

HI-COOK

NEWS LETTER FROM ASAHI SOSETSU co.,Ltd. | vol. 004

Café

TOPICS

HI-COOK Eye

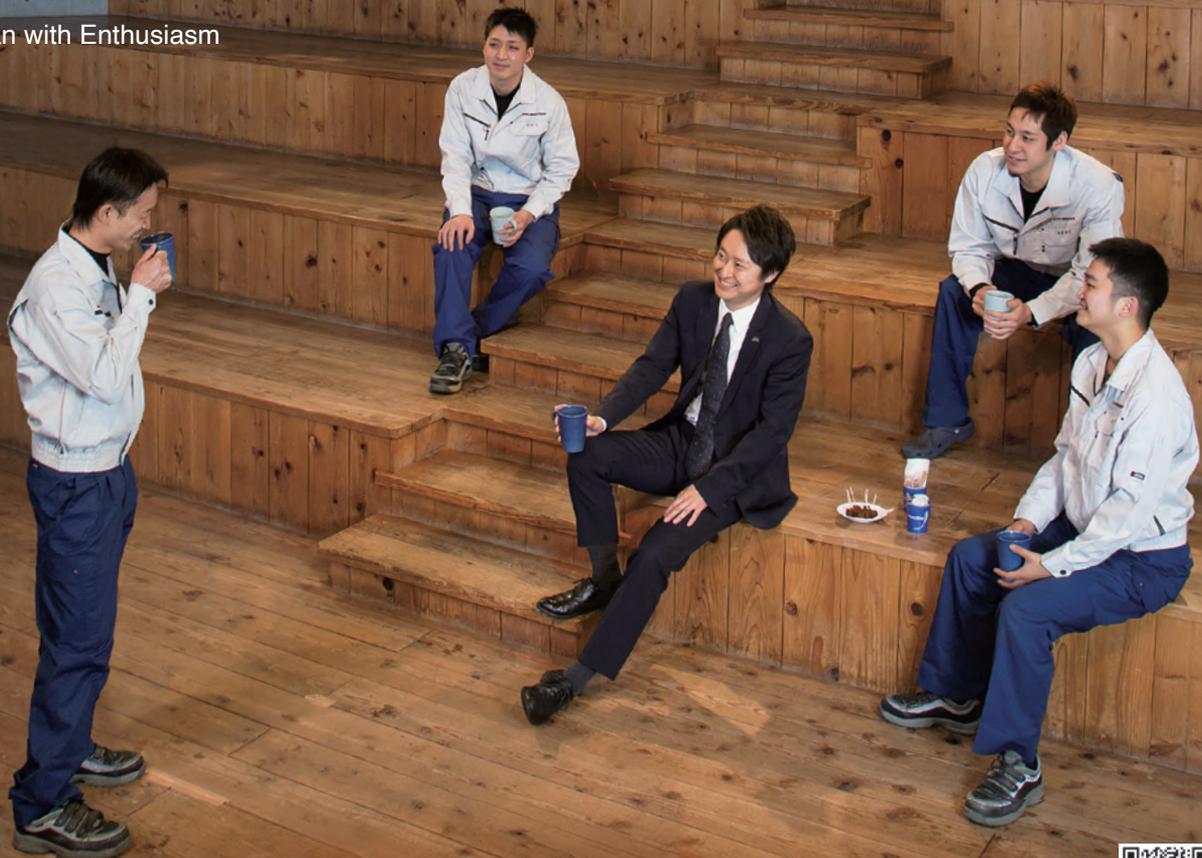
Carbon Neutrality and Cooking Machines

Visiting HI-COOK Customer

Noto Seika Churros

Revolutionary Change in Rice-Cake
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Trusted Cooking Equipment

The Man with Enthusiasm



Photograph taken at 7☆Café, which is called "Na-na-ho-shi café" in Japanese.
The café is housed in Shihsiku Kogen (plateau) Fureai-kan which is famous for overhead-hovering paragliders.
Live performances and events are irregularly held in the rotunda which is filled with comfort and warmth of wood.
Instagram: @7hoshicafe



Follow us on social media!

Carbon Neutrality and Cooking Machines

The effort to reduce greenhouse gas emission is drawing increasing global attention. Prime Minister Kan announced his commitment last October to “realize non-carbon societies by the year 2050.” President Biden also announced that the United States intended to become carbon neutral by the midcentury and to rejoin Paris Climate Accord.

The carbon neutrality, as everybody might know, is a state of balance between CO₂ emissions and its removal. Though the idea itself is controversial, IPCC’s fifth assessment report insists a considerable amount of effort should be devoted to realizing the non-carbon society because, pointing out the expected global temperature rise by max. 4.8°C by the year 2100, the increase, otherwise, will cause land loss due to rising sea level, make negative impact upon animals and aggravate damage by torrential rain.

Which Is More Environmentally Friendly?

Electricity comes readily into mind when one thinks of the word “non-carbon.” However, we generate CO₂ even when producing the so-to-speak eco-friendly energy. Moreover, such fossil fuel as coal and LNG makes up more than 60% of net Japanese electricity generation while renewable energy only little more than 20% with many Japanese nuclear power plants’ shutdown.

Let’s find out which is more eco-friendly, an electric fryer or a gas fryer. One of Asahi’s gas fryers, DBC-43B, when operating at the highest heat setting, generates 26,284g CO₂/h while an electric fryer 0g CO₂/h according to a calculation *1. We must remember here the amount of CO₂ emitted during the electricity generation, too, however. Assuming that the power is generated from coal, DEBC-43B, the gas fryer’s counterpart, emits 65,632.8g CO₂/h. If the electricity is generated using waterpower, on the other hand, the fryer generates 765.6 CO₂/h, less

CO₂ than the gas fryer*2. That means that you must use more renewable energy for power generation to be environmentally friendly. Such technologies as offshore-wind and hydrogen employed power generation could provide effective solutions though there remain many issues to be addressed in terms of power supply stability and cost.

Potentialities of Hydrogen – the Energy of the Future

Carbon-free hydrogen is said to play an essential role in realizing carbon neutral societies. Though hydrogen as an energy source has been drawing public attention since before, the chemical element has not been able to be described as carbon free yet because its production process does produce CO₂. The use of the element has become realistic, however, as a hydrogen generation technology development project has been launched: the project, being targeted to be completed in 2030, employs the thermochemical IS process which uses heat from high-temperature gas reactors.

While hydrogen is most typically used as auto fuel, it could serve other purposes, too: “Research and development of common infrastructure technology for oxygen-hydrogen combustion turbine power generation systems” was adopted as a NEDO (New Energy and Industrial Technology Development Organization)’s research and development theme last

year. Though it will be a long way off, if the effort was rewarded, thermal power plants, as current base load station, could be replaced by hydrogen power plants, and Japan be nearly self-sufficient in power thanks to hydrogen and renewable energy power production.

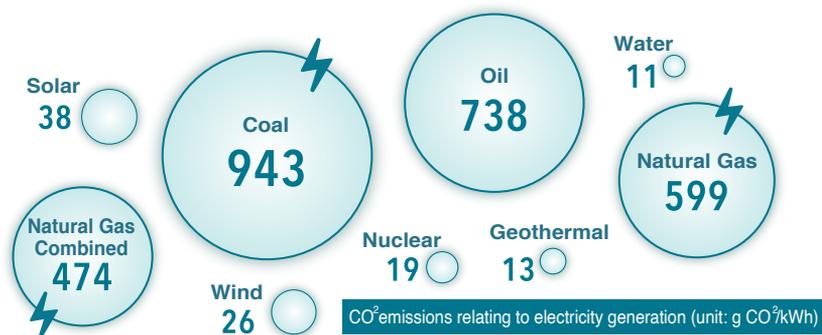
Development of Carbon Free Cooking Devices

Today’s cooking equipment uses gas and/or electricity as its heat source(s)*3. Considering the reality of domestic power generation, electric equipment is not necessarily the most environmentally friendly. Hi-efficient gas cooking devices, when we look extensively at them, could be more earth-friendly. Asahi is committed to developing the cooking machines which offer improved heating efficiency and reduced heat loss, and to striving to develop and offer as efficient and effective, in producing delicious food, machines for various heat sources as we possibly can. We also want to offer hi-performance cooking devices, in the future, which include hydrogen-burners and use carbon-free electricity to help our customers reduce their environmental impact.

*1 Asahi measures a machine’s maximum fuel consumption when the machine is fully loaded. Therefore, actual fuel consumption can hardly match the maximum one. The latter always exceeds the former.

*2 The calculated amount of CO₂ emissions include those which arise during transportation.

*3 Because steam is generated using fossil fuel, steam cooking devices are classified as gas devices here.



Noto Seika Churros

Churro is a type of fried snack very popular in Spain and Portugal. It is made generally by pressing the dough, the mixture of flour, water and a little bit of sugar and salt, through a piping bag fitted with a star nozzle, frying it and seasoning it with cinnamon and/or honey. Some churros are straight, and others curled, among which Japanese are familiar with 16-inch (approximately 40 cm) straight churros. Churros in



such shape are spread by Noto Seika, located in Noto peninsula, Ishikawa prefecture. They have been using Asahi's fryers for 30 years.

The Birth of Japanese Churros

It is Noto Seika (president: Mr. Aka) which first produced churros in Japan, whose tastiness is now known by many Japanese. Back in the year 1986, Mr. Aka, as the company's then senior managing director, saw churros for the first time in the United States. That changed his fate. He first wanted, using his connections, to sell them in Japan. However, it turned out to be impossible because some of ingredients were prohibited imports.

He, therefore, decided to "rather produce churros in Japan" in 1988. He talked to food suppliers, heard about Asahi, and bought his first churros fryer from Asahi. He remembers he recognized Asahi from its buildings he had seen from

Hokuriku expressway. Noto Seika was taken care of by Asahi's then second president (current chairman), who visited their factory very often. Mr. Aka said that he had been very impressed at the president's extensive technical expertise and that he was very lucky to have found such a good machine manufacturer. This way, he started the churros business in Japan by trial and error.

3 Years of Hardship and 30 Years of Astonishing Success

Though Noto Seika literally became capable of producing churros, they were very unpopular for the first three years, when a deficit kept increasing. Mr. Aka did not give up, nonetheless, because Noto Seika's then president encouraged him very strongly and he himself was very confident that the snack would sell well. He had two pictures in his mind of his churros selling well. One of them was of many young people strolling down the Harajuku Street with a churro in one hand.

In 1990, after the three years of hardship, the churros became popular. They sold extremely well, when he gave it a try, on the Harajuku Street, which was exactly what he had been dreaming. It took three years to make good churros: it was very difficult. That long time, however, seems to be worthwhile now that he sees people cheerfully walking with the 16-inch churro held in one hand, and others getting curious about and craving the attractive-looking snack. Since then, the churros have been selling well for 30 years, which Mr. Aka "just cannot believe." The crispy outside, sticky inside, slightly sweet and tasty churros are now known familiarly as "starry churros."

Present of Churros and Future of Noto Seika

Now, Japanese people love and call the Noto Seika-made 16-inch thin churros "churros." There seem to be three good reasons for the success. One primary reason is the employers' zeal for the churros production, itself. Other reasons are technology of food suppliers and of Asahi, the cooking device manufacturer. Noto Seika has set another goal of developing the churros' successor. We, Asahi Sosetsu, are sure that Noto Seika achieves the goal and determined to make ardent effort to assist them in the endeavor.



On the left: Mr. Aka, president, Noto Seika Co., Ltd.
On the right: Mr. Yoshino, sales chief, Asahi Sosetsu Co., Ltd.

Acknowledgement:

Genuine appreciation for Mr. Aka's kindness to share his story about churros with us: he had never granted any such interviews for the past thirty years. Machines are not something just to be left there after delivery. They need to be maintained when the time comes. We continue to do whatever we can so he feel secure with his maintenance expert nearby.

*We made Noto Seika special custom-made machines. We are very sorry but we are unable to answer any inquiries about the machines, accordingly.

The picture is for illustrative purposes only.



Revolutionary Change in Rice-Cake Cooking with HI-COOK's Safe and Trusted Cooking Equipment



For fried rice crackers and nuts:
brings about the taste of ingredients
and fries them until crisp



For light rice crackers and snacks:
baked to perfect texture and
brownness



Gas Fryer
Model DC-FS

1. Higher heat transfer efficiency employing a special heating system

Ensures increased efficiency compared with that of conventional direct heat system. Offers optimal temperature control by gathered burners in the infeed and discharge areas.

2. Evenly cooks both upper and lower product surfaces

The even cooking is realized owing to the hold-down and transport conveyors. Tailored optimal transport systems are available to suit your products.

3. Easy to wash and hygienic

Special lift-able conveyor frames enable quick inside-oil-vessel cleaning.



Impingement Oven
Model IMPJ-BS

1. Hot air circulation system for uniform cooking

Special heat circulation technique realizes quick browning and uniform cooking. You can make the heating settings just right for each of your products.

2. Special nozzles enabling foods to be browned quickly and beautifully

The system evenly jets hot air over products through the special impingement nozzles to brown products perfectly.

3. Upper and lower separately-speed-controllable circulation fans

You can cook varieties of food products at will: the separate control enables upper/lower-surface being cooked at different setting.

MOBAC SHOW 2021

MOBAC Show 2021 (the 27th Machinery, Materials, Marketing of Bakery and Confectionery Show)

We are participating in the show, where you can find various machinery, facilities, equipment, materials, etc. for bakery/confectionery industries. We are going to display the fryer and the oven which suit your products, for example rice biscuits and snack foods, and needs. Come stop by our booth!

- **Date:** 9th (Tue.)–12th (Fri.) Mar. 2021
- **Opening:** 10:00-17:00
- **Venue:** Intex Osaka (1-5-102, Nanko-Kita, Suminoe-ku, Osaka)
- **Booth:** #329 (3rd Hall)



[How to Enter]

To reduce congestion at the entrance and as a precaution against the new coronavirus infection, pre-registration is required. Please pre-register at the MOBAC SHOW official website before visiting the show. For further information, please confirm the attached visitor information.

The Man with Enthusiasm Vol. 4

Development subsection chief Yuichi Miyagishi

Asahi's development department blends the skills they have developed over a long period of time and the latest knowledge to create value-added products for food industry. Mr. Miyagishi holds a leading position in that department. He was born and raised in a small town of just ten households. While having been being modernized, the town remains mostly a beautiful countryside. People have closely cooperated with each other for a long time in farming and community activities: he has seen it since his childhood.

Having determined "now to do something for the community," he participates in inherited observances and activities. That proves



that he "wants to protect the community and his friends." He also plays an important role to ensure peace and safety both in normal times and times of emergency, which includes firefighting, patrol, searching missing people, flood prevention and disaster rescue as a member of a firefighting company. He says, "You definitely need to work as a team when you fight a fire. You need to trust your teammate when extinguishing a fire and saving lives," which he learned through the activities. His motto is to "help people and be thoughtful." He actually applies the rules at work as well as in the community. His belief strengthens the team and helps the group solve problems.



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| Keiyo Foods Machines Co., Ltd. | 3218-5, Oomiya-cho, Wakaba-ku, Chiba, 264-0016 | +81-43-262-8466 |
| SK System Co., Ltd. | 12-30, Kotobuki-cho, Suruga-ku, Shizuoka, 422-8055 | +81-54-281-8581 |

<Associated company>

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