

Hiwell[®] Professional food processing system



Forming and Coating Food

Endless Creative Surprise For You...



HIWELL MACHINERY

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HIWELL MACHINERY

FORMING & COATING

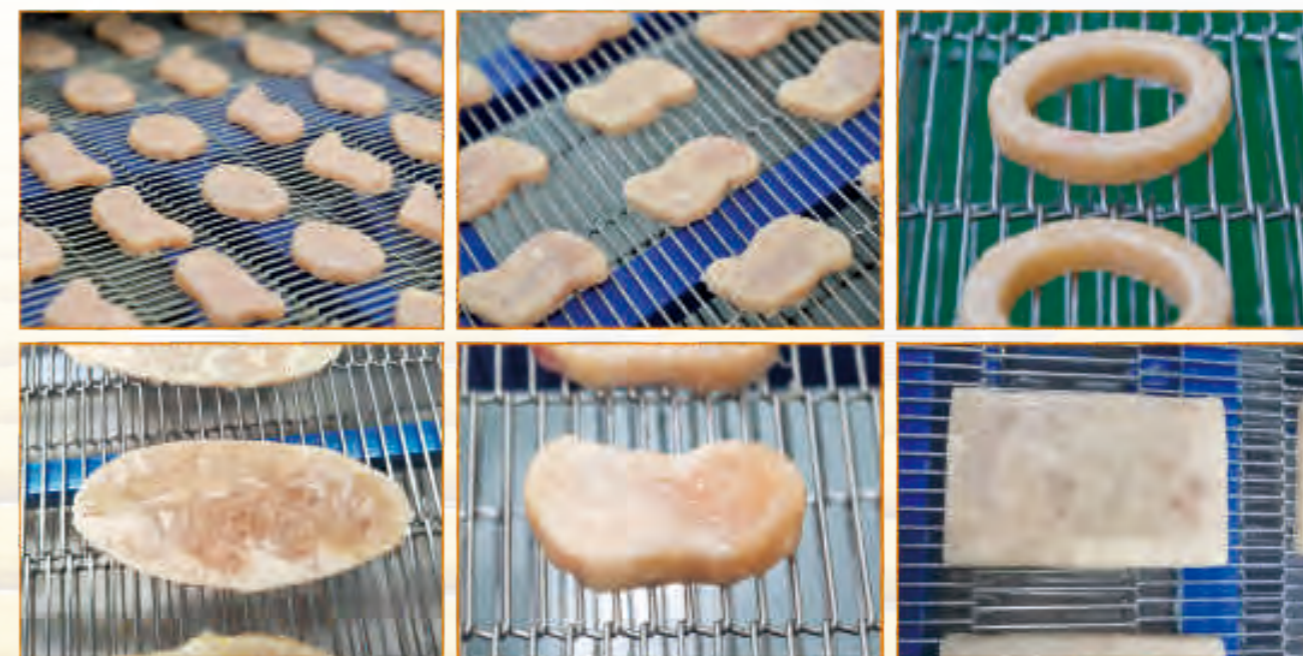
SLICER & INTELLIGENT PORTION CUTTER

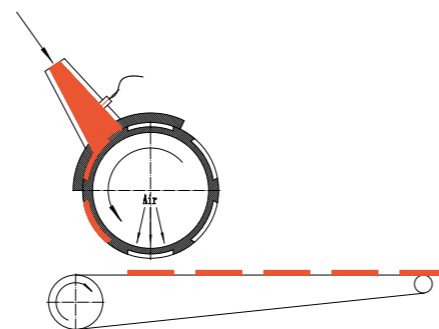
Edition 2024-3



Automatic Drum Forming Production Line

- ☐ Low-pressure and perfect forming.
- ☐ Air release knock-out, no water needed, avoiding pollution of products and water waste.
Available for steak, and cubes these thin and small products as well.
- ☐ High yield: 2~5t/h, brings more profit.
- ☐ Almost zero material leakage, no stain.
- ☐ Automatic identifying the mould parameter, easy to adjust.
- ☐ The equipment can be remote maintenance and the software is upgraded free of charge for life.
- ☐ Very low maintenance cost, easy to operate.





Drum Former

The raw meat is filled into the cavity of the spongy metal mould through the vacuum filler, to obtain the required shape and weight, then the compressed air releases the products and drops onto the belt. Fit for meat, poultry, seafood, plant based, vegetable and mixed materials.



Vacuum Filler

The raw material is conveyed into the cavity by a double-screw pump at low pressure without damage, and then evenly covered in the mould. The constant filling pressure is controlled by the pressure sensor to ensure the uniformity of product quality and shape.

[Technical parameter]

Model	AMP600	ZGJ90
Name	Drum former	Vacuum filler
Power	8.1kW	15.2kW
Production capacity	2~5 T/h	6 T/h(-2°C)
Belt width	600mm	Hopper volume 240L
Overall dimension	1693×1962×1783mm	2435×1480×2334mm



[Technical parameter]

Name	Cleaner
Power	5.7kW
Overall dimension	1852x1055x1638mm

Mould Washing Machine

Meat juice or starch is retained in the spongy micropores of the mould during the filling process. The mould cannot work properly if it is not cleaned in time. The cleaner will automatically finish the process of washing, alkali washing, acid neutralization, clean water washing, and air drying to ensure the normal use of mould.



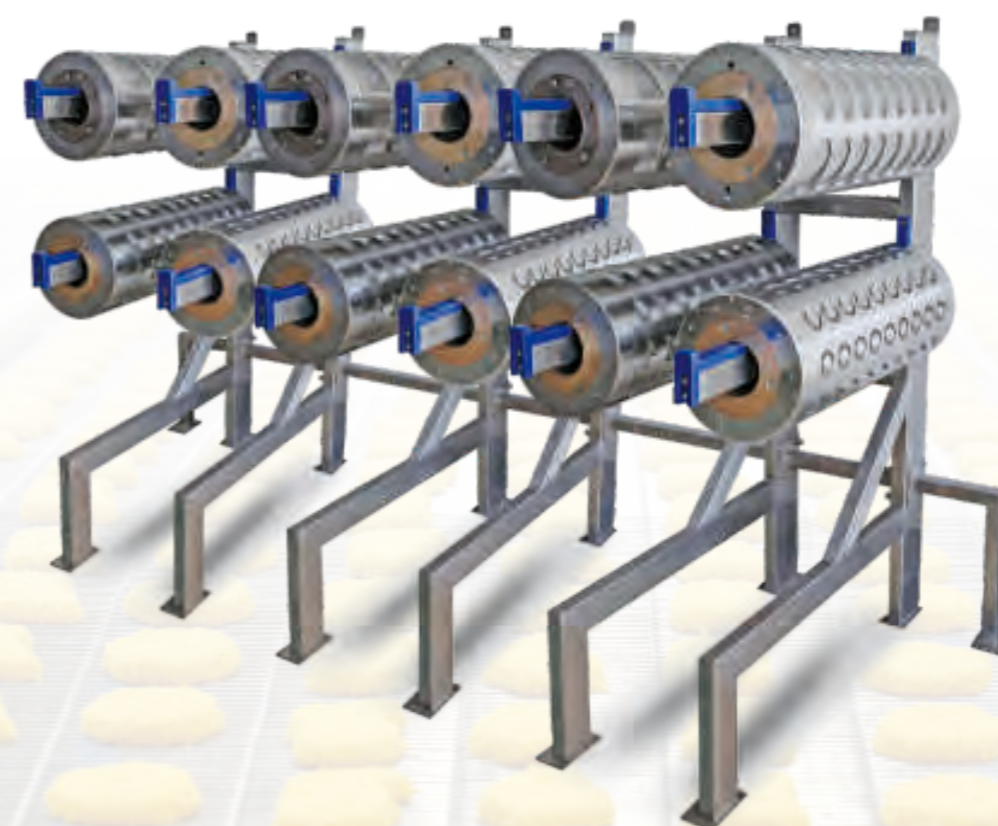
Mould Carriage

The special moving tools for loading and unloading the mould from drum former and cleaner.



Mould Storage

Mould storage to avoid mould collision.



120 Strokes/min

Automatic Multi Forming Machine AMF600Pro

The plate movement, screw feeding, filling, and knock-out parts are all driven by servo motors.



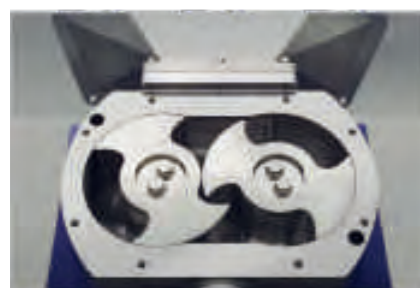
MES



Optional design, new operation interface, multi-language display, convenient data adjustment, automatic saving, fault diagnosis indication. Ether CAT bus mastering, fast speed data communication.



The hopper can be tilted, easy for cleaning.



Servo lobe pump feeding method reduces the damage of raw materials and maximizes the structure of raw materials.



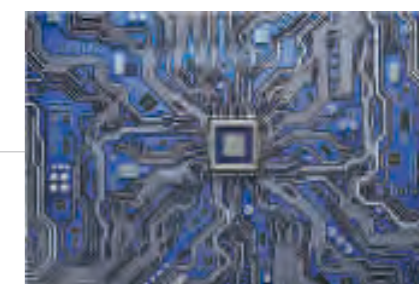
Optimization design of plate movement reduces ineffective motion performance and improves motor efficiency.



High degree of automation, user-friendly operation and adjustment, Can be used in MES system for digitalized management. Made of stainless steel and non-metallic materials, in compliance with HACCP requirements.



Metal plate used, perfect forming, no burrs, minimal material leakage, and cost saving, The knock-out part is controlled by a servo motor, accurate, reliable, and efficient.



Machine automatically reads data from chip on the plate, easy to operate.

[Technical parameter]

Model	AMF600 Pro
Belt width	600mm
Power	34.3kW
Strokes	15~120 strokes/min
Thickness of product	5~40mm (metal plate for thickness ≤12mm)
Overall dimension	3876×1144×2076mm



100 Strokes/min

Automatic Multi Forming Machine AMF600-V

Servo Feeding System

The application of servo control system on feeding screw effectively avoid extrusion damage of raw materials and highly reliable.



Servo Plate Driving System

High repeat positioning accuracy, make sure of reliable working in 100 strokes / min, Less quick-wear parts, low maintenance cost.



Entire Basis Platform

Made by whole stainless steel plate and high precision, Parts installed with high position accuracy, make sure the plate driving system operate stably with fast speed.



Hydraulic Rapid Filling System

Adopting imported fast speed hydraulic system and high precision filling cavity, meet the requirement of fast speed plate filling without material leaking, make sure the stable working with fast speed.



CE



Touch Screen Control

Optimal design, New operation interface, multi language input, convenient data adjustment, automatic saving, fault diagnosis indication, EtherCAT bus mastering, fast speed data communication.

Application of Steel Plate

Excellent abrasion performance and filling effect, lowest material leaking, long service time.



[Technical parameter]

Model	AMF600- V
Belt width	600mm
Power	28.12kW
Strokes	50~100 strokes/min
Thickness of product	6~40mm
Overall dimension	3170×1176×2430mm



Convenience of Production

Fuzzy design is adopted in the software, and the forming speed matches automatically with the output speed of the conveyor belt. Formula selection ensures the consistency of batches.





CE



60 Strokes/min

Automatic Multi Forming Machine AMF260-II

- AMF260 automatic multi forming machine has same perfect forming performance with AMF600 which combining humanized design concept to realize flexibility, stability and efficiency.
- The cost effective feature is especially suitable for medium and small factories. It is also a perfect choice for medium-scale testing in large factories. AMF260 can provide accurate parameter reference for mass production.
- Germany SIEMENS PLC control system can guarantee stable weight control and less downtime.
- Precise hydraulic control system ensures the accuracy of each filling and weight control.
- Screw feeding system can give accurate step feeding, avoid extrusion damage of raw material and maintain the taste of the product.
- The precise mould control system and high-speed hydraulic drive ensure high output and uniform product weight. Multi moulds are available with easy changes.
- Stainless steel made and food grade non-metal material, safe and reliable, HACCP standard.

[Technical parameter]

Model	AMF260- II
Belt width	260mm
Power	5.56kW
Strokes	30~60 strokes/min
Thickness of product	6~25mm
Overall dimension	2513×709×1950mm

Innovative Plant-Based Food Forming Technology

Solved the problem of difficult formation and deformation of plant-based products with our unique plant-based forming technology and ensure that plant-based products completely conform to the fiber and chewy texture of meat, so as to realize the replacement of chicken, pork and beef.

Plant-based alternative protein is a new technology and new raw material.

The processing of plant-based raw material with less water, energy-saving and low-carbon.

To lead a green and healthy lifestyle with the R&D of innovative plant-based food, and achieve the goal of "carbon peak".

Perfect processing of plant-based beef patties, pork steaks, and chicken nuggets.





Combined Contact Cooker

Combined contact cooker has two layers parallel non-stick belts providing contact cooking on both sides simultaneously. The food is fully cooked and wonderfully browned. It has a wide application for formed, whole muscle, marinated, boneless or bone-in products. It can also be used for various pasta products, such as bake bread, shortbread, etc.



Features:

- ☐ Non-stick belt, multi choice for sticky and marinated product.
- ☐ Space between the upper and lower conveyor belts can be adjusted quickly, applicable for various products with different thicknesses.
- ☐ Baking temperature can reach 260℃, independent temperature control area, suitable for single-sided or double-sided baking.
- ☐ Effective cooking length, 1.8m, 2.7m, 3.6m, and 4.5m optional.
- ☐ With scraper and high-pressure on-line continuous cleaning device, keeping the conveyor belt clean at all times and maintain product integrity.
- ☐ With operator friendly touch panel, convenient to adjust speed, temperature and heating time.
- ☐ Disassemble design, easy to clean.
- ☐ 304 Stainless steel made and food grade non-metal material, in conformity with the standard of HACCP.

Advantages:

- ☐ The food can be cooked without adding fat. This way can reduce product's fat content, more suitable for healthy diet culture.
- ☐ Contact cooking can help food being pre-injected or richly coated and covered by sticky marinades. The moisture and juice are firmly locked inside the product to ensure that the product has a juicy taste and a special grilled aroma.
- ☐ No belt marks on products.

[Technical parameter]

Model	SMJ600-1.8	SMJ600-2.7	SMJ600-3.6	SMJ600-4.5
Power	63.4kW	93.4kW	123.4kW	154.9kW
Belt width	650mm	650mm	650mm	650mm
Belt speed	0.5~10m/min	0.5~10m/min	0.5~10m/min	0.5~10m/min
Upper belt length	7550mm	8150mm	9950mm	11750mm
Lower belt length	8750mm	9850mm	11650mm	13450mm
Input height	1050±50mm	1050±50mm	1050±50mm	1050±50mm
Output height	1050±50mm	1050±50mm	1050±50mm	1050±50mm
Effective cooking width	560mm	560mm	560mm	560mm
Effective cooking length	1800mm	2700mm	3600mm	4500mm
Effective cooking height	0~50mm adjustable	0~50mm adjustable	0~50mm adjustable	0~50mm adjustable
Overall dimension(mm)	3810×1570×2150	4380×1570×2150	5280×1570×2150	6200×1570×2150



3D Extrusion Forming Machine

The raw material is conveyed to the vertical extrusion forming machine without damage through twin screw vacuum filling machine, and then formed into the required 3D shapes through the forming mold, such as onion ring, shrimps, chicken drumsticks and other different shapes.

- ☐ High forming efficiency and maximizing the graininess of raw material.
- ☐ Perfect 3D shape.
- ☐ Product parameters saved in the chip, easy and fast to adjust the product.
- ☐ Intelligent equipment adjustment. when row spacing is determined, the belt speed will automatically adjust according to the forming speed.
- ☐ The whole machine is made of stainless steel and FDA-compliant non-metallic materials.



[Technical parameter]

Model	3D-EXT600	3D-EXT1000
Belt speed	4~20m/min adjustable	
Strokes	150 strokes/min	
Mold numbers	13 (6/7 double row)	
Power	2.99kW	
Belt width	600mm	1000mm
Overall dimension	2090×1453×1775mm	2090x2053x1775mm



Horizontal Extrusion Forming Machine

The raw material is conveyed to the vertical extrusion forming machine without damage through the screw vacuum filling machine, and then formed into the required shapes through the forming mold, such as cylindrical, square, star, heart and other special-shaped long and short products. Especially suitable for the production of pet snacks and cheese.

- ☐ High forming efficiency and maximizing the graininess of raw material.
- ☐ Flexible production between 6-16 channels.
- ☐ Adopting servo drive system, efficient and precise.
- ☐ Product parameters saved in the chip, easy and fast to adjust the product.
- ☐ The whole machine is made of stainless steel and FDA-compliant non-metallic materials.
- ☐ Quickly and conveniently replace molds without using tools.
- ☐ Touch screen operation, automatic fault alarm.



[Technical parameter]

Model	H-EXT600	H-EXT1000
Belt speed	4~20m/min adjustable	
Strokes	200 strokes/min	
Output height	1050mm	
Power	3.75kW	
Belt width	600mm	1000mm
Overall dimension	2130x1376x1346mm	2130x1776x1346mm





Vertical Extrusion Forming Machine

The raw material is conveyed to the vertical extrusion forming machine without damage through the screw vacuum filling machine, and then formed into the required shapes through the forming mold, such as meatball, olive, candied haws string, skinless sausage, chicken nuggets and other different shapes.

- ☐ High forming efficiency and maximizing the graininess of raw materials.
- ☐ Combined with the shaping belt, more shapes can be achieved.
- ☐ Product parameters saved in the chip, easy and fast to adjust the product.
- ☐ Intelligent equipment adjustment, when row spacing is determined, the belt speed will automatically adjust according to the forming speed.
- ☐ The whole machine is made of stainless steel and FDA-compliant non-metallic materials.



[Technical parameter]

Model	V-EXT600	V-EXT1000
Belt speed	3~15m/min adjustable	
Strokes	200 strokes/min	
Output height	1050mm	
Power	2.75kW	
Belt width	600mm	1000mm
Overall dimension	2289×1114×1626mm	2289×1514×1626mm





The machine structure is developed to meet the European standard.

MES



SJJ600/1000 Pro

Batter

Battering machine can offer a even coating of the chicken (poultry), beef, meat, seafood etc with a two-layer batter curtain on the top and a batter under-bath. It is suitable for the processing procedure before breading and predesting.

- ☐ Special design of batter pump can greatly reduce the cutting of the batter.
- ☐ Fast-combine design, easy to clean, less damage to the viscosity of the batter.
- ☐ Easy and reliable adjustment.
- ☐ Reliable protecting device.
- ☐ SIEMENS electric apparatus guarantee the safety and reliability.
- ☐ Can be precisely combined to a forming machine, a breading machine or a fryer to realize the continuous producing.
- ☐ Stainless steel made, creative design, reasonable structure and reliable features.
- ☐ Equipped with digital connectors for network communication.

[Technical parameter]

Model	SJJ400-V	SJJ600-V	SJJ1000-V
Belt speed	3~15m/min adjustable		
Input height	1050±50mm		
Output height	1050±50mm		
Power	2.6kW		
Belt width	400mm	600mm	1000mm
Dimension(mm)	1775×835×1450	1775×1035×1450	1775×1435×1450



CE



SJJ600/1000



GJJ400

Drum Batter

By the turning of the tumbling box, it can make products rolling and collision then coat the surface of products with even layer of batter. It is specially used for chicken and various seafood such as fish, shrimp, Scallop etc.

- ☐ No need to put mass of products on convey belt one by one, especially for the concave convex parts of the products can be coated evenly.
- ☐ Both batter and tempura batter are good.
- ☐ Can be realized preduster-batter-preduster and batter-preduster, also can be combined to drum breader to realize the continuous production.
- ☐ SIEMENS electric apparatus guarantee the safety and reliability.
- ☐ Stainless steel made, creative design, reasonable structure and reliable features.

[Technical parameter]

Model	GJJ400 - II
Belt speed	3~15m/min adjustable
Input height	900±50mm
Output height	1050±50mm
Belt width	400mm
Power	2.43kW
Overall dimension	3750×800×1700mm

Drum former 06

Plate former 14

Extrusion former 32

Coating 42-59

Other 60

Mini line 64



MES

The machine structure is developed to meet the European standard.



NJJ600/1000 Pro



Automatic liquid level control device (optional)

The automatic liquid level control device can be combined to the batter feeder to make it possible automatically feeding the batter and keeping a consistency quality. Additionally a cooling device of the battering machine is optional.

CE



NJJ600/1000

Tempura Batter (Dipper)

Tempura batter (dipper) realized the batter coating by dipping the products into the batter bath. It is widely used in the tempura products, meat, poultry, seafood and vegetable.

- ☐ The space between the upper and lower belt can be adjusted, which gives a wide range of variety products.
- ☐ Powerful blower can remove the excess batter.
- ☐ Easy and reliable operation and adjustment.
- ☐ Using SIEMENS electric apparatus, and reliable protection device.
- ☐ Dismountable design, easy to completely clean, meet the HACCP standard and got the CE authorization.
- ☐ Independent output belt available for your choice.
- ☐ Equipped with digital connectors for network communication.

[Technical parameter]

Model	NJJ400-V	NJJ600-V	NJJ1000-V
Belt speed	4~20m/min adjustable		
Input height	1050±50mm		
Output height	800~1100mm		
Power	2.17kW	2.17kW	2.17kW
Belt width	400mm	600mm	1000mm
Overall dimension	3100×920×1400mm	3100×1120×1400mm	3100×1520×1400mm



MES



SFJ600/1000 Pro

Improved with high configuration, automatic powder supply system, Online monitoring and precise control of powder coating process solutions. Equipped with digital connectors for network communication.



Controllable upper powder spreading belt with better coating.



Imported stainless steel motor with high protection level and stable performance.



Small size mesh belt design for output belt with less belt marks.



Preduster (Flouring Machine) Pro

- Visual control of parameters, stable product quality, possible for duplicated production, suitable for large-scale automatic production lines.
- Equipped with multiple sensors, controllable pick-up level, also suitable for high-speed production.
- Stainless steel motor for driving system, smooth sealing, no cover, low noise, easy clean, reduce the pollution and guarantee the sanitation.
- Quickly adjusted castor wheels, without using forklift, which can reduce preparation time before production.
- Small size mesh belt design for output belt with less belt marks.

Model	SFJ600Pro-VI	SFJ1000Pro-VI
Belt speed	5~25m/min adjustable	
Input height	1000mm	
Output height	1050±50mm	
Power	3.93kW	5.9kW
Belt width	600mm	1000mm
Overall dimension	2730×1610×2150mm	2730×2010×2150mm



CE



SFJ600/1000

Side powder hopper design, user-friendly feeding, even coating and avoiding flour leaking.



Preduster (Flouring Machine)

Preduster (flouring machine) is specially designed for coating food processing, it coats the bottom of the products by the layer of the flour on the conveyor belt, it coats the surface of the products by the unique belt pouring the flour evenly to the passing products on the belt. This can ensure the coating evenly, equally, and the coating quantity is controlled. Using the air flow system which is easily to connect to the preduster, it can collect the flour generated from the falling of the flour inside and recycle it, separate the air and the flour, suck the clean air onto the products to blow off the extra flour.

Model	SFJ400-VI	SFJ600-VI	SFJ1000-VI
Belt speed	3~15m/min adjustable		
Input height	870~970mm		
Output height	1000±50mm		
Power	2.93kW	2.93kW	4.9kW
Belt width	400mm	600mm	1000mm
Dimension(mm)	2655×835×2150	2655×1035×2150	2655×1435×2150



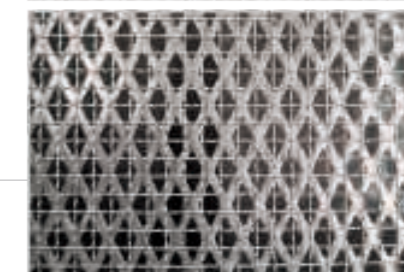
- Adjustable drum speed
- Adjustable flour bed.
- Controllable pick-up levels



- Automatic flour feeding.
- Inner sensor design can prevent blockage and control flour coating.
- Constant flour feeding for consistent flour consistency.



- An adjustable level of flour on the flour bed is constantly maintained.
- Adjustable speed, controllable coating percentage.
- Drum tumbling can deliver consistent coating quality with the authentic home-style look, taste and bite.
- Handles boneless and bone-in products.
- Ideal as a predest applicator for whole muscle and bone-in.
- Guaranteed full predest coverage on natural portions.
- The special design of convex rib inside the drum reduces the products damage and adds more powder coatings to wrinkle.



- Unique vibration mechanism design.
- Simultaneous vibrate wet powder and agglomerated particles.
- After vibrating screen, the gathered dough will be removed, and the recycle flour is conveyed back to machine feeding part by bottom conveyor to make sure the stability of flour recycling.
- Minimize the flour loss.

Drum Breader

By the turning of the tumbling box, it can coat the products with even layer of the coating flour and increase the quantity of the flour on the products surface. It causes the obvious scaly food surface. It is used for the massive products flouring and breading processing. Such as chicken nuggets, chicken popcorn, fish nuggets etc. The product enters the drum through the flour bed and it can avoid batter loss. After vibrating screen, the gathered dough will be removed, and the recycle flour is conveyed back to machine feeding parts by bottom conveyor.

Features:

- Stable powder coating effect.
- Controllable pick-up levels.
- Suitable for various hand-made/ breaded products.
- Connect the vibrator to make the products evenly spread on the conveyor belt, greatly reducing manual placement.
- Reduced labor.
- Opens up for cleaning.
- Hidden buttons, more beautiful and safer.
- Frequency conversion control, speed is readable.

Benefits:

- Adjustable drum speed.
- Function of vibrating screen, filtering large grain.
- After filtering, the grain will be lifted from the flour bed to the drum, avoiding humid meat sticking on the belt.
- Flour feeding can be worked with the front hopper, user-friendly feeding.
- SIEMENS parts, protection grade: Ip55.
- Adopting SUS 304 stainless steel and non metal material, HACCP approved.
- Equipment with sand blasting, the door with SUS 304 wire drawing board.

Technical parameter

Model	GFJ600-VII
Belt speed	3~15m/min adjustable
Belt width	600mm
Input height	1050±50mm
Output height	1050±50mm
Power	3.5kW
Overall dimension	4200×1210×2000mm





Japanese Fresh Breader

Japanese fresh breader coats the surface of the products by the bread crumbs poured out from the upper hopper and coat the bottom of the products by the special designed lower conveyor. Widely being used for meat, seafood and vegetables crumbs coating.

- ☐ Use the PU belt, avoiding the damage of the structure and pattern of the wet crumbs.
- ☐ The frequency conversion control of the speed for the upper and lower strap also for the upper belt.
- ☐ The air tube can blow off the extra crumbs.
- ☐ The unique blanking design.
- ☐ None broken of the crumbs.
- ☐ Apply the SIEMENS electrical parts, safe and reliable.
- ☐ The Germany bearing, maintenance free.
- ☐ The whole machine is made of stainless steel and nonmetal material, meet the HACCP standard.

[Technical parameter]

Model	XXJ400 - VI	XXJ600 - VI
Belt speed	3~15m/min adjustable	
Input height	1000mm	
Output height	1050±50mm	
Power	3.35kW	
Belt width	400mm	600mm
Overall dimension	3380×2275×1945mm	3380×2675×1945mm



- ☐ With wrinkled sidewalls, the lifting belt assures less falling down and less damage to the fresh bread crumbs.
- ☐ Two rollers, press softly first and then hard, adding the bread crumbs coating amount with less damage.
- ☐ Drum motor reduces washdown time up to 50%. Minimize downtime with no chain transmission design.
- ☐ High standard of sealing design minimizes the loss of bread crumbs and moisture.

Be integrated with Hiwell other equipments to form complete in-line processing system



- ① Conveyor
- ② Preduster
- ③ Tempura Batter (Dipper)
- ④ Japanese Fresh Breader
- ⑤ Conveyor

New Automatic Japanese Fresh Breadcrumb Coating Processing Line

New automatic Japanese fresh breadcrumb coating processing line is suitable for all kinds of fish-based products such as fish fillet, breaded shrimp, prawn, shrimp ball, shrimp patty, squid ring etc.

- ☐ Applied to all kinds of dry and fresh crumbs such as dry bread crumbs, panko crumbs and shredded coconut.
- ☐ To meet different coating requirements, the coating ratio can be easily and accurately adjusted like 30%, 40%, 50%, 60%.
- ☐ The soft and hard roller can help the coating effect like home-made taste.
- ☐ PU belt can minimize damage ratio of bread crumb.
- ☐ Drum motor design can make sure the stable operation for a long time and reducing the failure rate.
- ☐ Easy to clean, High Sanitation, Long shelf time.
- ☐ Labor saving, High capacity and efficiency.



MES



SXJ600/1000 Pro



CE



SXJ600/1000


Drum former 06
Plate former 14
Extrusion former 32
Coating 42-59
Other 60
Mini line 64

Technical parameter

Model	SXJ400-V	SXJ600-V	SXJ1000-V
Belt speed	3~15m/min adjustable		
Input height	1050±50mm		
Output height	1050±50mm		
Power	3.7kW	3.7kW	4.7kW
Belt width	400mm	600mm	1000mm
Dimension(mm)	2638×856×2240	2638×1056×2240	2638×1456×2240

Applied To The Corn Flake Products

Through the combination of lifting-flouring-dispersing-battering-breading (corn flakes), the automatic production line of corn flake chicken strips, cheese sticks and other products is realized.

Decreases the size of machine to reduce the crumbs circulation, thus reduce the cutting damage of crumbs.
Improving the belt movement design to extend the service life.
The machine structure is developed to meet the European standard.



- 1 Bulk Loader
- 2 Drum Breader
- 3 Vibrating Screen
- 4 Batter
- 5 Breader

Breader

Breader coats evenly the chicken, beef, meat and seafood a top layer by outpouring the crumbs from the hopper and a bottom layer while the products are passing the conveyor.

- Excellent crumbs circulation system virtually reduce the cutting damage of the crumbs, easy to realize the standard production.
- Reliable protection device.
- SIEMENS electric apparatus.
- Access to former, battering machine and fryer for a continuous production line.
- Stainless steel made, creative design, reasonable structure, and reliable characteristics.
- Equipped with digital connectors for network communication.