

## CAMBRIDGE-LEE INDUSTRIES LLC

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## Cambridge-Lee Industries LLC produces copper tubing utilizing recycled scrap

CLI is located in Reading, Pennsylvania and produces alloys UNS C12200 and UNS C12000 copper tubing.

The process of scrap recycling entails the purchase of #1 grade scrap from multiple sources and converting it in a finished cast form, utilizing a reverbatory furnace, where the melt is fire refined, reduced and alloyed to a melt that meets ASTM specification requirements for either alloy UNS C12200 or UNS C12000 and a floating slag by-product. Currently, operations purchases approximately 80% of #1 scrap with the remaining melt being composed of internal scrap. The slag (metal oxides) is skimmed off the molten bath and collected into slag pans for further reclamation. When all chemistry requirements are met, the casting process can begin. The cast form is in logs which are then cut into billets for the subsequent operation.

Casting may also be performed utilizing a cast and roll furnace which utilizes primarily cathode and internal scrap produced from the same operation. The melt is alloyed to meet ASTM specification requirements for either alloy UNS C12200 or UNS C12000 and creates a floating slag by-product. The slag (metal oxides) is skimmed off the molten bath and collected into slag pans for further reclamation. When all chemistry requirements are met, the casting process can begin. The cast form is a large hollow tube for the subsequent operation.

Copper tubing is produced utilizing either a hot billet extrusion press or a planetary rolling mill.

Subsequent operations include a series of tube reductions (both diameter and wall thickness) utilizing either straight drawing or coil drawing until the final dimensions are achieved.

Finishing operations include various cut straight lengths; level wound coils, and small flat coils per the customer requirements. The product lines include plumbing service, industrial applications and commercial applications.

Finished product is then sent directly to the customer or to our main distribution center for distribution to customers or company warehouses throughout the US.

If you have any questions, please feel free to contact our Quality Department at (256) 542-8186 or AStout@camlee.com.

Cambridge-Lee Industries, LLC.

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Director of Applications and Quality



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