Special Feature 1

Chips

BAMBOO+ Paving the Way for the Future

As global warming and resource depletion become more serious, we urgently need to realize a sustainable society. Particularly in the manufacturing and materials industries, there is a growing emphasis on creating business models that reduce environmental impact and are in harmony with local communities. BAMBOO+, a biomass composite material, is moving forward toward new possibilities to contribute to wellbeing, environmental responsiveness, and local economies by maximizing the use of bamboo, a sustainable resource.

Bamboo: a sustainable resource in Japan

Contribution to the community and the Earth

The community and the Earth

This project is being carried out in cooperation with local communities. Regular harvesting of bamboo preserves the beauty of bamboo forests and satoyama, and the material also contributes to reducing the use of petroleum-derived materials.

We aim to realize a nature-positive future by building a sustainable business model that utilizes domestic bamboo

BΛMBOO--

The beginnings of BAMBOO+

We established MIROKU TECHNO WOOD in 1999 as a joint venture with Miroku Firearms Mfg. in Kochi Prefecture, and have a history of mass-producing steering wheels made from bamboo in 2008. We have contributed to the local community through the mass production of bamboo steering wheels as an industrial use of bamboo, but we wondered if we could use bamboo more widely and sustainably. In 2021, we joined forces with Kochi Prefecture and Miroku Techno Wood's partners in bamboo handle production to start developing materials that add (+) new value to bamboo in order to contribute to a higher quality of life and to work in harmony with nature and local communities



Bamboo grows quickly and has less environmental impact than other materials, and has been a part of our lives for centuries. Today, however, bamboo forests are not well managed, and their rapid growth is actually causing problems. If left unattended, bamboo forests can encroach on surrounding forests, negatively impacting the ecosystem and landscape, as well as causing disasters. That is why it is important that we utilize bamboo as a resource and properly maintain it to make it sustainable again. Bamboo is a material whose supply is sustainable and of great value to our future.



BAMBOO+ is a biomass material made from locally collected bamboo chips that have been converted into fiber using our proprietary technology and then composited with resin for industrial molding use. BAMBOO+ BP5300 and BAMBOO+ BP5100 are composite

materials containing at least 50% bamboo fiber with the addition of polypropylene-based resin. In particular, BAMBOO+ BP5300 contains half the amount of petroleum-derived components as conventional materials and has physical properties that can be used in automotive parts. Tokai Rika, which has been involved in the production of automotive interior parts that we touch with our hands, was able to speed up the development of this material by targeting the needs for the material and the strong desire of members to bring this material to the world as soon as possible. This material does not require painting or film decoration, and can be designed to take advantage of natural patterns and textures. It is expected to be well received by consumers seeking sustainable design. Further market expansion is anticipated, especially in the automotive industry, through its application as an interior material.



We have acquired the "Biomass Mark" certification of the Japan Organics Recycling Association



No 230299 This material is made from plant-derived raw materials.

Collec Environmental/ecosystem conservation Resolving community issues · Landslides caused by neglected bamboo forests Job creation Incinerable

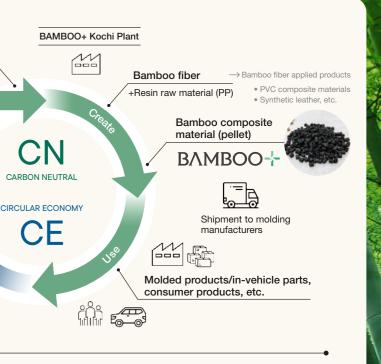
Lumber collection

BAMBOO+ containing at least 50% natural fibers can be incinerated as wood by local authorities

BAMBOO+ lets us envision a future that is not only environmentally friendly, but also contributes to the local economy and improves the wellbeing of society as a whole. Products made from sustainable bamboo fiber materials will play an even more important role in our daily lives. With BAMBOO+, we will continue to take on the challenge of achieving the grand goal of carbon neutrality by 2050. We will continue to develop innovative technologies and strengthen our partnerships with local communities to create a future that is friendly to the earth and its people in order to realize a sustainable society. We will strengthen our alliances with partners who share our vision and who will work together to shape our future.

Strategies and goals for growth

We plan to expand the BAMBOO+ business with the goal of achieving sales of 1 billion yen or more by FY 2030. As an important step toward this goal, we launched an in-house company in January 2024 to develop a business operation structure. This is not only increasing the speed of project development, but also revolutionizing the traditional way of working and promote innovative business development. Furthermore, in March 2024, we acquired our own plant in Kochi Prefecture and plan to begin full-scale production in the summer of 2025.



By FY 2030 Sales

At or above

1 billion yen