

JOINT JAPANESE-GERMAN NEWSLETTER

NEWS FROM ICC JAPAN

Connecting the German and Japanese Composite Industry

VOLUME 4 | MARCH 31, 2025



Joint Japanese-German Newsletter
Connecting the Japanese and German Composite Industry

Dear CU Members

Here is the fourth issue of Joint Japanese-German Newsletter, highlighting events in the latter half of FY2024 as well as exciting new collaboration between Germany and Japan and the latest technology updates.

ICC celebrates its 10th anniversary. We will keep committed to contribute to the development of the composites industry by connecting companies and regions in Japan through various collaborative activities, and by serving as a hub connecting the composites industry in Japan and overseas. Hoping you will enjoy reading.

from ICC Team

FIP-MIRAI@ICC: New Collaboration between Germany and Japan

ICC Japan and the Fraunhofer IGCV research institute in Augsburg (Germany) have announced their new collaboration "FIP-MIRAI@ICC" aiming to develop solutions for global challenges in composite recycling.

The new collaboration will promote R&D, technology transfer and business development under the research theme 'Manufacturing and application technologies using recycled carbon fiber composites', utilizing ICC's strength in composite resin technology and manufacturing process technology and IGCV's superiority in recycled carbon fiber processing technology.

FIP-MIRAI@ICC is the first Fraunhofer Innovation Platform base that the Fraunhofer Institute has established in Japan. "MIRAI" means "future" in Japanese and it will tackle themes that will lead to the 'future' of composites and a sustainable society with composites. It is half funded by Fraunhofer and half funded by ICC. The FIP's initial term has a duration of five years (2025 - 2030) and a budget of €2 million.

While lightweight and high-stiffness composites play an increasing role in the realisation of a decarbonised society, the increase in composite-related waste is a global challenge: with FIP-MIRAI@ICC, composite waste is seen as a valuable resource for the circular economy to ensure sustainability for future generations.

For More Information

[Website \(ICC/KIT\)](#)

[Website \(Fraunhofer IGCV\)](#)

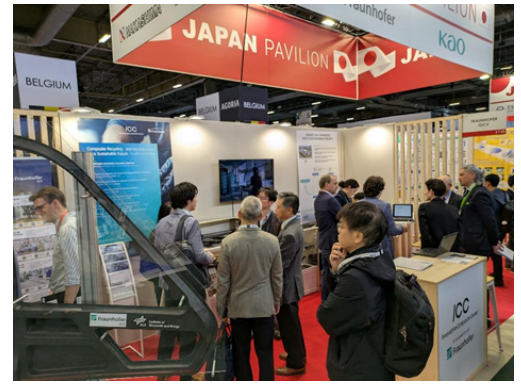


JEC WORLD 2025

JEC World, the world premiere international trade show for the global composites industry, was held from 4-6 March 2025. ICC set up a joint booth with the Fraunhofer IGCV in the Japan Pavilion to promote our new collaboration, FIP-MIRAI@ICC, along with the respective outstanding technologies of the Fraunhofer IGCV and ICC. FIP-MIRAI@ICC was officially signed a week before the JEC and a press conference was held at the booth. The details of the press conference is available on the JEC website.

The joint stand with Fraunhofer Germany in the Japan Pavilion was particularly eye-catching and, due to its good corner location, many visitors stopped by and showed interest in the contents of the exhibition.

[For the JEC article](#)



ICC/HACM Joint Forum (86th ICC Forum)

The 86th ICC Members' Forum and the members-only seminar of the Hokuriku Advanced Composites Materials Association (HACM) were jointly held in Kanazawa, on 19 March 2025. ICC Forum is a monthly conference for those who participate in the ICC Membership Program to exchange the latest information and to have networking together. The HACM is a corporate research group chaired by ICC Director Uzawa and has about 55 member companies. The speeches were given by Dr Frank Manis of the Fraunhofer IGCV, Prof Kazuto Tanaka of Doshisha University (Kyoto), Dr Tsunehisa Miki of the National Institute of Advanced Industrial Science and Technology (AIST) and others. In the evening, about 60 participants networked during the reception

[Website \(HACM\)](#)



Composite Highway Convention 2024

The annual conference of the Composite Highway Consortium (CHC) was held on 16 January 2025. This year, ICC was in charge of organising the conference, which was attended by more than 160 participants. The CHC is operated by three composite centres in Japan - Innovative Composite Center (ICC) of Kanazawa Institute of Technology, NCC of Nagoya University and GCC of Gifu University - and works together with companies in the region. Keynote speeches were given by Dr Bastian Brenken from Composites United, Prof Klaus Drechsler from Technical University of Munich and Dr Frank Manis from Fraunhofer IGCV. The participants showed a keen interest in German R&D trends and the cooperation activities between Germany and Japan.

[Event Program \(Japanese\)](#)

[Website \(CHC\)](#)



Upcoming Event

JISSE-19 TECHNICAL CONFERENCE

SAMPE Japan is delighted to be organizing JISSE-19. We trust you will have an outstanding experience at the symposium and during your stay in Tokyo and Japan.

Date : 2-4 December, 2025

Venue : Ariake Central Tower & Conference, Tokyo

[Website \(SAMPE Japan\)](#)

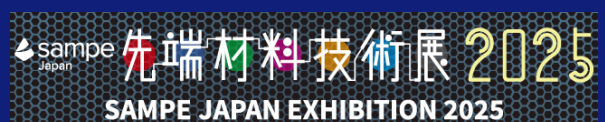
SAMPE JAPAN EXHIBITION 2025

SAMPE JAPAN EXHIBITION 2025 will take place from 3-5 December. We look forward to welcoming exhibitors from overseas companies!

Date : 3-5 December, 2025

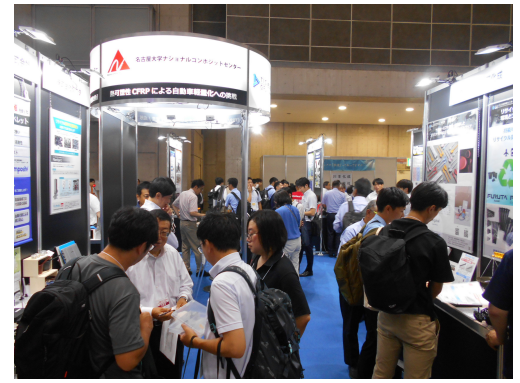
Venue : Tokyo Big Sight, (Odaiba, Tokyo)

[For More Details](#)



SAMPE JAPAN EXHIBITION AND AWARD 2024

SAMPE JAPAN EXHIBITION 2024 took place at Tokyo Big Sight from 18-20 September 2024. It is the largest composites exhibition in Japan organized by SAMPE Japan and has been held since 1989, in order to aim for the development of the advanced materials and their utilization technologies and to look at their impact on future technological innovations and developments. Under the theme 'Addressing Global & Social Challenges', 2024's exhibition had 165 booths (including Organizer's Zone) from 130 companies and organizations.



SAMPE EXHIBITION AWARD is a new initiative that started since 2023 to recognize companies and organizations that have comprehensively evaluated the technology of their exhibits, exhibition methods and booth presentation and have achieved excellence. The pre-presentation review (web) and the first day of the exhibition are evaluated and scored by the juries, and 4 companies were selected as this year's SAMPE Exhibition Award. In this issue, we would like to introduce briefly about these 4 initiatives. SAMPE Japan would like to increase the presence of this award in the future, not only to promote the award-winning products, but also to motivate participation in the exhibition. We hope you will enjoy the latest technologies from Japan.

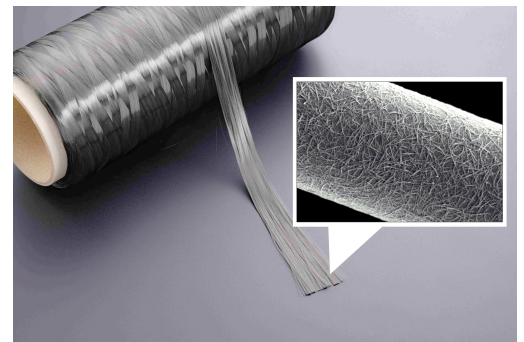
🏆 Carbon nanotube (CNT) composite carbon fiber (Namd) for FRP and unique physical properties

Nitta Corporation

Namd™ is a technology that coats a uniform carbon nanotubes (CNT) film on the surface of each individual carbon fiber (CF). It is also possible to uniformly coat regular tow and large tow. This CNT coating enhances the interfacial properties between CF and resin of CFRP.

As for products, we offer Namd™ prepreg (PPG) and Namd™-CFRP molded as intermediate materials. Typical characteristics include the effect of reducing the dependence of the elastic modulus on speed and the vibration damping characteristic during large deformations, so it is effective in sports equipment such as badminton and tennis rackets and golf shafts that strike at high speeds.

In addition, there are expectations in the industrial field for the improvement of mechanical properties, such as the effect of improving fatigue durability by Namd.



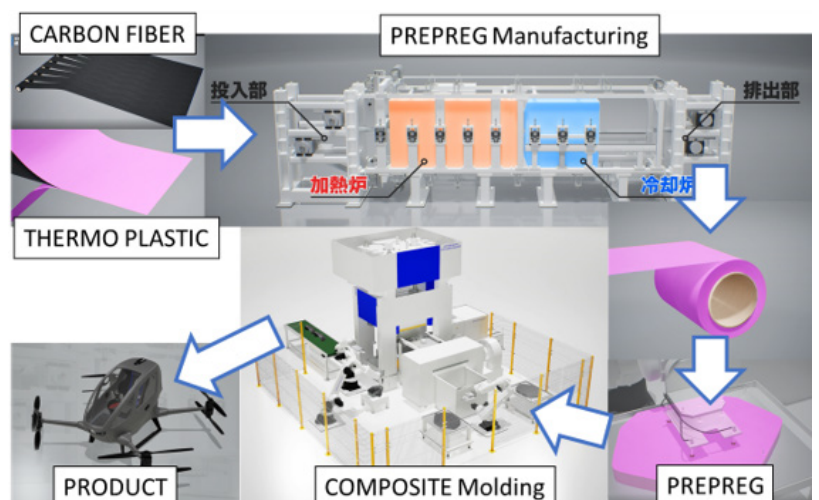
<https://www.nitta.co.jp/en/lp/namd/>

🏆 CF RTP manufacturing system from beginning to end

Shibaura-machine.co.jp

Shibaura Machine is an industrial machinery manufacturer that has been in business for over 75 years and manufactures and sells plastic molding machines (extrusion machines, injection molding machines) and machine tools.

We have developed a highly productive continuous molding system for PREPREG and an automatic molding system for COMPOSITE MATERIALS. The continuous molding system for PREPREG uses a double belt machine, which allows for continuous production of PREPREG. The automatic composite molding system uses robots to safely and efficiently produce COMPOSITE MATERIALS. The combination of these two systems allows for total engineering of production from CF RTP materials (CF and thermoplastics) to COMPOSITE MATERIALS (parts).



[For more details](#)

Thermoplastic Composite Fuselage Panel with Innovative Manufacturing Process Kawasaki Heavy Industries Co.,Ltd.

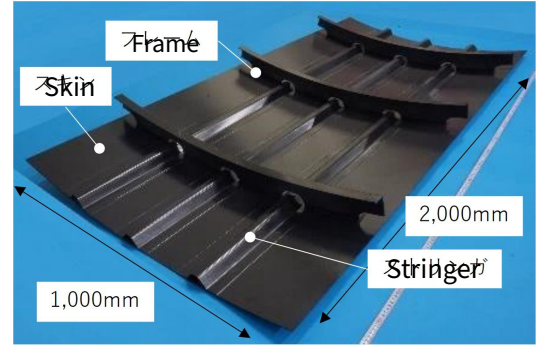
■ Novel Manufacturing Process technology utilizing the advantage of thermoplastic validated

- Continuous one-piece fuselage skin-stringer panel fabrication
- Curved components fabrication
- Innovative welding and assembly

■ Addressing future narrow body challenges: High-rate, low-cost, and light-weight.

- High-rate achieved by continuous compression molding of longer parts.
- Lower cost compared with the conventional process*
- Lightweight manufacturing technology for complex ply-drop variations

*Conventional process : High-temperature, high-pressure, long-time fabrication with autoclave



Research & Development of Recycled Carbon Fiber Process Miraikasei Inc.

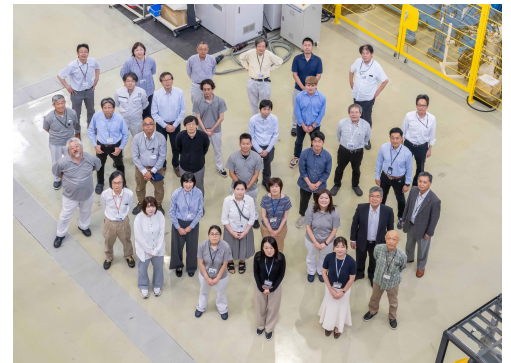
Mirai Kasei is dedicated to advancing carbon fiber recycling technologies by developing optimized recovery methods tailored to different types of carbon fibers and resins. Through meticulous process selection, the company ensures that the most effective recycling approach is applied to each material, maximizing performance and sustainability. This proprietary recycling process minimizes resin residue and preserves the mechanical strength of the recovered fibers. As a result, high-quality recycled carbon fibers are produced with minimal performance degradation, making them suitable for demanding applications. This technology transforms CFRP into sustainable, eco-conscious materials by continuously refining recycling techniques.



[For inquiries](#)

10 Years of Our Progress and The Future

Innovative Composites Center (ICC) celebrates its 10th anniversary. With the philosophy of "creating the future with composite materials," the ICC has supported R&D activities in Japan by providing a rich R&D environment and a platform where researchers from companies and universities can gather, aiming to expand the application of composites. We have been committed to contribute to the development of the composites industry by connecting companies and regions in Japan through various collaborative activities, and by serving as a hub connecting the composites industry in Japan and overseas. We are now embarking on new initiatives for the next 10 years. To celebrate our 10th anniversary, ICC was featured in a full-page spread in JEC Composites Magazine Issue 158 (September-October 2024), titled "10 Years of Progress and the Future."



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