



ASIA & Middle East FOOD TRADE

JOURNAL FOR LEADERS IN FOOD & BEVERAGES

≡ MENU

Alimentaria

BARCELONA
18-21 March 2024
Gran Via Venue

BREAKING

ANDREY BARTLETT'S 'FLIPSIDE' WINS AWARD

NEWS DECEMBER 6, 2023 0

Completion of the research project SPLASH

Completion of the project following the development of a new washing machine and successful tests with plasma-based disinfection technology

In November, the research project SPLASH, which was funded by the German Federal Ministry of Food and Agriculture (BMEL), was officially brought to a close. Before this, the results of the project had already been presented to visitors at the KRONEN Customer Day: The twelve-month-long test phase, which used the newly developed HEWA washing machine in combination with the plasma washing process in an industrial setting, achieved positive results. Against this background, the partners from the Leibniz Institute for Agricultural Engineering and Bioeconomy (ATB Potsdam), the company Gartenfrisch Jung GmbH, the Leibniz Institute for Plasma Research and Technology (INP Greifswald), and KRONEN GmbH will continue to work together to scale the solution to meet various



The project involved the development of an innovative washing process for fresh-cut lettuce using non-thermal plasma technology. In this process, plasma-treated wash water (PTW) is used in a newly developed washing machine adapted to serve this precise purpose. The process for the hygienization of the lettuce helps to reduce the risk of packaged cut salads being contaminated with microorganisms.

Efficacy examined in a test phase lasting several months

To prove the efficacy of the process in an industrial setting, tests using PTW to process baby leaf lettuce and other types of lettuce in the [HEWA washing machine](#) developed by KRONEN were carried out over several months at the facility of the fresh produce manufacturer Gartenfrisch Jung GmbH. These tests examined the disinfection efficiency in the wash water and on the treated products, resource savings compared to other disinfection methods, and the optimization of the products' suitability for storage and transport.



Optimized in terms of hygiene and cleaning time: the HEWA washing machine



additionally be fully dismantled for easy and thorough cleaning and is therefore optimized in terms of hygiene and a reduced cleaning time.



A process with a good antimicrobial effect



The use of the HEWA washing machine with plasma-treated wash water (PTW) revealed extremely promising results, with the laboratory examination of the treated lettuce and the water samples providing evidence of a positive antimicrobial effect compared to the washing process using normal tap water. No negative effects of the treatment on the product whatsoever were detected. These results show that the project achieved its objective of developing a resource-conserving washing process using non-thermal plasma technology for disinfecting cut lettuce as gently as possible. The hygienization of the lettuce increases consumer safety by avoiding premature spoilage.

Expertise in research, machine development, and the food processing industry

The cooperation between the project partners from the [Leibniz Institute for Agricultural Engineering and Bioeconomy \(ATB Potsdam\)](#), the company [Gartenfrisch Jung GmbH](#), and the [Leibniz Institute for Plasma Research and Technology \(INP Greifswald\)](#) with KRONEN, the manufacturer of machines for the food industry, combines expertise and practical knowledge to facilitate the development of innovative, practical solutions to improve food safety. The research project was funded by the [German Federal Office for Agriculture and Food \(BLE\)](#) within the framework of the Innovation Funding program of the German Federal Ministry of Food and Agriculture (BMEL)

Following the completion of the project, the partners will continue to work together to publish the results and make the developed solution



Tags: German Federal Ministry of Food and Agriculture (BMEL), HEWA washing machine, Kronen GmbH, Leibniz Institute for Agricultural Engineering and Bioeconomy (ATB Potsdam), Leibniz Institute for Plasma Research and Technology (INP Greifswald), plasma-treated wash water, PTW, SPLASH

PREVIOUS ARTICLE

MeetingPack 2024 presents a programme that focuses on innovations to achieve sustainability goals by 2030

NEXT ARTICLE

The FPH5 packs preformed chewing gum at exceptionally high speed

Related articles



PROCESSING AND PACKAGING

JUNE 5, 2021

Cool Öcoologisch Herz Lolli Compostable Confectionery Packaging

German confectionery brand, Cool, has chosen NatureFlex™ compostable cellulose films from Futamura to package its confectionery product Öcoologisch Herz Lolli. NatureFlex™, and its big sister brand Cellophane™, have long been used for confectionery packaging due to their excellent



NEWS

JANUARY 17, 2023



Contract & Fulfilment Zone to be a highlight for outsourcing at Packaging Innovations 2023

The BCMPA – the Association for Contract Manufacturing, Packing, Fulfilment & Logistics–is representing its 200+ membership, in addition to over 20 exhibiting members at this year’s Contract Pack & Fulfilment show, now established as an essential part of the UK’s leading packaging event

Type and hit enter to search

barrier, outstanding optical clarity
and unrivalled deadfold, a

Birmingham on 15th&16thFebruary,
Contract Pack



GRUPO | GROUP
ELCOR



Tonadita

THE MOST
TECHNOLOGICALLY
BUTTER FACTORY
IN SOUTH
AMERICA

Argentina | Chile



Recent Posts

Type and hit enter to search



Avail MSME benefits by participating in the 3rd Edition of Dairy Expo at Chennai Trade Center



VKD seminars in January, February, and March 2024



Siam Coconut achieves greater operational efficiency and accuracy with Zebra Technologies



iPRO and parkrun Collaborate to 'Get Fans Fit for 2024' with Exciting Prizes for Participants



GRUPO | GROUP
elcor

Tonadita

THE MOST TECHNOLOGICALLY BUTTER
FACTORY IN SOUTH AMERICA

Argentina | Chile

Recent Comments

Ali Afsal on IPI aseptic systems

Ali Afsal on Gulfood 2022: Welsh Lamb sets foot in the Middle East's hospitality sector

Chinna Muthu rawther on IPI aseptic systems

Gladson Ronad on Gulfood 2022: Welsh Lamb sets foot in the Middle East's hospitality sector

SHAHZAD MUNIR on Used Food Machineries from the Netherlands

Type and hit enter to search



'IKA/Olympic of Chefs' to kick start in Stuttgart from 2nd to 7th February 2024

JANUARY 9, 2024



Avail MSME benefits by participating in the 3rd Edition of Dairy Expo at Chennai Trade Center

JANUARY 9, 2024



VKD seminars in January, February, and March 2024

JANUARY 8, 2024



Siam Coconut achieves greater operational efficiency and accuracy with Zebra Technologies

JANUARY 8, 2024



iPRO and parkrun Collaborate to 'Get Fans Fit for 2024' with Exciting Prizes for Participants

JANUARY 6, 2024



Discover how to control your crumb

Type and hit enter to search

Categories



BAKERY & DAIRY

BEVERAGES

CONFECTIONERY

EVENTS

FRUITS & VEGETABLES

INGREDIENTS

MARKETS

MEAT & POULTRY

NEWS

PROCESSING AND PACKAGING

TECHNOLOGY & SUSTAINABILITY

Top Stories



'IKA/Olympic of Chefs' to kick start in Stuttgart from 2nd to 7th February 2024

JANUARY 9, 2024



Avail MSME benefits by participating in the 3rd Edition of Dairy Expo at Chennai Trade Center

JANUARY 9, 2024



VKD seminars in January, February, and March 2024

JANUARY 8, 2024

Type and hit enter to search



Siam Coconut achieves greater operational efficiency and accuracy with Zebra Technologies

JANUARY 8, 2024



iPRO and parkrun Collaborate to 'Get Fans Fit for 2024' with Exciting Prizes for Participants

JANUARY 6, 2024



Published since 1983, ASIA & Middle East FOOD TRADE (AMEFT) Journal is an invaluable link between thousands of renowned ingredients and machinery suppliers and buyers as it has been for over three decades. This year, we are proud to celebrate our 37th anniversary.

Folgen
1.887

Latest posts



'IKA/Olympic of Chefs' to kick start in Stuttgart from 2nd to 7th February 2024

JANUARY 9, 2024

Type and hit enter to search



Avail MSME benefits by participating in the 3rd Edition of Dairy Expo at Chennai Trade Center

JANUARY 9, 2024



VKD seminars in January, February, and March 2024

JANUARY 8, 2024



Siam Coconut achieves greater operational efficiency and accuracy with Zebra Technologies

JANUARY 8, 2024

Categories

BAKERY & DAIRY

BEVERAGES

CONFECTIONERY

EVENTS

FRUITS & VEGETABLES

INGREDIENTS

MARKETS

MEAT & POULTRY

NEWS

PROCESSING AND PACKAGING

TECHNOLOGY & SUSTAINABILITY

Popular Tags

Type and hit enter to search



Innova Market Insights

Kerry

KHS

Sidel

Siemens

SIG

Symrise

TUTTOFOOD



© by Pan Media Matrix

Updated daily. No warranty for accuracy or completeness of information.

Copyright © 2020 by AMEFT. All rights reserved.

