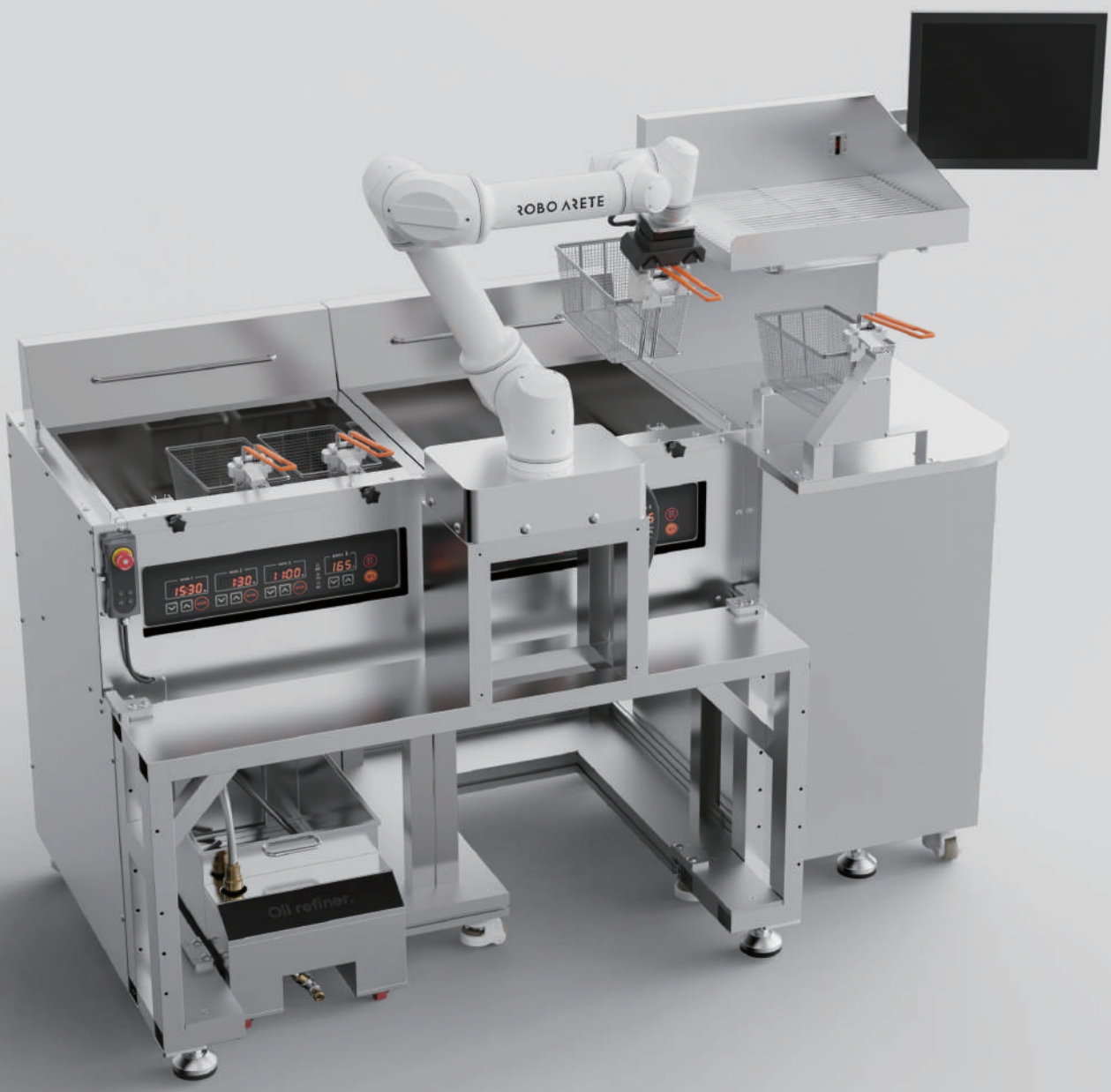
AI Frying Robot

ROBERT-E

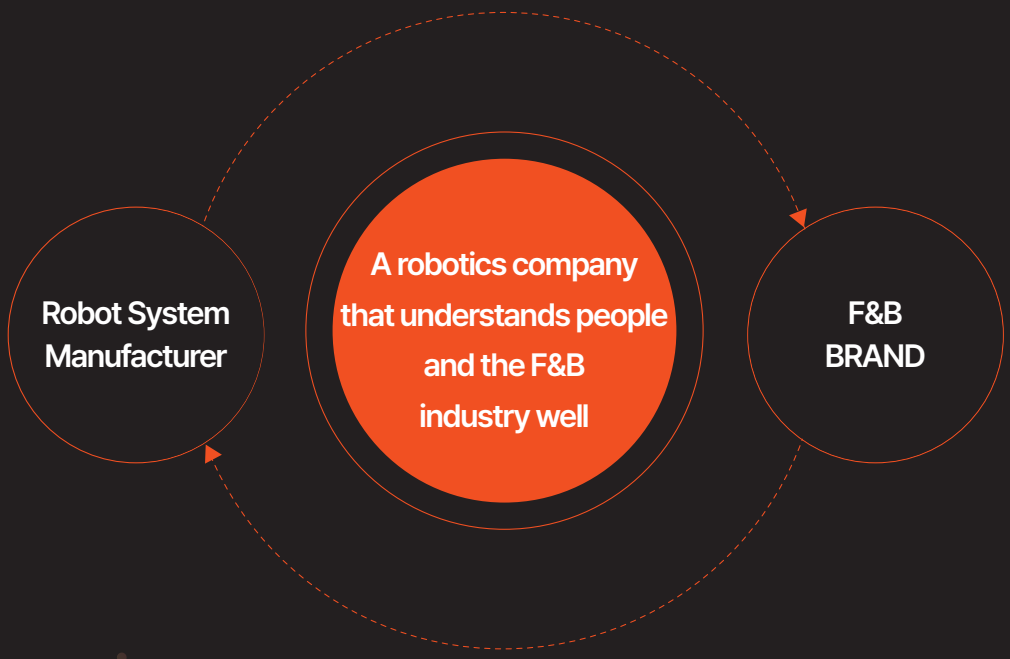


roboarete.com

ROBO ARETE

ROBO ARETE

Robo Arete is a global food tech company that
revolutionizes human culinary culture and F&B business
through the development of cooking robot systems that understand people.



It's Eatnovation

Who Is Robo Arete?

Robo Arete is a pioneer of kitchen automation, leveraging unique robotics technologies developed in-house.

What Do We Do?

Robo Arete has developed a frying robot system that automates the entire frying process.
This system drastically reduces costs for restaurant owners while improving efficiency, safety,
and taste through our unique expertise.
Our goal is to provide a comprehensive kitchen automation solution.

Why Do We Do It?

We are continuously innovating the cooking process using robotics,
aiming to lead the future of culinary robotics globally by providing a safe
and efficient environment where robots and humans collaborate in cooking.

Robo Arete

Milestone

2024	01	Overseas B2B Sales : Greenbea Food Ltd, UK
	02	Overseas B2B Sales - 365 Holdings, USA - No brand F&B, USA
	03	Overseas B2B Sales : The Hansik Express, Mexico
	04	Establish A/S infrastructure in Western, Central and Southern America Establish A/S infrastructure in UK
2023	01	Overseas B2B Sales: Noori Chicken Columbus, Ohio
	04	B2B Sales: Sinbihan Brothers food truck
	05	Tech Credit Bureau(TCB) TI-3 (Excellent) obtained B2B Sales : Hangry Joe's Hot Chicken
	06	Series A-2: Hanwha Investment & Securities Opened the 1st overseas franchise store in Singapore
	07	Robert-E achieved NSF food safety and sanitation certification Achieved INNOBIZ certification
	11	Robert Chicken & Hungry Dao/TFG Joint Venture Company signs master franchise agreement in the Philippines
2022	02	MOU with GS Retail for robot supply
	04	B2B Sales : GS25 Busan Dongrae Flagship Store
	05	Series A - Korea Investment Partners, GS Retail, IBK, Smart Study Ventures, JB Invest, KODIT
	06	B2B Sales : GS Supermarket
	10	Started Robert Chicken franchise business
	12	Minister's award from the ministry of agriculture, food and rural affairs
2021	06	Pre Series A - Naver, WE Ventures, Bluepoint Partners
	07	Korea Institute for Robot Industry Advancement, service robot demonstration project
	09	Selected as a TIPS company with Blue Point Partners as the operator
	12	2021 Women's Entrepreneurship Competition winner
2020	02	Opened the 1st Robert Chicken Store
	07	Selected for the service robot demonstration project, organized by the Korea Institute for Robot Industry Advancement
	08	Seed: Korea Venture Investment Corp
	12	Opened 2nd Robert Chicken Store
2019	03	Acquired venture company certification
	09	Startup Package (Yonsei University)
2018	09	Establishment of Robo Arete

AI FRYING ROBOT

ROBERT-E

1

First in Korea
to obtain NSF certification
for the entire robot system

1.62

Compact size that
can be installed in only
1.62 square meter

50

Capable of
Cooking 50 Baskets per hour

2020

Validation of effectiveness
through self-operated robot store
operation from 2020 to present

01 Suitable for Any Location that Requires Frying

It's capable of cooking 50 baskets per hour, including a variety of fried items such as chicken, french fries, pork cutlets, donuts, and hot dogs. Moreover, it allows customization for specific restaurant recipes, including adjustments to robot movements and cooking times.

Capable of Various Frying Recipes

Cooking 50 Baskets per Hour

Ability to Develop Customized Systems

02 A Cooking Robot That Best Understands People and Kitchens

Since 2020, Robert-E has been operating daily and upgrading the capabilities at Robo Arete's own chicken brand, 'Robert Chicken'. It is now actively used not only in Robert Chicken but also in BHC, Hangry Joe's Hot Chicken, GS25, and others, making it a robot thoroughly verified in both Korean and global stores.

03 Compact Size

With a simple structure and compact size, it only requires 1.62 square meter of space for installation, making it suitable for any kitchen from small 1-ton trucks to small and large stores. Additionally, its small size ensures ample space for operators to manage operations, cleaning, and stocking of ingredients.

04 Cloud-Based Operating System

The R&D headquarters in Seoul can monitor and control robot systems not only in Korea but also overseas. This enables quick remote troubleshooting, software updates, and the addition or modification of menus.

05 Order Connect

The robot system is seamlessly connected with various ordering systems like kiosks, apps, table orders, and POS. This integration allows cooking to start automatically without manually inputting orders into the robot - simply press 'Start Cooking'.

Obtained Hygiene and Safety Certification for the Entire Robot System

1. NSF Food Safety Certification

- ✓ Obtained certification for the safety of food processing equipment and related components(NSF/ANSI 169)
- ✓ NSF product production facility qualification

2. Human-Safe Frying Cooking System

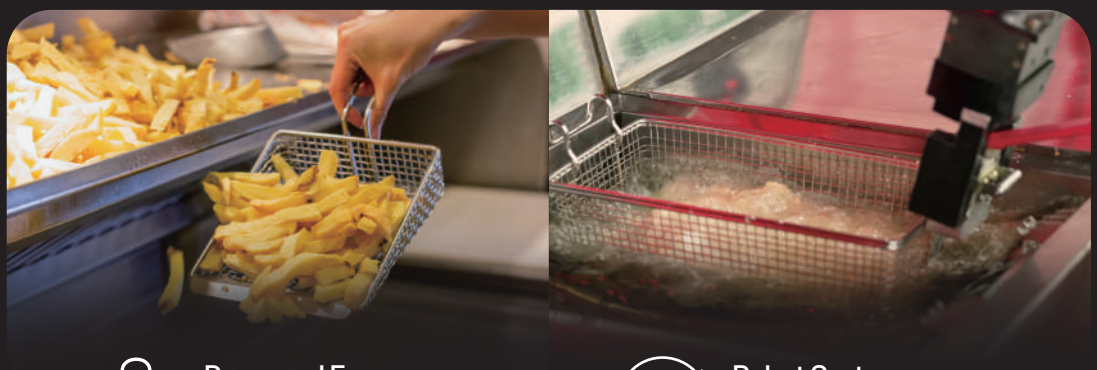
- ✓ Using FDA-compliant materials with no harmful substances released in contact or proximity to food
- ✓ It is safe even when food comes into contact with the system

3. Utilizing High-Durability Components

- ✓ Non-corrosive SUS components and fasteners
- ✓ Hygienically validated components even under high temperatures

As the first in Korea to secure **NSF** Food Safety Certification for the entire equipment involved in the robot system, we can offer food that consumers can trust and enjoy, making it convenient for global use as well.

01 **Labor Cost Reduction** BEP can be achieved within 1 year.



Personnel Expense
$65,700
$15 × 12(hours) x 365(days)
*Every Year

>

Robot System
Robot Arm + System + Others

02 **Improved Labor Intensity and a Safe Working Environment**

You can improve the risk of burns, carpal tunnel syndrome, and respiratory illnesses caused by inhaling fumes.

Cooking Fume

WHO classified cooking fume as a carcinogen.

→ Since Robert-E handles all frying tasks, there is no need for anyone to stand in front of the fryer.

Risk of Burns

The high temperature of frying oil can cause serious burns.

→ Robert-E protects people from the risk of burns by directly inserting food into the fryer.

Overuse of joint

Repetitive heavy lifting can cause Carpal Tunnel Syndrome.

→ Robert-E can protect wrist joints by replacing human lifting tasks.

03 **Quick and Friendly After-Sales Service**

Software issues are typically resolved remotely within 2-3 hours. Hardware issues can be promptly addressed through branches or partner companies established in each country (Doosan Robotics, Rainbow Robotics),
NY branch(restaurants) engineer and maintenance team, and remote support via cloud-based OS.

04 **Easy usage, Real-time updates**

With a user-friendly UI/UX, robots can be used more easily and conveniently than POS systems.
Immediate updates such as generating menu keys for new menu additions
and adjusting cooking times for recipe changes are possible.

Case

ROBERT-E

01 Robert Chicken

At Robert Chicken, we have validated the effectiveness of ROBERT-E by implementing it in all stores.
Through the direct management store, Robo Arete identified all possible issues that could arise from
operating a cooking robot and incorporated them into ROBERT-E to make the user-friendly system we have today.
As a result, Robert-E is being used in various stores, ranging from small stores operated
by a single individual to large stores requiring bulk cooking.
*Robert Chicken, the F&B brand by Robo Arete, is scheduled to open in the United States, Mexico, the Philippines, and other countries in 2024.

"This Robo Arete robot replaces the workload of 1.5 people. When I am busy, it is more worthwhile than that. I'm sure it can make a restaurant open without any employees. Only a collaborative robot and me are enough."

02 BHC Chicken

ROBERT-E has been designed with a user-friendly UI/UX by eliminating unnecessary features,
making it reasonably priced and easy to operate for cooking.
With the collaborative robots from global companies such as Doosan Robotics and Rainbow Robotics,
Robo Arete conducts re-evaluation, assembly, programming, and software development directly without outsourcing.
This allows you to use high-quality cooking robots at a reasonable price.

"I consulted with numerous cooking robot companies, and among them, Robo Arete offered the most reasonable price and was the easiest to use."

03 **GS25 & GS Fresh**

The synergy between the characteristics of convenience stores and the compact size of ROBERT-E,
along with its capability to perform tasks of more than one person, is a notable case.
GS Fresh has also introduced ROBERT-E to cook various menu items such as french fries, pork cutlets, and chicken,
playing a significant role in the deli corner.

**"I was worried about the limited space
in the convenience store, but I was pleasantly
surprised that the robot didn't take up
much space and could cook
a variety of menu items."**

04 **HANGRY JOE'S Hot Chicken Korea**

HANGRY JOE'S Hot Chicken is a chicken and burger brand in the United States that uses Robert-E to cook chicken menu items and chicken patties. As fast and accurate cooking is crucial for a QSR brand, ROBERT-E was absolutely necessary and has become the most important cooking staff member.

**"We are finding it extremely useful to have orders
prepared accurately and quickly
by the robots during peak hours,
ensuring that no orders are missed."**

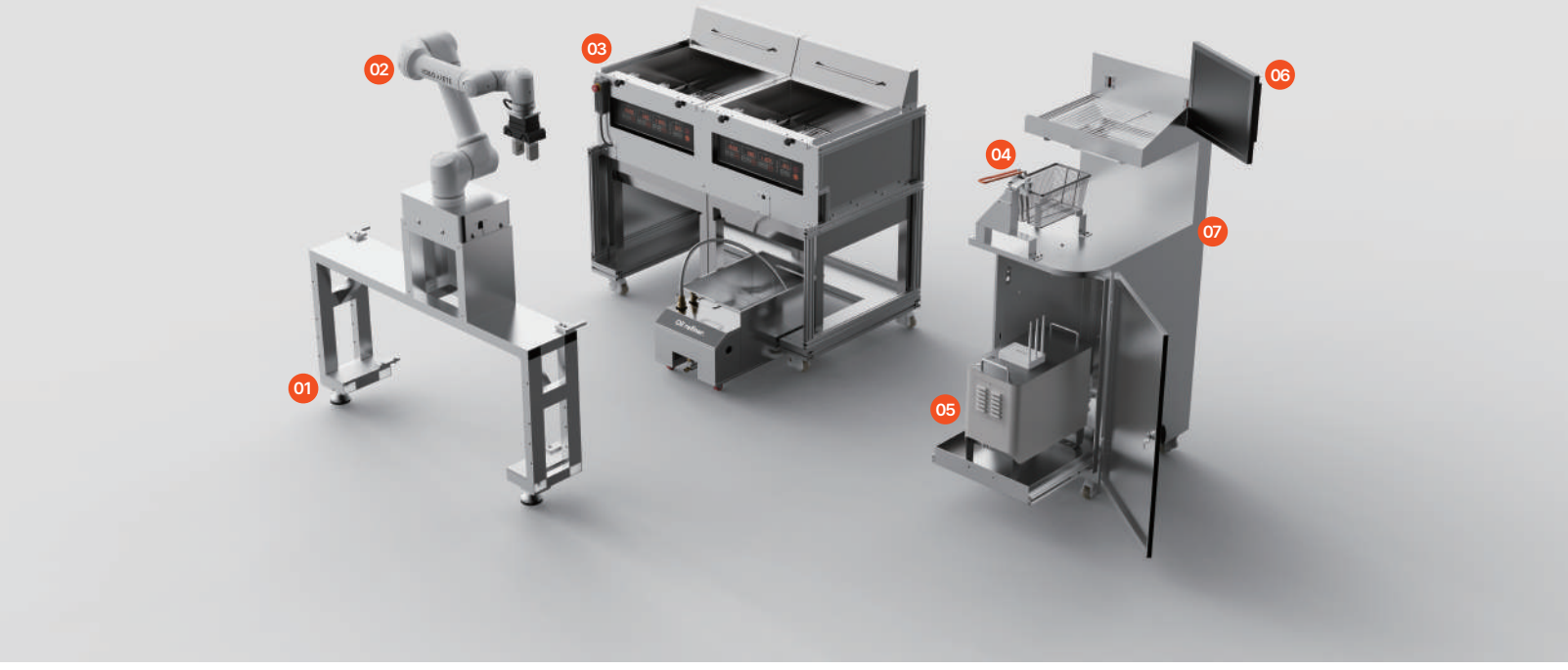
05 **Food Truck 'RABO'**

The food truck RABO is a prime example demonstrating that ROBERT-E can be installed even in tight spaces.
With ROBERT-E, installation can be done quickly within a day in narrow spaces like small-sized stores
and food trucks, as long as there is space for a fryer.

**"Even with a 1-ton food truck,
there is plenty of space for a ROBERT-E,
leaving enough room for two people to work inside."**

Components

ROBERT-E



01 Robot fixing bracket
02 Cobot
03 Fryer 4/6 burners
04 Basket
05 Control box
06 Operation monitor (all-in-one PC)
07 Fry stand

ROBERT-E-F-4 (Specs)	
Productivity	33 Basket / hour
Electric Spec	110V/220V (Single phase, 50/60Hz, 20kW)
Size	1501mm(W) X 932mm(D) X 1522mm(H)
Fryer	RINNAI 428G(LNG) / 227E(Electric)
Controller	20 inches All-in-one PC
Co-bot	Rainbow Robotics : RB5N Doosan Robotics : A0912
Gripper	GIMATIC MPLM3240

ROBERT-E-F-6 (Specs)	
Productivity	50 Basket / hour
Electric Spec	110V/220V (Single phase, 50/60Hz, 20kW)
Size	1770mm(W) X 932mm(D) X 1522mm(H)
Fryer	RINNAI 328G(LNG) / 327E(Electric)
Controller	20 inches All-in-one PC
Co-bot	Rainbow Robotics : RB5N Doosan Robotics : A0912
Gripper	GIMATIC MPLM3240

*It may change depending on the site and supply condition.

ROBO ARETE

ROBO ARETE

IT'S EATNOVATION

Roboarete Co. Ltd

Headquater

Email	contact@robertchicken.com
Phone	+82-2-6929-0557
Fax	+82-2-6929-0553
Address	Seoul Office: 4th floor, 37, Seongsui-ro 22-gil, Seongdong-gu, Seoul, Republic of Korea
	R&D Center : 2th floor, 151, Bongeunsa-ro, Gangnam-gu, Seoul, Republic of Korea

ROBOARETE USA INC

Email	nyc@robertchicken.com
Address	298 Fifth Ave, New York, NY 10001

Master Franchiser & Exclusive distributor in US : ROBOCRISP, INC.

Email	info@robocrispusa.com
Phone	+01-213-605-5727
Address	6929 Airport Boulevard, Suite 176 Austin, Texas 78752

Exclusive distributor in UK : SABA ROBOTECH UK LTD

Email	hello@sabacvs.co.uk
Address	29 Kensington High Street London W8 5NP

instagram.

linkedin.

Roboarete web.