppliers are under pressure to deliver not just functional products, but solutions that are scalable, efficient, and compatible with a global charging network. KLARM is addressing this by optimizing its manufacturing cells for **rapid prototyping, small-batch customization, and full-scale production**, all while maintaining the precision and quality that the EV industry demands.

With more than a dozen advanced multi-axis CNC machines added to its workshop floor, alongside live-tooling Swiss-type turning systems and automated quality control inspection platforms, KLARM is now positioned to produce complex geometries and mission-critical assemblies that would otherwise require multiple manufacturing steps. This vertical capability enables customers to streamline their design cycles, reduce sourcing risks, and bring products to market faster.

KLARM is also extending its **engineering services** to clients in the fast charging space, helping companies transition from 2D drawings to 3D models, refine tolerances for manufacturability, and select optimal materials for thermal, electrical, and structural performance. Through **design-for-**

manufacturing (DFM) consulting and **co-development of prototypes**, KLARM is offering more than just parts—it is providing integrated solutions that help its partners reduce development time and improve the real-world durability of their charging systems.

One of the most critical technical challenges in fast charging is thermal management. As EVs charge at higher rates, the resulting heat from power electronics and current conduction becomes a potential barrier to system efficiency and safety. KLARM's experience in machining **liquid-cooled plates, heat sinks, cold plates, and fluid distribution manifolds** plays a pivotal role in overcoming this challenge. By leveraging advanced machining strategies, including internal channel routing and high-precision surface finishing, the company helps clients develop thermal management solutions that are both compact and highly effective.

In addition to its technical and manufacturing strengths, KLARM is making major advances in **supply chain reliability and traceability**. With global logistics still under strain from the aftermath of the pandemic and ongoing geopolitical uncertainties, having dependable manufacturing partners has become essential. KLARM has implemented rigorous materials sourcing protocols, lean inventory systems, and batch-level documentation processes that ensure transparency, reduce lead times, and support strict quality assurance standards. These systems are particularly important in the fast charging industry, where failures can lead to high replacement costs and reputational damage for manufacturers.

KLARM's move into the EV infrastructure space also includes plans for **certification and regulatory compliance alignment**. The company is currently expanding its internal systems to meet ISO 9001:2015, IATF 16949, and environmental certifications required for long-term partnerships in automotive and energy-related fields. Furthermore, KLARM is investing in workforce training programs to ensure that every technician and engineer understands the critical nature of EV charging systems and can meet the meticulous standards demanded by this high-stakes market.

Commenting on the company's expansion, **Jacky**, CEO of KLARM, stated: *"The shift to electric mobility is one of the most important industrial transitions of our lifetime, and we're proud to be enabling it from the ground up. Fast charging infrastructure is not just about convenience—it's about making EV adoption viable on a global scale. We understand that reliability, safety, and speed are non-negotiable in this space. Our mission is to be a trusted, responsive, and forward-looking partner for the entire industry."*

The implications of this move are global. As the EV charging market continues to grow—expected to exceed USD \$150 billion globally by 2030—KLARM aims to become a critical link in the international EV supply chain. The company is already supporting customers across North America, Europe, and Asia, providing localized service with global consistency. With scalable production, advanced engineering support, and deep materials knowledge, KLARM is emerging as a go-to partner for innovators and manufacturers racing to electrify transportation infrastructure.

This expansion is not just a commercial decision for KLARM—it is a strategic commitment to playing a central role in shaping the future of sustainable mobility. By aligning its technological capabilities with the evolving needs of the EV fast charging sector, KLARM is helping to ensure that the world's transition to clean energy is built on a solid, precise, and dependable foundation.

KLARM Precision Machining is a leading Chinese provider of advanced CNC machining and [custom manufacturing services](#). With decades of experience and a focus on high-performance, tight-tolerance parts, KLARM supports clients in industries including aerospace, medical devices, robotics, green energy, automotive, and now, EV fast charging. The company is known for its commitment to

innovation, quality, and long-term partnerships that deliver measurable value to customers around the world.

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