

GLOBAL MANUFACTURING POWER, LOCALIZED SERVICE

Lucas-Milhaupt's manufacturing capability and global footprint underpin its reputation for reliability. Its new 125,000-sq-ft headquarters and production facility in Cudahy, Wisconsin, serves as both a technological hub and a symbol of long-term commitment to U.S. manufacturing. Complementing this are plants in Warwick (Rhode Island), Ribérac (France), and Suzhou (China)-a configuration that ensures dual-continent redundancy, regional responsiveness, and optimized logistics.

This global presence means customers can count on consistent quality, flexible lead times, and just-in-time supply across multiple time zones. The company's logistics model supports both high-volume OEM production and small-batch specialty orders, an increasingly vital capability as manufacturers pursue leaner supply chains and risk mitigation strategies.

Technology Meets Application

Lucas-Milhaupt doesn't simply sell brazing materials-it delivers brazing science as a service. Through its network of application engineers, metallurgists, and training specialists, the company provides deep technical partnership from concept to production line.

Core technology capabilities include:

- Fine control of melting ranges through proprietary alloy blending and atomization techniques.
- Flux-cored and coated products that minimize waste and improve operator safety.
- Preform engineering-custom rings and washers that ensure perfect alloy volume, reduce spatter, and cut cycle time.
- Silver-thrift optimization, allowing customers to maintain joint integrity with lower silver content alloys.
- Automation-ready pastes, designed for precision dispensing and high repeatability in robotic and induction-brazing systems.

Lucas-Milhaupt's Brazing Book and Quick Reference Guides-widely cited in engineering curricula-serve as educational cornerstones for generations of brazing professionals worldwide.

With a brand lineage stretching back nearly a century, Lucas-Milhaupt's reputation is anchored in trust and performance. The company's Sil-Fos® 5, Sil-Fos® 15, and Silvaloy® 450 alloys are household names in workshops and assembly plants around the world.

Innovation Protected by Patents

Innovation has always been Lucas-Milhaupt's hallmark. Over the years, the company has secured numerous patents in flux technology, preform design, and aluminum brazing, reflecting its continuous investment in R&D.

Key patents include:

- Advanced flux-composition systems that minimize residue and improve wetting.
- Processes for flux-coating and flux-coring preforms, enhancing consistency in high-volume brazing.
- Specialized aluminum and multi-metal brazing technologies, expanding beyond traditional copper-silver systems.

Sustainability and Regulatory Stewardship

As global environmental regulations tighten, Lucas-Milhaupt has proactively aligned its operations and products with sustainability goals.

- Its facilities operate under ISO 14001 Environmental Management Systems, ensuring responsible resource use and waste management.
- The company offers a wide selection of cadmium-free silver brazing alloys, eliminating toxic elements without compromising performance.
- Materials are fully traceable and compliant with RoHS, REACH, and DFARS/ITAR requirements, making them suitable for global OEMs in regulated sectors.

Silver is a precious and finite resource; Lucas-Milhaupt's R&D focus on silver-thrift formulations directly supports customers' efforts to reduce material intensity and carbon footprint. The company's engineers frequently assist clients in transitioning to lower-silver, higher-efficiency alloys—a small change that yields enormous sustainability dividends across thousands of joints.



Applications Across Industries

HVAC & Refrigeration

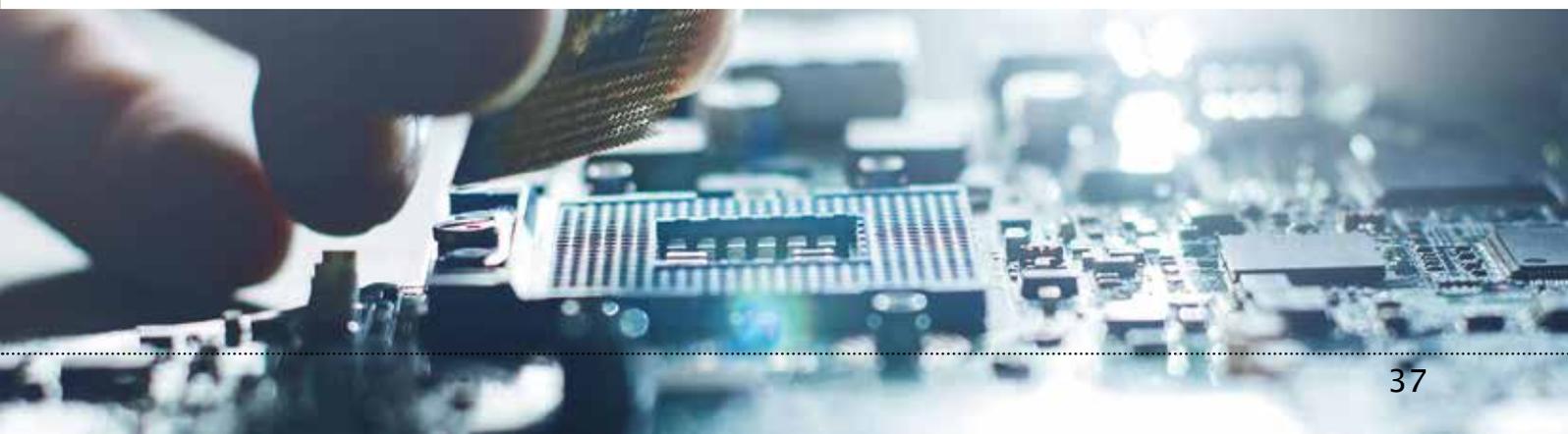
Lucas-Milhaupt's Sil-Fos® alloys are a mainstay of the HVAC industry, where millions of copper joints are brazed each year. Their self-fluxing properties and high reliability make them indispensable in compressor and heat-exchanger manufacturing.

Automotive & Mobility

From fuel lines to electric-vehicle heat exchangers, Lucas-Milhaupt's silver brazing alloys enable lightweight, durable, and corrosion-resistant assemblies. Their IATF 16949 certification reinforces trust among Tier-1 automotive suppliers.

Aerospace & Defense

In the skies, joints must withstand extreme stress and temperature cycles. Lucas-Milhaupt's high-purity silver-nickel alloys, manufactured under AS9100D protocols, meet these demands with exceptional consistency.





Electronics & Energy

For power electronics, sensors, and renewable-energy components, the company offers low-temperature silver alloys and pastes suitable for fine-pitch assembly and vacuum brazing.

Global Reach, Local Understanding

What differentiates Lucas-Milhaupt from many competitors is its geographical spread and cultural agility. With production hubs in Cudahy (USA), Ribérac (France), and Suzhou (China), the company offers customers supply continuity and market-specific expertise.

In Europe, engineers in France work closely with high-tech manufacturers for aerospace and automotive applications. In Asia, the Suzhou plant serves the fast-growing HVAC and electronics sectors, ensuring on-time delivery and localized service.

As industries evolve toward electrification, miniaturization, and low-carbon manufacturing, silver brazing alloys will remain a critical enabler-and Lucas-Milhaupt is ensuring that these materials are cleaner, smarter, and more efficient than ever before. In a world where precision, sustainability, and dependability define competitive advantage, Lucas-Milhaupt stands as the silver standard. Its century-long legacy, global manufacturing scale, and relentless focus on innovation have made it a trusted partner for industries that cannot afford to fail.

Whether in the copper tubing of an air conditioner, the fuel systems of an aircraft, or the power electronics of a solar inverter, Lucas-Milhaupt's silver brazing alloys form invisible but vital bonds-uniting components, companies, and continents in a shared pursuit of engineering excellence.

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