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NEWS RELEASE

Promotion of Commercialization of HRDP®, a Specialty Carrier for Next Generation Semiconductor Packaging

— Second Line Now in Operation and Collaboration to Be Enhanced —

Mitsui Kinzoku Company, Limited (NOU Takeshi, President; hereinafter "Mitsui Kinzoku") announces that Mitsui Kinzoku and GEOMATEC Co., Ltd. (CEO: MATSUZAKI Kentaro; hereinafter "GEOMATEC") will change the current structure of the collaboration between the two companies to further strengthen their collaborative relationship following the start of the operation of a second dedicated HRDP® line. HRDP® is a specialty carrier for next-generation semiconductor packaging that was developed by Mitsui Kinzoku and is manufactured by GEOMATEC.

The goal of HRDP® is to facilitate the implementation of next generation semiconductor packaging while ensuring high production efficiency. It consists of a release layer and a copper layer formed using the sputtering method, which are laid on a carrier made of glass or other materials. Applications are being considered, mainly in the area of semiconductor packaging substrates and the like.

In FY2023, it was decided that Mitsui Kinzoku and GEOMATEC would invest in the second production line at GEOMATEC's Ako Factory. It has been completed and will soon be operational. Given its characteristics, the second line will significantly reduce the amount of foreign matter caused by handling, thanks to processes being automated and other measures that greatly improve quality. This will enable Mitsui Kinzoku to meet the high quality requirements of its customers. In addition, production capacity will increase from 110,000 m² to 160,000 m².

For the second line, GEOMATEC invested in a sputtering system used in film formation, and Mitsui Kinzoku invested in the systems for the processes before and after film formation during the introduction phase. The two companies consulted with each other and decided that Mitsui Kinzoku would purchase the sputtering system to include it in its assets. The decision was reached because the continuous improvement of the equipment as a whole will be necessary to meet the demands of front-line customers, and it has been determined that having all of the equipment be assets of Mitsui Kinzoku would be appropriate to facilitate the accelerated implementation of improvements using Mitsui Kinzoku's production technology effectively combined with

GEOMATEC's high-level film formation expertise. GEOMATEC will promote the early commercialization of

HRDP® by transforming itself into an enterprise driven by production technology and accelerating process

improvement leveraging its strengths in the thin-film technology it has cultivated over many years and further

enhancing the structure of the collaboration between Mitsui Kinzoku and GEOMATEC.

Mitsui Kinzoku's Business Creation Sector led the development project as the unit steering HRDP business.

On October 1, 2025, the project was handed over to the Engineered Materials Sector, and the unit's name was

changed to the HRDP Business Development Division. The Engineered Materials Sector includes the Copper Foil

Div., which has a large share of the global ultra-fine circuit formation market, and the PVD Materials Div., which

manufactures sputtering targets and possesses knowledge of sputtering technology. The sector will further the

promote commercialization of HRDP® leveraging the synergy between these elements.

Mitsui Kinzoku will contribute to the realization of a sustainable society by implementing its vision for 2030,

"Building new businesses — and the future— with our material intelligence," based on its purpose, "We promote

the well-being of the world through a spirit of exploration and diverse technologies."

GEOMATEC will continue to ensure stable quality and establish a production system for Mitsui Kinzoku

and also play their role as professionals providing valuable production technology and thin-film products.

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Right: NOU Takeshi, Mitsui Kinzoku Left: MATSUZAKI Kentaro, GEOMATEC



First and second HRDP lines at GEOMATEC's Ako Factory

Photos of HRDP®



Panel type 300 × 300mm 310 × 310mm 415 × 510mm 510 × 515mm 600 × 600mm



Wafer type Φ300mm