

MicroGroove Manufacturing Processes and Equipment Are Ready for Production, Says the International Copper Association

Flexibility and Versatility of Production Lines Is a Major Advantage of Equipment for Making Coils from Smaller-Diameter Copper Tubes

New York, New York (April 22, 2015) – According to the International Copper Association, versatile equipment for producing a wide range of heat exchanger coils from smaller diameter copper tubes is available now. High-volume production of MicroGroove coils for residential air-conditioner has been an accomplished fact for more than five years and the successful production of coils for refrigeration systems and commercial applications is ever broadening.

“For any manufacturer, a major attraction of MicroGroove is the versatility of the production lines,” says Nigel Cotton, MicroGroove Team Leader for the International Copper Association. “Equipment today is capable of short runs of specialty products as well as high-volume production. Either can be accomplished with speed and precision.” Coils for commercial applications typically are not produced in high volumes, so fast-yet-flexible production is paramount, he noted.

Round copper tubes laced through optimized plate fins are the basis for highly efficient evaporators, condensers and gas coolers for countless applications in refrigeration and air conditioning. The ease with which such conventional coils can be made has made them attractive for use for many decades in the past.

The use of smaller diameter tubes with inner grooves allows for even more efficient coils. “Once the tubes became available from ICA member companies, the supply chain developed equipment and processes that could handle the smaller diameter tubes,” explained Cotton.

“The type of equipment remains basically the same,” says Cotton. “Tube benders, lacers and tube expanders are still at the heart of such production but these steps had to be adapted to smaller tube diameters. The equipment makers responded quickly and admirably so that today a manufacturer can purchase and/or build the equipment necessary to establish a reliable and versatile production line for the manufacturer of coils from smaller diameter copper tubes.”

During a recent webinar sponsored by the Copper Alliance, members of the audience were polled about their greatest concern with moving to smaller-diameter coil production. Their two biggest concerns were centered around “technology/innovation in this area” and “manufacturing process changes.”

“The audience responses suggest that many manufacturers are on the brink of transitioning from conventional copper tubes to MicroGroove,” says Nigel Cotton. “The early adopters are already in production and demand is increasing. Current equipment is proven in production environments and is ready for adoption by the mainstream industry.”

For more information, visit www.microgroove.net. Join the MicroGroove Group on LinkedIn to share your ideas about research directions and product development.
www.linkedin.com/groups/Microgroove-4498690.

About ICA

The International Copper Association, Ltd. (ICA) is the leading organization for promoting the use of copper worldwide. ICA's mission is to promote the use of copper by communicating the unique attributes that make this sustainable element an essential contributor to the formation of life, to advances in science and technology, and to a higher standard of living worldwide. Visit www.copperinfo.com for more information about ICA.

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