

Product and Service Sustainability

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# Product and Service Sustainability



#### Number of merchandise R&D



# Product quality optimization and process improvement investment



# 282 Product development projects





First food company in Taiwan to receive dual traceability certification





Restaurant received



- We developed 282 products and completed 53 product quality optimization and production process improvements over the past three years.
- Hsin Tung Yang's Grilled Honey Pork Jerky and Healthy Pure Shredded Pork Floss for Babies, Frozen Mung Bean Cake, Shredded Chicken, and Healthy Shredded Pork were chosen to receive "Eatender" designation from the Council of Agriculture, Executive Yuan.
- Eco-friendly bamboo fiber kitchenware and straws are used throughout highway service areas.
- ✓ Food Safety Decision-making Teams have been separately established at production side and at channels.
- We have established food safety monitoring plans and received food safety system certifications from ISO 9001, HACCP, ISO 22000, and FSSC 22000.
- Hsin Tung Yang was the first food company to receive both "traceable agricultural product (TAP)" and "processed food traceability" system certifications.
- Chen Hao Shih Hakka Restaurant's "traceable restaurant" designation from Agriculture Multi-Discipline Management of Technology (AMOT) in Taiwan was enhanced to three-star in 2019 from the two-star in 2018.

# **3.1 Product Creativity**





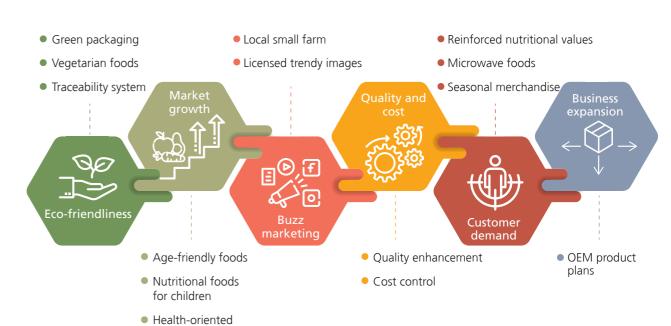


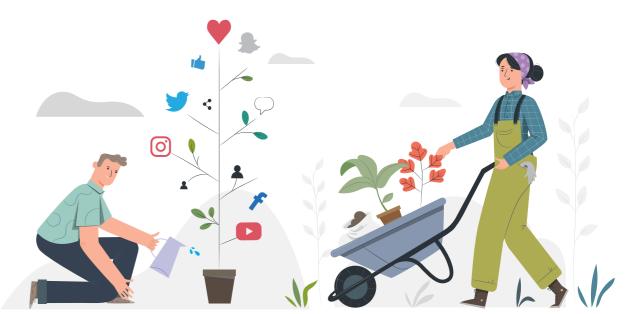




# Innovation Strategy

Hsin Tung Yang's product innovations are founded on the conception of "LOHAS," and various product development projects are planned based on six major strategic themes, including eco-friendliness, market growth, buzz marketing, quality and cost, customer demand, and business expansion. The creativity behind product planning takes sales data and product trends into consideration. Besides meeting customers' actual needs, our creative concepts are also infused with local ingredients, seasonal delicacy, and culture and humanities as well as social welfare promotions, thereby achieving the qualities of "unique products, local connections, social welfare, and food safety". Through developing and promoting creative products and gift packaging, Hsin Tung Yang provides choices that are nutritious and healthy to consumers, as well as friendly to the nature, thereby allowing the public to promote sustainability to encourage for more responsible consumption and production while enjoying delicious tastes.







#### Eco-friendly Packaging

#### Festive Garden Gift Box

- This exquisite and eco-friendly gift box can be used as a classic lampshade or a jewelry box.
- From instilling a design philosophy of circular economy from the beginning, we ensured that the packaging could be reused, thereby reducing waste.



- A creative design of a lucky mouse-shaped piggy bank designed by crafts master Brandon Lin from "Cilin"
- The "Wealth Treasure Trove" contains Truffle Black Pork Jerkies and is great for gift-gifting; the recipient can enjoy the tasty treats while admiring the classic ceramic





#### Traceable Black Pork Sausages

- Received "Traceable Agricultural Product (TAP) certificate" from the Council of Agriculture, Executive Yuan
- Received "Processed Food Traceability" certification
- The best black pork in Taiwan is used in an optimized fat-to-lean ratio and marinated at a low temperature for 48 hours after adding our exclusive seasoning.



#### Ton Pineapple Cake

- Received "Traceable Agricultural Product (TAP) certificate" from the Council of Agriculture, **Executive Yuan**
- A collaboration with local small farms at Bagua Mountain, Nantou and uses Taiwan's No. 2 pineapple as the main ingredient
- No food coloring, spices, preservatives, or bleaching agents were added



#### Market Growth

#### Products for All Ages



#### Grilled Honey Pork Jerky

- Receive "Eatender" designation from the Council of Agriculture, Executive Yuan
- Tenderized to make it softer and easier to chew
- Single packs that are easy to open
- No preservatives added to reduce possible health burdens



#### Healthy Pure Shredded Pork Floss for Babies

- Receive "Eatender" designation from the Council of Agriculture, Executive Yuan
- Formulated by nutritionists and delicately processed to ensure its safety
- Only three ingredients are used: pork, cane sugar, and pure soy sauce
- Protein content: an industry-leading 58%
- 17% less sugar, 45% less sodium, and 38% less fat
- No preservatives, MSG, or potassium salt, it is safe for all ages

#### Healthy Trend of Using Less Sugar



#### Sugarless Pork Jerky

- A low-carb sugar alcohol is used in place of sucrose or maltose.
- Inspected and proven to be a "sugarless food" that is safe to consume by both generic consumers and those with restricted sugar intake.
- The unique texture and taste makes it both juicy and firm.

#### Sugarless Shredded Black Pork



- It has 18% less calories, 30% less fat, and 34% less sodium than other market competitors.
- Confirmed to be a low-glycemic food by a nutritional Ph.D.'s laboratory in a medical university.

#### **Buzz** marketing

#### Hello Kitty Honey Glazed Pork Jerky

- This inter-disciplinary and limited edition collaboration comes in appealing packaging that includes a free tote bag
- Product launch at Taipei 101 invited the "Goddess of Baking "Casey as a special guest
- Free pork jerky was given out as gifts for photo tags on social media

#### Mazu's Bubble Milk Tea Cake

- A creative formulation of a popular drink into a delicate pastry
- A novelty and delicious souvenir that best represents all of Taiwan
- A collaboration with Dajia Mazu Temple; brings luck to everyone who eats it
- Free of preservatives and artificial flavoring

#### Customer demand



#### Hsin Tung Yang Multi-grain Shredded Black Pork

- Twenty-five grains are added for enhanced
- Quality wheat fibers are added for digestive benefits.
- Healthy and secure palm oil is used.
- No preservatives or MSG.



#### Savory Pork Zongzi

- Rated No. 1 Hakka zongzi by Apple Daily.
- Reduced salt formula makes this zongzi a much healthier
- By infusing traditional Hakka salted pork made from black pork with traditional Hakka fried shallot, this zongzi comes with a unique savory taste.

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# Creative Management

#### Creative Product R&D

Hsin Tung Yang is actively committed to research and development, and upholds the principles of legal compliance and quality over cost. Related tasks include: new product development, existing product improvement, raw material review and evaluation for new/existing products, product labeling, future legal adjustments, and providing assistance to internal departments or external vendors. Our R&D expenses have significantly risen over the past three years; in 2019, related expenses (including R&D projects, personnel salaries, educational training, equipment, miscellaneous fees, and transportation fees) have reached NT\$5.17 million, which is twice as much as relevant expenses in 2017. On top of being very experiences in food R&D, our R&D team also continuously receives seminar training and attends relevant forums from external training institutions to enhance their professional skills. In 2019, we had a total of 105 product R&D projects.

#### Quality Optimization and Process Improvement

To ensure product safety and to enhance quality, Hsin Tung Yang's Dayuan Plant actively improves food production processes. In 2019, product quality optimization and processing improvements amounted to NT\$1.1 million, and 12 projects were completed.

#### Production Equipment Upgrade and Automation

In terms of production management, in order to enhance productivity and achieve standardized and automated processing, Hsin Tung Yang continues to implement new hardware facilities and to revolutionize processing procedures, thereby reducing labor expenses and enhancing product quality. From 2017 to 2019, over NT\$19.79 million was invested, and we are expected to invest NT\$27.65 million toward the automated packaging for handmade pineapple cake project, which was proposed and approved in 2019 and to be commenced in 2020. The following are summaries of related key implementations.

Mincing the shredded pork **Process automation** 



Related equipment was purchased in April 2017 to reduce the number of operators from 3 to 1, which is estimated to save NT\$490,000 from manual labor in each year. A metal inspector is added to effectively inspect for metal foreign objectives, thereby enhancing product quality.

Canned meat sauce **Production line** automation



Related equipment was purchased in October 2017 to reduce the number of operators from 7 to 4; which is estimated to save NT\$507,000 from manual labor in each year.

Handmade pineapple cake Packaging automation



Project approved in 2019 and to be commenced in 2020. The newly procured automated production and packaging equipment is estimated to reduce the number of operators from 13 to 5 and is estimated to save NT\$3.49 million from manual labor in each year.

# Manual processing

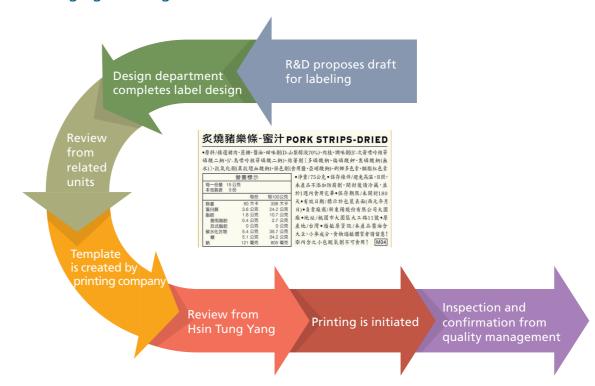


Automated processing

# Product Labeling

All containers or packaging for foods and food ingredients produced by Hsin Tung Yang are dedicated to specific and complete labeling. Hsin Tung Yang ensures that applicable regulations for food labeling and advertisement management stipulated in the Act Governing Food Safety and Sanitation and Enforcement Rules of the Act Governing Food Safety and Sanitation are met through establishing and implementing internal "Finished Product Labeling Management Procedures". Currently, all compositions of Hsin Tung Yang's products are clearly specified, so that consumers can understand information on product ingredients, nutritional value, allergens, and GMO, and promotional appeal and slogans are not included. Hsin Tung Yang has actively implemented such measures to comply with the rigorous labeling standards before relevant laws were enacted. In 2019, we have not had any violation on product and service information or labeling.

#### **Product Packaging Labeling Review Process**



# 3.2 Service Creativity







# Creative Channel Services

In terms of service innovations for our diverse channels, Hsin Tung Yang has been promoting both internal and external creative programs through building relevant systems, management and communications, audit and improvement, and providing incentives. Relevant measures are as follows:

In 2018, Hsin Tung Yang enacted the "New Product and Creative Service Improvement Proposal Method" at the Channel Business Division in order to enhance employees' skills in finding and solving the problems. Employees were encouraged to submit proposals regarding new products, creative service and process improvements to improve business and service quality. When a proposal is confirmed to be submitted for discussion and to be further implemented by a departmental supervisor, the employee would be rewarded by gift vouchers. Those who make significant contributions to the organizational performance will be further rewarded based on the Employee Incentive Method. Additionally, "Retail Space Incentive Method" has been enacted for vendors of our retail space. Assessment for the retail space is carried out in every six months, and individual outstanding performance is also rewarded.



# Thoughtful In-store Service

Thoughtful services at provided across all Hsin Tung Yang stores based on their respective locations and characteristics, whether the store may be a corner food shop, a department store counter, or at a bus terminal or highway service area and airport shops. Aforementioned services include roast foods, freshly grilled meats, and tax return services and more, and are all aimed to bring the best experience for all customers.

# Hsin Tung Yang any parking issue.

Gift packaging and contents are available based on your budget and needs. Our professional and thoughtful service can provide you with the ultimate gift-giving experience.

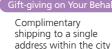




you shop at any of our

Hsin Tung Yang stores.

We watch over your vehicle free-of-charge as







We can help any customer to ship products from Hsin Tung Yang stores in Taiwan to China (shipping fees apply).

### Hsin Tung Yang

Enjoy discounts when shopping at Hsin Tung Yang stores with Hsin Tung Yang's co-branded credit card and membership card



Hsin Tung Yang's Customer Service



### Sustainable LOHAS Highway Service Area

To emphasize the importance of environmental conservation and to encourage the public to adopt sustainable actions, we have been implementing four major environmental protection measures at our service area operations at Guanxi, Xihu, Qingshui, and Nantou since 2017. By adjusting the scope of our services, Hsin Tung Yang is striving to pursue for sustainable solutions while providing excellent services in order to encourage road users to take environmentally-friendly actions.

- We became the first company to stop tobacco sales at highway service areas in Taiwan since the first World No-Tobacco Day in 2017.
- Hsin Tung Yang was also the first company to install new cigarette butt barrels at highway service areas. The new barrels were less likely to be mistaken as trash cans, thereby reducing environmental pollution.
- Smoke-free areas were set up at the service stations; on top of caring for the health of road users, we are also committed to building a smoke-free highway environment.
- The bustling traffic flow at highway service areas generate an enormous amount of trash. By referencing Japan's method, Hsin Tung Yang created brand-new recycling bins that classify trash into five types, including ordinary garbage, paper, PET bottles, metal and aluminum cans, and glass. Recycling bins for waste battery and consumer electronics are also placed at the cashier's counter at convenience stores and service counters.
- Besides encouraging the public to sort their trash, the new recycling bins also help to beautify the service areas. Many international visitors have even posed in front of the bins.
- At least 55 tons of trash was reduced in the single month after the introduction of the new bins in December 2017.



Eco-friendly Bamboo Utensils Promotes Safety and Circular Economy





Local Green Procureme nitiative for Sustainable



- All dine-in kitchenware was replaced with eco-friendly utensils made from bamboo fiber rather than plastic, melamine or single-use kitchen-
- Natural wastes from agricultural processing, such as straw, bran, wheat stalks were used to make our heat- and oil-resistant and biodegradable hamboo fiber utensils, thereby reducing further damage to the planet The utensils are also SGS and FSI certified since we are committed both environmental protection and the health of road users.
- In line with the ban on plastics policy in 2019, bamboo fiber straws are now exclusively used.
- To reduce food miles and carbon emissions, we prioritize sourcing from locally produced ingredients at nearby areas in terms of cooked foods, including Hsin Tung Yang's lunch boxes (bento boxes) sold at our
- In line with "Green Procurement" practices, we prioritize sourcing from products that have received "Carbon Footprint" and "Eco Label"
- Encourage road users to turn off ignition after idling for three minutes to reduce exhaust emissions.
- To encourage green lifestyle through learning and experience, we organized environmental education activities that fit the particular characteristics of highway service stations in line with related events such as Earth Day on April 22nd.



• Hsin Tung Yang is a pioneer in the trend to go green, and bamboo fiber kitchenware and straws have been adopted throughout our highway service station operations.

Hsin Tung Yang's Guanxi, Xihu, Qingshui and Nantou service areas have adopted bamboo fiber kitchenware free of plastics in as early as October 2017 to be more aligned with sustainability trends and the enactment of the policy to ban single-use plastics. Our bamboo fiber kitchenware uses bamboo fiber materials made in Taiwan. A plant-fiber based production technique that took 20 years to research and develop went into making these utensils and no plastic was added, allowing them to dissolve overtime in nature, thereby preventing further harm to the planet. The utensils have also passed SGS and FSI inspections, thereby protecting the health of all customers and road users.

In June 2019, to contribute toward the conservation of the planet, Hsin Tung Yang advocated for going green by adopting biodegradable straws made from Taiwan's bamboo fibers before the enactment of the government's policy to ban plastic straws. As a testament of the biodegradable nature of the straws, a biodegradable experiment of the bamboo fiber straws was carried out in March at Guanxi service area. The Freeway Bureau, MOTC, environmental NGOs and bamboo fiber straw suppliers were

invited to plant bamboo fiber straws, plastic straws, and single-use bamboo fiber chopsticks into soil. Results of this experiment will be shared with the public in the future, and we also invite all citizens to pay more attention to environmental conservation.





## Special Features at Highway Service Areas

Hsin Tung Yang has thoughtfully planned and organized every channel through integrating arts and culture, local specialties, and environmental protection awareness with a well-rounded management approach. We have planned travel service destinations that integrate sight-seeing, recreation, food, and shopping, and created the most thoughtful and LOHAS experiences, thereby becoming a leading brand in diverse retail channels.

# Guanxi

Service station



LOHAS Inn: A New

Face of Guanxi

#### **Creative and Sustainable Services**

- Green building architecture used to create a wall of green and large floor-to-ceiling windows, creating a greeting area for all guests.
- ◆ Industry-academic cooperation for low-carbon vegetable production. (merge)
- ◆ Form alliance with Korea's Daebo Concession & Distribution to sell popular Korean merchandise
- Pet-friendly Cafeteria, bidet toilets, and free umbrellas



Happy Mountain and Sweet Forest

- ◆ "Xihu Farm" vegetable garden promoted food and agricultural education.
- ◆ "Pomelo Trail" made for a more comfortable and enjoyable pedestrian walk.

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#### Service station

#### Unique features

#### **Creative and Sustainable Services**



Qingshui: A Happy Natural Rhyme

- Sustainable energy and circular ecology education, visits and initiatives including solar tracking panel, wind power corridor, and aquaponics
- Largest aquarium that has not required water changes for 10 years in Taiwan
- 3D touch-panel interactive zone and optical illusion painting from a renowned master painter
- JAPAN SKY DINE, a site dedicated to all things Japanese in partnership with Central Nippon EXIS Company



Aborigine Arts and Taste

- Purple crow butterflies corridor Taiwan's oldest snake kiln is transformed into a corridor dedicated to ecological education that promotes conservation of purple crow butterflies
- Indoor air quality monitoring, national freeway and Nantou travel information
- Library, children's playground and barrier-free facilities

For more information on service areas and sustainable and LOHAS facilities and services, please visit the website for Hsin Tung Yang's highway service areas at http://freeway.hty.com.tw/home.php



#### Enviro, Taiwan's First Smart Table-Bussing Bot

Since receiving the store management rights at Taoyuan International Airport in 1979, and the management rights of the souvenir shops in 2007, Hsin Tung Yang has constantly provided the best and most thoughtful channel experiences to domestic and international travelers through our shops.

In line with Taoyuan International Airport's smart transitions in recent years, Hsin Tung Yang has collaborated with TECO Corporation to launch Taiwan's first customized table-bussing bot, Enviro, at the cafeteria at Terminal 1. After one year of research and development and customized according to the spatial design of Taoyuan International Airport and passenger movement, the bot is installed with 6 ultrasonic sensors and optical radar scanners and can detect barriers up to 25 meters away and prevent



close-up collisions. The bot is navigated by artificial intelligence (Al), can achieve a maximum speed of up to 1.1 meters per second, and continuously work for 8 hours. Modeled after a Formosan Black Bear, the bot adopts lively expressions and reminds passengers to pick up their own trays.

By implementing high-tech services, Hsin Tung Yang allows passengers to not only experience unique Taiwanese foods at the cafeteria, but also to bus their own tables through the help of an exciting robot, thereby helping everyone to enjoy a more convenient and comfortable dining environment and to experience brand-new technological services. We further implemented the Enviro Table-Bussing Bot at Guanxi, Xihu, Qingshui, and Nantou service areas at the end of 2019.

# **3.3 Food Safety Management**





Hsin Tung Yang persists in our commitment to "faithful production" and "customer health," and has established separate, inter-departmental Food Safety Decision-making Teams at both the production side and the channel side. Rigorous measures are implemented to ensure food safety throughout the production cycle, from product development, raw material supply, production processes, finished product quality control, product launch, to after-sale services. By installing a comprehensive management system and procedures, not only do we comply with the latest Act Governing Food Safety and Sanitation; in addition, we also actively promote third-party certified management systems, such as HACCP, ISO 22000, and FSSC 22000, to incorporate the awareness for risk and hazard management into our processes. For instance, in terms of our meat products, we insist on preserving traditional techniques and produce all lard in-house to completely eliminate any possible food safety risk from externally procured oils. Though numerous food safety hazards had occurred in Taiwan in recent years, our efforts have steered Hsin Tung Yang clear of such hazards and allowed us to continuously retain consumers' trust.



#### **Product Development**

- Additives that are not critical are eliminated from the formula and we are continuing to work toward Clean Label actions.
- Inspection of quality management system, food safety management system, certification system and applicable food and health

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#### Processina Contro

- HACCP food safety management system is implemented to eliminate risks related to food safety hazards and to ensure product safety and customer health
- OEM supplier is asked to undergo rigorous assessment mechanism and periodic audits.

#### Warehousing, Logistics, Channel Management

- Understanding product movement
- Inspection of specification and quality of suppliers' finished goods and raw materials
- Weekly inventories of in-store products
- Daily inspection of cooked/ready-to-eat products

Development 0

# Raw material

Production 03

on Finished products

Launch 0



#### Supplier Management, Input Management, Raw Material Inspection

- Raw material is inspected by Quality Assurance laboratory and third-party unit.
- Integrate product traceability with supply chain management; information on raw materials is immediately available upon entering the plant, and non-scheduled visits to suppliers' production plants are carried out.



#### Finished Product Quality Control

- Finished goods produced by Hsin Tung Yang and OEM goods are inspected and analyzed by the Quality Assurance laboratory and third-party unit.
- Product sampling is conducted on products not made in-house.



After-sale

service

#### Customer Communications and Food Safety Crisis Management

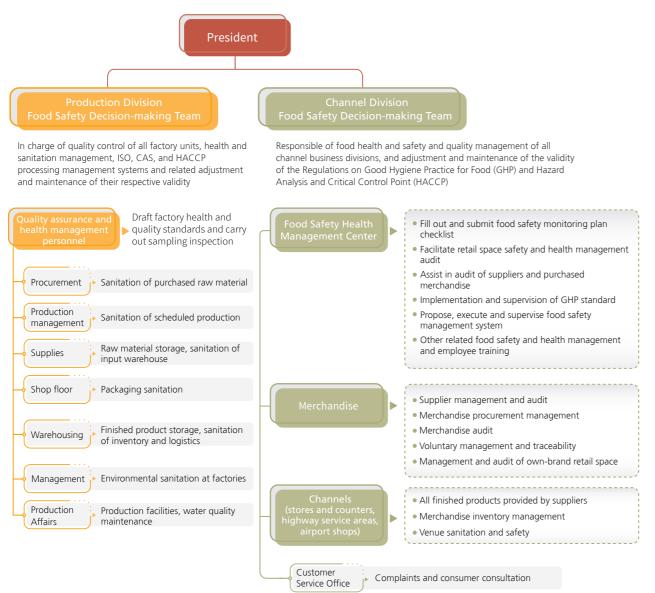
- Dedicated customer service hotline
- In case of food safety incident, product in question shall be immediately submitted to inspection and a qualified report shall be issued, or the product shall be discontinued and recalled.

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## **Solution** Food Safety Management Framework

Hsin Tung Yang's food safety management is coordinated by the President, and product quality and food safety issues are discussed through regular monthly Company-wide meetings. Additionally, separate Food Safety Decision-making Teams have been set up both at production side and at our channels, thereby construing a complete food safety management team. The food safety team at the production side is in charge of input, production, and output processes, while the food safety team at the channel side is in charge of managing sources of merchandise, suppliers, product launch and discontinuation, sales, and dining and beverages at our channels. Additionally, the Customer Service Office understands consumers' opinions through the dedicated customer service hotline, 0800-011367, and reflects such opinions to the headquarters, production division and business division on a timely basis.



The Food Safety Team of Hsin Tung Yang's Production Division convenes annual review conferences and inspects the implementation status of quality management systems such as HACCP and ISO and quality objectives during monthly meetings. In addition, abnormal incidents and customer complaints are inspected and relevant departments are asked to make improvements, and related laws and standards are also regularly updated. Additionally, food safety management personnel are also arranged to receive internal and external

training to ensure that they are aware of the latest food safety technologies and legal information. In 2019, 36 personnel from quality management, production management, and procurement department have participated in related training, and this figure covers 100% of all production lines at Production Division.

Category	Course/item		Number of participants
Functional training	2019 Food Industry Personnel Functional Training and Practicum for Introduction of Planned Audit		1
	2019 CAS Enterprise Laboratory Experimental Skills Training Course	16	1
	Food Factory Raw Material Management Practicum	28	2
	Organic Solvent Operations Supervisor Training	18	1
ISO Articles	A Thorough Study of ISO 22000:2018	6	1
	ISO 22000:2018 Food Safety Management System Training	12	1
	ISO 14001:2015 Environmental Management System - Articles and Internal Auditor Training	132	22
Regulatory Briefings	2019 Conference for Promoting Food Company to Retain Product Sourcing Document (Traceability Training)	3	1
	2019 Course and Conference for Food Company Traceability System and Guidance on Applicable Food Safety Laws	7	1
	2019 Conference for Self-Management from Metallic Food Containers and Packaging Companies	4	2
	2019 Conference for Promoting Food Production Packaging Material Management and Self-Regulation Enhancements	8	2
	2019 Skills Testing and Updated Legal Environment Conference	4	1
Subtotal		254	36

In 2019, a series of courses and training encompassing diverse topics were organized by Hsin Tung Yang to facilitate food safety personnel from various channel units to comprehend related food safety management mechanisms and to understand the latest legal environment.

Trainin departm		Type of course	Total hours	Number of trainees
Merchano Division		Food safety monitoring plan, general catering sanitation and hygiene seminar and related legal seminar	51	15
Airpor Operation Division	ons	Food sanitation and hygiene seminar, HACCP food safety management system	304	64
Highwa Operatio Division	ons	Dining and beverage sanitation and hygiene seminar	62	40
Subtota	al		417	119

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# Food Safety Management System

By using food safety management system as a roadmap, Hsin Tung Yang evaluates and analyzes risks in the overall production and sales chain and taken the initiative to create a food safety management system and established "food safety monitoring plan" to ensure the safety and health of our food products. On top of complying with applicable food safety laws, Hsin Tung Yang also actively meets international quality standards and achieves third-party assurance. Take HACCP food safety management system for instance, our Dayuan Plant has already received relevant certification in as early as 2002, before the system was made mandatory by the government. In 2019, we have confirmed Hsin Tung Yang's compliance with both the Act Governing Food Safety and Sanitation and Enforcement Rules of the Act Governing Food Safety and Sanitation, and there has been no record of violation of applicable food safety laws.



- We implement self-management based on the Act Governing Food Safety and Sanitation and Guidelines for Retail Sale of General Merchandise to Establish Food Safety Monitoring Plan.
- Hsin Tung Yang adheres to the Regulations on Good Hygiene Practice for Food (GHP), Hazard Analysis and Critical Control Point (HACCP), Regulations of Recall and Destruction for Food and Related Products, and various health standards, restrictive volume standards and related safety and health regulations.

#### Quality assurance system

- Setting HACCP as the basis of self-quality assurance system, management is enforced on four aspects including operators, processing grounds, facility health management, and quality assurance system. We systematically plan appropriate measures for the supply chain and have received third-party management system certification, thereby achieving sound food safety management.
- Hsin Tung Yang's Dayuan Plant has received certifications of HACCP food safety management system, ISO 22000 food safety management system, and FSSC 22000 food safety management system and food business health and safety management system. Boundaries of aforementioned certifications cover all product lines for meat and poultry processing, canned pork meat, aquatic produce, pastries, and snacks from Production Division, and ratio of coverage is 92.1%.

#### Self-inspection

- Based on our risk analysis and management principles, Hsin Tung Yang evaluates and implements inspections and other
  matters that are either on par with or more rigorous than the basic requirements from compulsory inspections based on
  the characteristics of products sold, quality assurance system, and capacity for carrying out self-inspection. And such
  inspection results are used to demonstrate the effectiveness of our quality management measures.
- Samples are taken from Hsin Tung Yang's major products, and submitted to a third-party assurance unit for inspection on an annual basis.
- Hsin Tung Yang's quality assurance personnel will conduct sampling inspections based on the criteria and number of samples stipulated in the quality management programs for each product.

#### Compulsory inspection

Hsin Tung Yang carries out compulsory inspections for items required by the law; for instance, annual sampling inspection
plan is established for raw meat materials for processed meat products, egg products, and baking products. Reasonable
inspection items are carried out after evaluations, and samples are also submitted to third-party assurance unit for inspection on a quarterly basis.

To continuously enhance our food health, safety and quality, Hsin Tung yang implements active measures targeting operators, processing grounds, facility health management and quality assurance system to safeguard the health of our consumers. The boundaries of impact from related implementations in 2019 covered meat and poultry processing, canned pork meat, aquatic produce, pastries, and snacks and traditional zongzi, or 100% of all in-house products and OEM products at Hsin Tung Yang's Dayuan Plant.

#### Food Health, Safety, and Quality Improvement Programs in 2019

Category	Program				
	Quality Enhancement Programs achieved in 2019:				
	Indicator	Target	Performance	Completion Rate	
	Customer complaint rate	Lower than 14ppm	5.6ppm	100%	
Quality assurance system	Abnormalities found during monthly production QA inspection	Maintain at 28 or below in each month	Completed for 11 months for the year	91.7%	
	Due to increased production volume, August 2019 had 29 abnormalities, exceeding target by 1 incident. In terms of management mechanism over abnormalities detected during quality inspection, Hsin Tung Yang analyzes the causes through "quality abnormality reporting form" and drafts improvement measures to prevent further occurrence.				
Facility Management	Installed hypochlorous acid (HOCl) generators at the production site and implemented HOCl disinfectant processes for production equipment and environment.  3M Molecular Detection System (MDS) was installed at the laboratories to conduct rapid and specific detection of Listeria and Salmonella, allowing for supervision and control over all in-house production at Dayuan Plant.				
Processing Grounds	Total renovations were carried out for the four bathrooms for operators at Hsin Tung Yang's processing grounds, enhancing the sanitation and health quality of employees' restrooms and ensuring that products are free of human contamination.				
Operators	Food safety personnel are encouraged to participate in educational training courses.				

# 3.4 Quality Management and Inspection





To ensure that Hsin Tung Yang's production quality can meet customers' expectations for taste while complying with relevant safety and health standards, we carry out and maintain our quality system while strengthening both "laboratory inspection" and "food retail management" at production and sales end

## Strengthening Laboratory Inspection

From raw material input to product output, all Hsin Tung Yang products are required to go through inspections from our Quality Assurance lab and an external third-party unit. Relevant inspections are carried out via standardized procedures (national standards or methods announced by the Taiwan Food and Drug Administration) and utilize standardized equipment. In terms of legally required compulsory inspections, annual sampling inspection plans are established, and samples are





also submitted to third-party assurance unit for inspection on a quarterly basis. In addition, self-inspection is also reinforced; for major products and festive products, samples are submitted to third-party assurance unit for inspection in each year, while quality assurance personnel will also conduct sampling inspections based on the criteria and number of samples stipulated in the quality management programs for each product.



Currently, Hsin Tung Yang has already established a food safety laboratory at Dayuan Plant in compliance with applicable laws, and the facility can carry out general chemical analysis, tests for microorganisms, and rapidly screen for veterinary drug residues. To enhance the capacity for inspection analysis, 3M Molecular Detection System (MDS) was installed in 2019 to conduct rapid and specific detection of Listeria and Salmonella, allowing for supervision and control over all in-house production at Dayuan Plant.

The human resources used to maintain food safety at Dayuan Plant, and the inspection expenses and facility maintenance at the food safety laboratory and third-party inspection expenses in 2019 amounted to nearly NT\$5.48 million, accounting for 0.54% of the revenues from Dayuan Plant. Our future target objective is for the food safety laboratory to be certified.

#### Hsin Tung Yang Product Inspection Items

Self-inspection items at Hsin Tung Yang laboratory	Third-party inspection items
<ul> <li>General chemical analysis: water activity, moisture, fat, protein, sulfur dioxide, acidity, sugar content, salinity, and pH value</li> <li>Microorganisms: number of bacteria, E. coli strains, E. coli, Staphylococcus aureus, Salmonella, Listeria, and fungi</li> <li>Veterinarian drug residues (quick screen)</li> </ul>	<ul> <li>Veterinarian drug residues: Tetracycline, ractopamine (21 types of β-Agonists); veterinarian drug residue analysis (II) 48 items; chloramphenicol or β-lactam antibiotics (8 types); Nicarbazin (multiple residue analysis of 7 items of antiprotozoal drugs); aflatoxin</li> <li>Heavy metals (lead, cadmium) or pesticide residues</li> <li>Microorganisms: Salmonella, E. coli, Staphylococcus aureus and more</li> <li>Packaging migration test: plasticizers</li> <li>Additives: preservatives, coloring, and sweeteners</li> </ul>

#### Hsin Tung Yang's Own Laboratory Inspection Results in 2019

Catagory	Inspection Item	2019 Inspection Results		
Category		Sample size	Ratio of certified products	
	Veterinary drug residues	120 items	100%	
Raw material	Microorganisms	1866 items	98.55%	
	General chemicals	2669 items	98.80%	
Most products	Microorganism	6607 items	99.88%	
Meat products	General chemicals	6776 items	98.86%	
Pastries	Microorganism	451 items	99.78%	
(including festive products)	General chemicals	1139 items	98.33%	

#### Third-party Inspection Results in 2019

Catagory	Inspection Item	2019 Inspection Results		
Category		Sample size	Ratio of certified products	
Raw material	Veterinary drug residues, heavy metals, pesticide residues, microorganisms and aflatoxin	50 items	100%	
Finished food product (including OEM products)	Veterinary drug residues, heavy metals, pesticide residues, microorganisms and aflatoxin, plasticizers, preservatives, coloring, sweeteners etc.	180 items	100%	
Mai's HK Roast Food lunch boxes and ingredients	Microorganisms, pesticide residues etc.	10 items	100%	

## Strengthening Channel Food Retail Management

From inspection before product launch to sales management of in-store products, a comprehensive merchandise management system, one that is integrated with supply chain management, has been set up at our channels. The smooth, systematic operations at our headquarters, store personnel, and suppliers are coordinated to ensure a satisfactory shopping environment for our customers. Verification, inventories, and validity inspection of in-store merchandise is conducted on a weekly basis, in which merchandise checklist and merchandise review form are filled and documented.

We pay particular attention to the quality and cooked meals served at highway service areas and airport shops. Besides implementing the "merchandise retail SOP" and "Detailed Regulations on Using Oils and Seasoning" at all food and beverage counters, all cooked meals produced by Hsin Tung Yang have also passed inspections from third-party units. Additionally, relevant protective measures and cooked meal quality management procedures are also established and enacted at at the same time. Hsin Tung Yang has created the cooked food health inspection table for daily self-inspections. Retail of any food or beverage can only be made after review and approval from our "food and beverage review team," comprised of our food professional technologists, cooked food developers, and food and beverage counter developers. An independent third-party unit is also commissioned to conduct sampling inspection on a monthly basis.

#### Self-Management of Quality and Finished Goods of Cooked Foods

#### Storage

#### > Raw material purchase, > Implement first-in, input inspection management, supplier evaluation manage-

Source

first-out (FIFO), and separate raw and cooked foods

Conduct three temperature checks and patrols daily at refrigerators and freezers and record humidity of dried goods warehouse

#### Manufacturing |

- > Implement SOP for personnel health and hygiene and cleanliness of equipment and environment
- > Inspect quality of frying oil twice daily, and replacement standards than legal requirements
- > Plan processing flow to prevent cross-contamination
- > Monthly and quarterly sampling inspection

#### Retail

- > Cooked foods the day they are made
- and refrigerators are
- are covered to prevent dust and respiratory droplets
- > Utentils undergo inspections for residues of carbohydrates, fats, and dishwashing liquids from professional inspection agency on a monthly basis

#### Disposal

> Documented based on

and leftover foods are

- (lunch boxes) are sold on established processes,
- > Temperatures of freezers checked three times daily
- adopt more rigorous oil > Unpackaged cooked foods



- Frequency of sampling inspection is increased for merchandise with higher risks to protect consumers' health.
- Self-inspection of fresh vegetables/ fruits from time to time.

Establish cooked food health inspection

table for daily self-inspections.

- In case of likely food safety incident, Hsin Tung Yang will immediately inspect the safety of related products, and to ensure consumers' health, the product may be discontinued when necessary
- Merchandise in question will be immediately submitted for inspection, and relevant suppliers will be requested to conduct inspections at the same time.
- Subsequently
- If the merchandise passes relevant inspections, it will be re-launched and an announcement regarding its safety will be made.
- Information on related food safety concern will be documented and remedial/protective measures will be developed to prevent recurrence.



Temperatures of freezers and refrigerators are checked three times daily



Twice daily inspection over quality of frying oil



Daily health inspection for food/



Monthly vector control and disinfection from professional operators



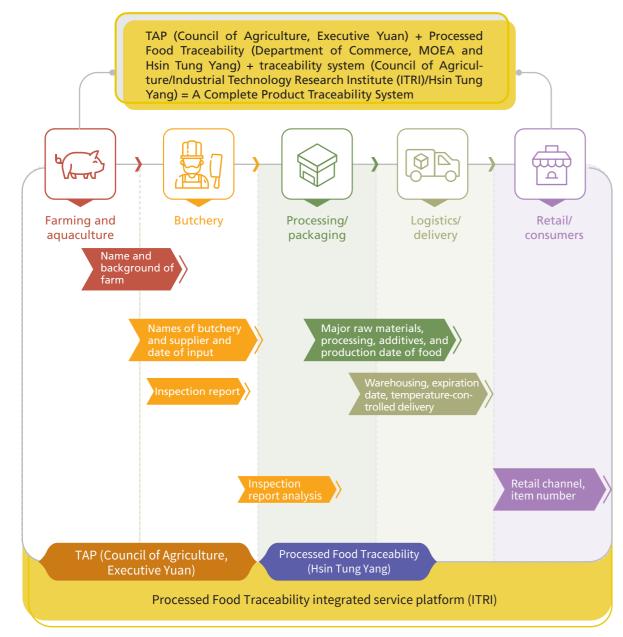
# **3.5 Product Traceability**





To encourage safe consumption and enhance the farm-to-table food transparency, Hsin Tung Yang has actively enhanced product traceability by implementing a traceability system that tracks each cycle of the food production processes. On top of our internal ERP system and private cloud, Hsin Tung Yang is also the first food company to be certified for Traceable Agricultural Products (TAP) and Processed Food Traceability systems. From farming, butchery, factory production, to in-store sales, complete information is available on the production of Hsin Tung Yang's classic favorites, such as pork jerky. By making food safety visible to all, we can enhance consumers' confidence in our brand, fulfill corporate social responsibilities and accountability, thereby becoming a leader in green food production!

#### • Building Hsin Tung Yang's Food Traceability System



Source: Hsin Tung Yang Corporation, summarized by DIGITIMES in Sep, 2009

# First food company in Taiwan to receive dual traceability system certificates

To ensure food safety and traceability and to enhance consumers' trust in our brand, beginning in 2007, Hsin Tung Yang has led the industry in collaborating with the Department of Commerce and ITRI to build "product traceability" and "processed food traceability" systems, which trace every step of food production starting from raw materials, manufacturing, processing, to logistics. The dual certification system provides sufficient product traceability information to consumers and ensures consumers' food safety.

#### • Benefits Achieved from Building Traceability Systems

#### Protecting Food Safety by Rejecting Counterfeit Products

Food movement can be precisely understood throughout the product traceability cycles, including production, sales, and inventory. In addition, it is also integrated with the POS system so that immediate sales information can be achieved, thereby eliminating any possible counterfeit or unsafe products and preventing any potential food safety incident.

#### **Enhanced Product Quality by Optimizing Production Processes**

The traceability system has led Hsin Tung Yang to reexamine sources of our raw materials, and to improve deficiencies found during processing and sales processes. It also simplifies the quality management over raw material and production processes, therefore ensuring food safety and consumers' rights.

#### Coordinating Industry Chain to Build a Transparent Food Value Chain

By building a product traceability system, we can create a transparent and traceable food value chain. Not only can we trace relevant food information, but all stakeholders can also trace food information throughout the value chain. For instance, a producer can track product storage, processing, and retail processes, and consumers can also trace a product back to logistics, processing, or production processes.

#### Transparent Product Information Leads to Worry-free Purchases

Consumers can query Hsin Tung Yang's product traceability information and understand relevant production processes through the QR code system. This enhances our product transparency, allows for more worry-free purchases, and helps us to earn more trust from consumers.

#### Taking the Initiative to Encourage Industry-wide Food Safety Actions

Hsin Tung Yang became the first food company to introduce product traceability and processed food traceability systems, thereby setting an industry benchmark and encourages vendors throughout the supply chain and all industries to collectively promote food safety and safe consumption.

#### Building a Traceable Agricultural Products (TAP) System

Beginning in 2007, Hsin Tung Yang commenced the establishment and implementation of a Traceable Agricultural Products (TAP) system, which contains the following five aspects:

Selecting icon

Promoting

Product

Traceability

We introduced ITRI's RFID technology, and utilized temperature-controlled RFID tags to document information such as logistics/shipping from company/factory to retail locations, and gradually expanded the information in our traceability system.

Additionally, we promoted the product traceability system at relevant market and social welfare activities, and provided websites in Simplified Chinese and English, allowing domestic and foreign consumers to query relevant

We coached key suppliers to build product traceability systems and assisted in enhancing the information transparency of the overall production processes.

information.

Three sausage products were selected to build a demonstration system at the beginning, and the system was expanded to meat jerkies and hams (5 products) after 2008.

We built a representative product traceability framework, coordinated and collected information on relevant raw materials, farming sites, butchery, suppliers, date of input, inspection analysis results, major raw materials, additives, production date, and expiration date.

The aforementioned traceable information is coded using QR Code while building a product traceability system. A related website in Mandarin Chinese is also built and accepts queries from consumers.

#### • Comparison Table of Hsin Tung Yang's Traceable

Traceable Agricultural Product (TAP) Hsin Tung Yang Black Pork Taiwanese Sausage (Sorghum Liquor), Hsin Tung Yang Black Pork Taiwanese Sausage (Garlic), Hsin Tung Yang Black Pork Taiwanese Sausage, Hsin Tung Yang Fried Pork Fiber, Ton Pineapple Cake

Cloud-based Traceability System Hsin Tung Yang Black Pork Taiwanese Sausage (Sorghum Liquor), Hsin Tung Yang Black Pork Taiwanese Sausage (Garlic), Hsin Tung Yang Black Pork Taiwanese Sausage, Hsin Tung Yang Canton Curd Pork, Hsin Tung Yang Black Pork Smoked Ham, Hsin Tung Yang Black Pork Loin Ham



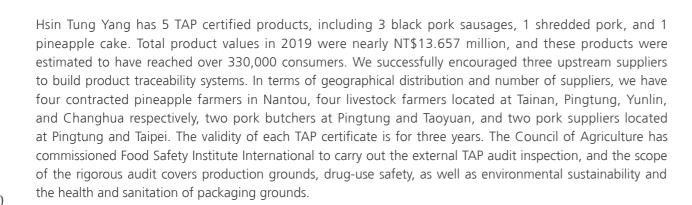
#### • Promoting Traceable Foods with Pig Farmers

We began to promote the TAP project for pork sausages and shredded pork in 2009. To achieve a consistent farm-to-table management, we needed to find pig farmers and pig butchers who would jointly promote our systems. These upstream suppliers needed to share our visions and to be dedicated to promoting the TAP project; besides receiving CAS certification, their raw and fresh pork materials also need to pass relevant inspections from the TAP system before these vendors could become qualified suppliers to Hsin Tung Yang's TAP-certified meat products.



#### • The First Traceable Pineapple Cake

Upholding our mission of "buying local and eating local,"
Hsin Tung Yang chose to collaborate with the pineapple production co-op at Nantou for our TAP-certified pineapple cake project in 2012. Our food professional technologists coached local small farmers including pineapple farmers and pineapple jam factories to pass the TAP inspection, and together, we were able to complete this TAP project. While enhancing product transparency and traceability, we also empowered our suppliers and promoted local agricultural development, thereby promoting partnerships dedicated to sustainable developments.



#### • Building a Processed Food Traceability System

Hsin Tung Yang joined the "processed food traceability" program, which was a part of the u-Taiwan program from the government, and aimed to coordinate food manufacturers, logistics industry, and retail industry to build a processed food traceability system. The system was designed to strengthen the transparency of

Number of processed food traceability records

99,066 117,009 108,988

business processes involved in processed foods from production output to end-user (consumer), in order to build a safer food consumption environment. The process of building this system had four major aspects:

Processed Food Traceability system continues to track food records through using QR code labeling in recent years, and in 2019, the cumulative processed food traceable records have cumulatively reached nearly 109,000.

Partnership Model

Establishing an Industry Chain

Collective Value Chain Participation

In 2010, we integrated our upstream suppliers and downstream channel retailers, and collectively built an inter-company traceability application system. By coordinating the system with automated labeling machine to create massive traceability labels, we successfully improved productivity and expanded the application efficiency of the system.

Building a Processed Food Traceability System

food traceability system was created by coordinating suppliers across Hsin Tung Yang's processed food industry chain. Processes and information in each cycle were coordinated, and qualities, sources, production records, warehousing,

A business model based around a complete processed

transportation, delivery of raw materials, and processing, delivery, and sales of merchandise are all documented.

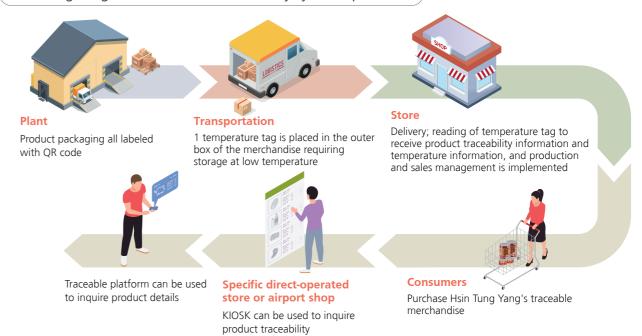
Information Sharing via Processed Food Traceability

In 2009, we expanded the number of traceable food products and labels and reinforced the applications with Hsin Tung Yang's ERP and CRM systems. Marketing activities were also organized for consumers to obtain in-depth awareness on the traceability system, thereby achieving advertising effects.

By integrally applying RFID and QR Code technologies, consumers can obtain complete traceable processed food production and logistics processes through KIOSK at retail locations or website, thereby construing a high-quality food supply system for local Taiwanese brands. The system can create a safe and rest-assured consumer environment for food in Taiwan and protect the consumers' rights to food and knowledge.

#### Hsin Tung Yang's Processed Food Traceability System Operations

**Expanding the Processed** 



資料來源:新東陽股份有限公司,DIGITIMES 整理,2009/9

# Internal Management of Product Traceability: ERP Information System

Internally, we require all records along each stage of production process, from raw material management, product inspection, packaging labels, to finished product inventory, to be retained, and manage these records in line with "Product Identification and Traceability Management Procedures".

To compile and coordinate the product information, Hsin Tung Yang's Dayuan Plant has implemented the enterprise resource planning (ERP) system as the systematic basis of product traceability. Computerized procedures allow us to separately identify, label, and record product input, production, packaging, and output delivery processes, as well as to retain such information in a cloud-based server to further connect with the rest of the industry chain. This allows us to rapidly trace information on our foods' raw material suppliers and to track the downstream retail channels; furthermore, it also allows us to efficiently track product movement in case of problems with raw materials. In 2019, as many as 715 of Hsin Tung Yang's products are tracked and monitored via the ERP system, accounting for 100% of all products at Dayuan Plant.

By practicing "simulation product recalls" in each year to attest that we can trace to upstream raw materials as well as downstream finished goods, the effectiveness of the product traceability system has been confirmed. In addition, when a customer conducts an unscheduled audit at our plant, we can also accomplish the traceability of designated products within 2 hours, which verifies the validity of the system.

Founded on the the aforementioned system, Hsin Tung Yang has connected with the government's public cloud, and the Food Business Registration from the Taiwan Food and Drug Administration. We have also received the Traceable Agricultural Product certification from the Council of Agriculture and developed our private cloud-based traceability system.

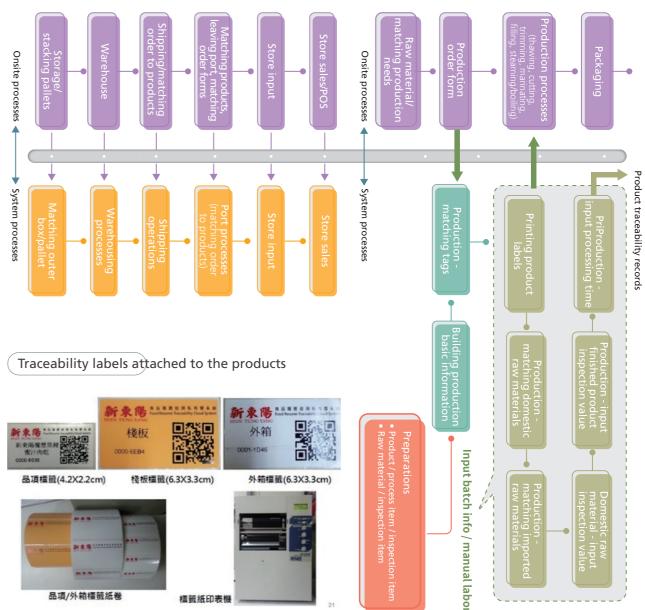
#### • Linking with Government Cloud via Food Business Registration

Hsin Tung Yang has completed the registration for the compulsory Food Business Registration, which includes building a database of basic information, business scope, and factory information and more. Moreover, Hsin Tung Yang has also uploaded the traceable information for all merchandise produced in-house at Dayuan Plant, including meat jerkies, low-temperature meat products, snacks, grilled foods, shredded meat, and canned foods, to the government's food traceability management information system. The system requires the input of basic company information, monthly traceability information (input, production batches, output, and product movement), and by linking with the system, the government's goal for digitized traceability management could be achieved. In 2019, Hsin Tung Yang's Dayuan Plant uploaded 2,255 tons of production volume to the government's food traceability management information system, which accounts for 70% of all production volume at Dayuan Plant.

#### • Building a Private Cloud-based Traceability System

In line with the Industrial Technology Development Program (ITDP), a technological R&D project from the Ministry of Economic Affairs in 2013, we have implemented the "Hsin Tung Yang Food Traceability Private Cloud-Building Demonstration Project" to further enhance and promote the digitization of food traceability management system. Through system automation and data interface such as the "Food Safety Traceability Platform", we can automate internal traceability control, and reduce the labor and other costs related to relaying data to the public cloud. Hsin Tung Yang promoted creative developments for 10 of our industry partners through this project, and we integrated the farm and production ends to gradually build a comprehensive traceability system.

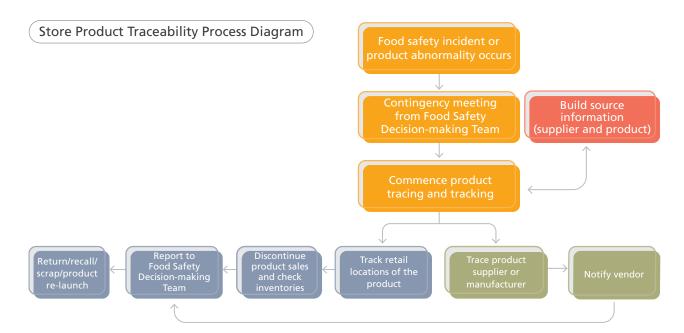
# Traceability Management Applications - System vs Onsite Process 2/2



# In-store Food Traceability

Hsin Tung Yang implements traceability management for gift boxes, meat jerkies, and low-temperature products sold at stores. Pursuant to the internally enacted "Product Traceability SOP" from the Channel Division, when a merchandise arrives at store, its name, specifications, quantity, and expiration date is confirmed and traceability information would be recorded in the system, allowing for traceability of product information and product movement. In line with the aforementioned SOP, all food products delivered from Hsin Tung Yang's Dayuan Plant to retail locations can be traced. By recording identifiable information in the system when each batch of product arrives at stores, we can efficiently trace product information and track for its movement should a food safety incident occur. This will facilitate us to rapidly complete discontinuation and other related processes to protect the safety of consumers.





#### "Chen Hao Shih Hakka Restaurant" - First 3-Star Traceable Restaurant at Taoyuan International Airport

Upholding the down-to-earth Hakka philosophy, Hakka Restaurant uses traceable, seasonal ingredients from small farmers, and infuses traditional Hakka flavors with modern creativity. On top of various classic dishes, Hakka dishes that best meet modern dietary awareness are also served. International passengers at Taoyuan International Airport, and road users of the freeways, can all enjoy the most authentic and the safest Hakka taste at our restaurant.

Taoyuan International Airport store - 4 traceable ingredients and 9 traceable dishes (received 2-star designation in 2018, and the highest honor of 3-star designation was received in 2019)

- Traceable eggs: Radish Omelette; Radish Omelette Fried Rice; Red Yeast Fermented Dried Plum and Grilled Beef Burger; Pork Chop Burger with Pumpkin Sauce
- Traceable beef: Taiwan-styled Fried Flat Noodles with Beef; Taiwan-styled Fried Flat Noodles with Assorted Beef
- Traceable Black Pork Taiwanese Sausage (Sorghum Liquor): Fried Rice with Sausages
- ◆ Traceable white shrimp: Fried Shrimp Balls in Orange Sauce
- ◆ Traceable Milk Fish Radish Cake

Guanxi Service Area store: 3 traceable ingredients and 6 traceable dishes (received 2-star designation for 2018 and 2019)

- Traceable beef: Stir-fried Beef with Basil; Beef Onion Stir Fry; Beef Brisket with Tomato
- ◆ Traceable eggs: Radish Omelette; Salted Pork Fried Rice
- ◆ Traceable Milk Fish Radish Cake

Chef Sheng-Ming Yang created the "Fresh Grouper Marinated in Mustard Meal"

- The only highway service area in Taiwan to be invited to participate in "Central Japan Service Area Cooking Contest"
- Received "Food Culture Special Award" from Central Nippon Exis Company
- Special report and recommendation from renowned Japanese cooking magazine, "Cuisine Kingdom"



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