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NEWS RELEASE

Mitsui Kinzoku Begins Mass Production of the Latest Thinner Carrier Product of Extremely-Thin Electrodeposited Copper Foil with Carrier

MicroThin™

—Saving resources and energy by reducing the carrier thickness from 18 μm to 12 μm—

Mitsui Mining & Smelting Co. Ltd. (President: NISHIDA Keiji; “Mitsui Kinzoku,” hereinafter) is pleased to announce today that its latest thin carrier product, the extremely-thin electrodeposited copper foil with carrier MicroThin™, has begun mass production and shipment.

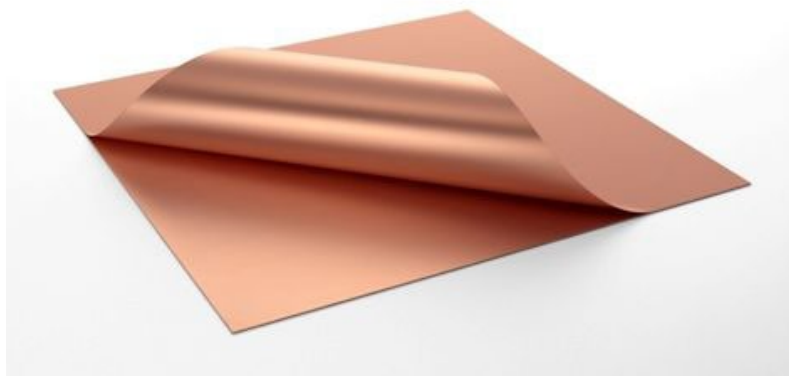
Manufactured by Mitsui Kinzoku, MicroThin™ is an extremely-thin copper foil (thickness: 1.5 to 5 μm) that is suitable for forming fine circuits supported by a copper carrier foil (thickness of existing product: 18 μm). This product has been highly regarded by our customers as its ability to be shipped in rolls as wide as 1,300 mm and its highly stable carrier peel strength help increase their productivity and process yield. The extremely-thin copper foil is used in circuit formation, and the copper carrier foil is peeled off in our customer's process and reused as a recyclable resource*¹.

In the background of various value creation activities carried out by Mitsui Kinzoku, the newly developed MicroThin™ has been designed to have a thinner copper carrier foil of 12 μm, down from 18 μm previously. This thickness reduction is expected to produce the following benefits for the product supply chain including our company.*².

- ① The total amount of copper resources in cyclic use will decrease because less copper material will be used during the production of MicroThin™ and reduced the amount involved in recycling and reuse, including customer's process. This will save resources.
- ② A thinner copper carrier foil requires less energy in manufacturing, while a lighter product requires less energy in transportation. This will save energy.

Under the slogan of *Taking full advantage of Material Intelligence*, we at Mitsui Kinzoku will continue to ensure stable product quality and sufficient supply capabilities for our customers while at the same time contributing to the creation of a sustainable society through our business activities.

*1: Picture of MicroThin™

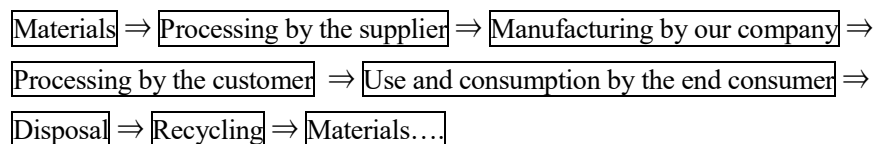


Top (curling sheet): Copper carrier foil (thickness: 18 μm and 12 μm)

Bottom: Extremely-thin copper foil (thickness 1.5 to 5 μm)

*2: Supply chain

A series of business activities that continue in a circle, such as:



<For reference> Relationship to the Sustainable Development Goals (SDGs)

The SDGs are a set of 17 goals to be achieved by 2030. They were adopted by the UN at the UN General Assembly held in September 2015. This activity in the copper foil business apply to the two SDGs below. We will continue to contribute to the achievement of the SDGs.

[12. Responsible Consumption and Production]

[13. Climate Action]

[Inquiries]

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