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NEWS RELEASE

## **Agreement with Helical Fusion Concluded Regarding Collaborative Research and Development of Fusion Machine Blankets**

Mitsui Mining & Smelting Co., Ltd. (president: NOU Takeshi; hereinafter, “Mitsui Kinzoku”) has concluded an agreement on collaborative research and development of blankets\* which are essential in the development of steady-state fusion machines, with Helical Fusion Co., Ltd. (head office: Chuo-ku, Tokyo; CEO: TAGUCHI Takaya; hereinafter “Helical Fusion”).

Nuclear fusion power generation is a next-generation energy source that does not emit CO<sub>2</sub>. The resources that are the fuel for this technology exist in large amounts in seawater. It is expected that this technology will be able to sustainably maintain a decarbonized society. Mitsui Kinzoku invested in Helical Fusion, a nuclear fusion startup, through corporate venture capital in 2023. The two companies have looked for the areas where they can collaborate using Mitsui Kinzoku’s materials technologies in pursuit of a first-of-its-kind steady-state fusion machine. Recently, an agreement has been concluded with Helical Fusion regarding collaborative research and development of blanket products being planned by Helical Fusion. The development of blanket will continue based on the technologies of Mitsui Kinzoku’s Ceramics Div.

Mitsui Kinzoku offers durable sintered ceramics such as alumina, silicon carbide, silicon nitride, tantalum carbide and niobium carbide. Going forward, we will create synergy between Mitsui Kinzoku, whose strengths include sintered ceramics, and Helical Fusion, which possesses technologies for the design of fusion machines. In this way, the two companies will engage in product development aiming to achieve the implementation of a steady-state fusion machine. Mitsui Kinzoku possesses highly functional technologies including the new iconos™ series of rare metal solution materials. We will extensively and actively search for areas other than blankets where Mitsui Kinzoku’s technologies can contribute and we will seek to commercialize the results.

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.”

[Glossary]

\* Blanket

An important component that plays a role in taking energy out of a fusion machine, increasing fuel and protecting the entire fusion device with the goal of generating electricity from a nuclear fusion reaction.

[Contact]

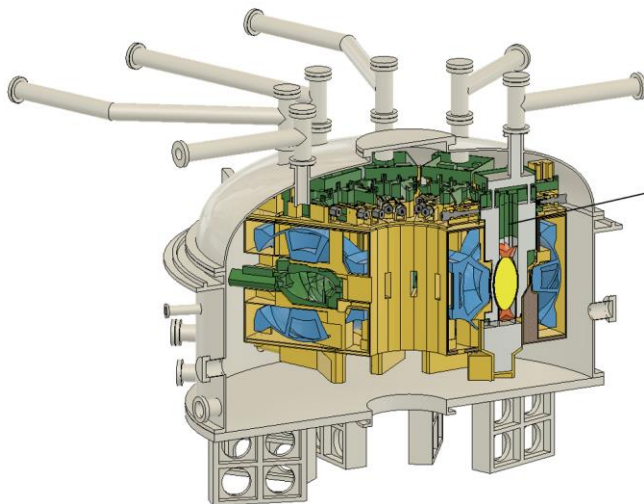
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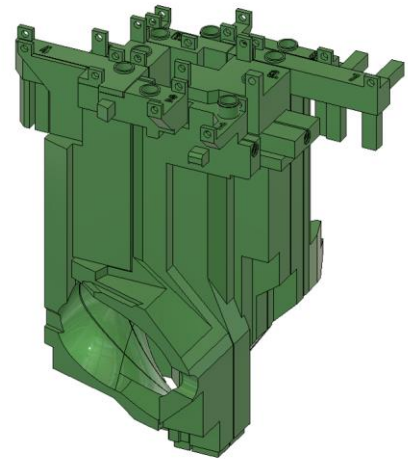
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[Reference]

**First power generator developed by Helical Fusion**



**Blanket enclosure being developed collaboratively**



First-of-its-kind steady-state fusion machine developed by Helical Fusion