

Range of Applications Benefitting from MicroGroove Smaller-Diameter Copper Tubes Widens, Says the International Copper Association

MicroGroove Advances and Applications Highlighted at ACREX 2016

Mumbai, India (25 February 2016) – The International Copper Association announced today that the latest advances in MicroGroove, including new manufacturing techniques, new design tools and new applications, will be highlighted at ACREX 2016 at Booth E-25.

As attendees arrive in Mumbai for ACREX 2016, manufacturers continue to adopt and use MicroGroove smaller-diameter copper tubes for applications ranging from small heat exchangers weighing a few kilograms to large commercial systems weighing hundreds of kilograms.

“Round tube plate fin designs with MicroGroove are proving versatile and adaptable,” says Avinash Kemkha, Chief Manager at the International Copper Association India. “The smaller diameter tubes are readily manufactured into many sizes of heat exchangers in a wide range of applications.”

An important advantage of the RTPF technology is that for niche applications MicroGroove manufacturing lines can be changed over quickly. In the case of aluminum microchannel heat exchangers, where a sensitive aluminum brazing process is used, when the product size changes, failure rates and production costs increase.

Consequently, heat exchangers made with MicroGroove smaller diameter tubes can be mass produced in high volumes for such as room air conditioners, which are manufactured by the millions; or in small volumes for niche applications. Successful applications of MicroGroove smaller diameter tubes include the following:

- Split systems air conditioners, including both the outdoor condenser and the indoor evaporators, using a variety of conventional and new Low-GWP refrigerants.
- Heat pump applications, including outdoor heat exchangers used as evaporators, hot water heat pumps (HWHPs) and clothes dryers.
- Room air conditioners (RACs) including residential window-type air conditioners for global markets, which are produced in high volumes.
- Vending machines, including those using R744 as a refrigerant
- Refrigerated beverage-coolers with glass door display cases, including those using propane as a refrigerant.

Such heat exchangers are made around the globe including in India, China and throughout Asia as well as in Europe and the North America. Furthermore, it is becoming easier to design heat exchanger, now that MicroGroove correlations are contained in CoilDesigner® software which is widely used by OEMs in the design of ACR products.

“MicroGroove tubes offer superior performance in countless coil applications,” says Nigel Cotton, MicroGroove Team Leader for the International Copper Association. “Manufacturers in India have been especially active in the development of new MicroGroove applications and these advances will be on display at ACREX.”

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 (ICA) leads the world's copper industry on the issues critical to securing copper's future growth. ICA's members represent a majority of global copper production, and include many of the largest copper and copper alloy fabricators. ICA's status as a not-for-profit trade association provides its members with a credible, independent advocate to address challenges faced by the collective industry. ICA increases awareness and 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 throughout the world.

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