

PROVEG ENGINEERING AND FOOD PROCESSING PVT. LTD.

<https://provegengineering.in>



“We believe in judging our success by our ability to meet the expectations of our customers and Principal's and work with the aim of providing global technology with local support.”

About us

We are a professional business entity engaged in designing, engineering, manufacturing, supplying, erecting and commissioning of an array of vegetable and fruit processing pretreatment line, hot air dryers, vacuum freeze dryers, IQF, extruded food machineries, baked food machines, candy, chocolate machines, industrial mixers, nut and grain shelling, hulling , grading, sorting and cutting machines, packaging solution. Our expertise resides in turnkey plants which we can assemble at client's site with ease.

From humble beginnings in year 2006 as Techno Engineers & consultants, now at PROVEG we have emerged as a strong partner to our customers serving them with need based solutions at affordable prices while never compromising on the quality of our equipment

Headquartered in Pune, we have a local presence in Chennai. In addition, we have a well-equipped manufacturing & testing facility on the outskirts of pune to give our customers the opportunity to test and validate their products with our solutions. Our manufacturing facility is also the authorized unit for manufacturing Shakers from Key Technologies.

Our strengths

- End to end solutions for food processing
- Highly skilled after sale service support
- 15 years of experience in automation of various International & Regional snack food products.
- We provide full solution right from procurement up to delivery of equipment to your doorstep, commissioning, handovering and backing it with technical support for life long
- Fully automatic solution for our machines

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A) Vegetable & fruits pretreatment line

1) PVG-SP-I model pre-treatment production line

General

The PVG-SP-I model pre-treatment production line for quick- frozen vegetable mainly consists of: high pressure cleaner, sorting conveyor, bubble cleaner, spiral blancher, normal temperature cooler, ice water pre-cooler and vibration draining machine so as to realize automatic pre-treatment processes such as cleaning, sorting , blanching, cooling, pre-cooling and filtering of vegetables.

The production line can adjust blanching time and temperature of vegetables as well as conveying speed so as to achieve an optimal treatment effect of various vegetables.

Features

1. Featured by stable operation, reliable performance, economic energy consumption, small land area, simple use and convenient maintenance,
2. The equipment can be both operated singly and used in combination with others. It can be freely placed and provided with other auxiliary devices such as cutting tools to fully meet the production demands of garden bean, asparagus, broccoli, taro, string bean, young soya bean, sweet corn, strawberry, cherry, apple dice, onion, tomato, mushroom, pumpkin dice, spinach, bean sprout and other fruits and vegetable products.
3. The equipment is completely made of stainless steel for the convince of cleaning and maintenance, which fully meets hygienic requirement for exported foods.



2) PVG-SP-II model pre treatment production line

General

PVG-SP-II model pre treatment production line for dehydrated vegetable is specially designed for pre treatment of vegetables before drying. It is mainly composed of cleaning machine, shorting machine, cutting machine, blanching machine, cooling machine, drying machine, blending machine and etc. it can be used for cleaning, sterilization, washing blanching, color protection, cooling, water filtration and blending of various vegetables.

Features

1. Simple operation, reasonable structure, convenient maintenance, wide application, and free combination of temperature and speed adjustment etc.
2. It is special device of higher automatic degree.
3. In addition to replacing heavy manual work,
4. It also reduces production cost and improves production efficiency, receiving high favor from users.



3) TX Series Vegetable & Fruits Pretreatment Lines

I) TX-1 Pretreatment Line

General

Type TX-1 vegetable convenient disposing blanching production-line for vegetable freezing, which is the absolutely necessarily process equipment before freezing. The product line is provided with the traits of running trustiness, low energy consumption, high efficiency, smallness area occupy, ease for using, safety. The product line is complete manufactured with stainless steel and accord with the export foodstuff sanitation standard completely.

The product line process in order for dasheen, sword bean, asparagus, spinach, broccoli, potato chips, carrot chips, cauliflower, etc. The process time is 3-20 minutes.

Technical parameter

Model	Output	Power	Water quantum	Steam quantum	Processing time	Exterior size
TX -I-5	500	6.8	5	0.4	3-20	18x2.7x1.7
TX -I-10	1000	7.0	8	0.5	3-20	20x2.8x1.7
TX -I-20	2000	8.9	12	0.8	3-20	23x2.8x1.7
TX -I-30	3000	11.4	15	1.5	3-20	25x2.9x1.7
TX -I-40	4000	12.2	20	2.0	3-20	28x3.0x1.7

TX-I Convenient dispose product-line



II) TX-2 Pretreatment Line

General

TX-2 vegetable pretreatment blanching processing line for vegetable freezing, which is the absolutely necessarily process equipment before freezing. The product line is provided with the traits of running trustiness, low energy consumption, high efficiency, smallness area occupy, ease for using, safety. The product line is complete manufactured with stainless steel and accord with the export foodstuff sanitation standard completely.

The product line process in order for dasheen, sword bean, broccoli, potato chips, carrot chips, cauliflower, etc. The processing time is 3-20 minutes.

Technical parameter

Model	Output	Power	Water quantum	Steam quantum	Processing time	Exterior size
TX –II-5	500	7.4	5	0.4	3-20	17x1.3x2.0
TX –II-10	1000	7.4	8	0.5	3-20	19x1.3x2.0
TX –II-20	2000	9.2	12	0.8	3-20	21x1.5x2.2
TX –II-30	3000	10	15	1.5	3-20	22x1.5x2.2
TX –II-40	4000	11	20	2.0	3-20	24x1.5x2.2

Spriral blanching machine



Normal temperature water cooling machine & Ice water cooling machine



III) TX-3 Pretreatment Line

General

TX-3 production-line is the advance auto production-line which manufactured by our company proper motion, for the use of cleanout, scalding, cooling, water purifier before the dehydration of the vegetable. It is the optimize combination with inland and overseas machines, with the traits of compact contraction, low area occupy, easy for operation, convenient servicing, modulation temperature, timing, auto temperature control, auto cleanout, The product is complete manufactured with stainless steel, and accord with the export foodstuff sanitation standard completely.

Technical parameter

Model	Output	Power	Water quantum	Steam quantum	Processing time	Exterior size
TX –III-5	500	9.0	6	0.4	3-20	15x1.3x3.23
TX –III-10	1000	9.0	8	0.5	3-20	16x1.3x3.23
TX –III-20	2000	9.5	12	0.8	3-20	17x1.5x3.23
TX –III-30	3000	11.0	15	1.5	3-20	18x1.5x3.23

Spin-drier prevent disposal product-line



Winnowing machine



4) ZX-1 Pretreatment Line

General

Type ZX-I langouste braising and cooking production-line which manufactured based on the excellence of Denmark's products, it is provided with the traits of running trustiness, low energy consumption, high efficiency, smallness area occupy, ease for using, safety. The production-line is complete manufactured with stainless steel and accord with the export foodstuff sanitation standard completely.

Technical parameter

Model	Output	Power	Water quantum	Steam quantum	Processing time	Exterior size
ZX -I-5	500	6.1	8	0.6	3-20	17x2.7x1.4
ZX -I-10	1000	6.6	10	0.8	3-20	19x2.8x1.4
ZX -I-15	1500	7.0	12	1.2	3-20	21x2.8x1.4
ZX -I-20	2000	8.2	15	1.5	3-20	23x2.8x1.4

Spiny lobster digester product-line



Retiary belt blanching machine



5) Washing Equipment

1) PVG-GXJ High Pressure Washing Machine

General

The machine is suitable for cleaning of vegetables, fruits, seafood, products and other granules and rootstock products.

Technical parameter

Processing capacity	500~1500kg/h
Power:	3.3 kw
Water consumption:	0.5~1.0 t/h (Circulating water)
Overall size:	5380×1550×1230mm



II) PVG-QXJ Bubble Washing Machine

General

The machine used for cleaning of vegetables, fruits, aquatic products in granules, leaf and rootstock vegetables.

Technical parameter

Processing capacity	500~1500kg/h
Power	4.4kw
Water consumption	500~1000 kg/h (circulating water)
Overall size	4700×1500×1370mm



III) PVG-Multi-functional washing machine

General

The machine is used for cleaning leaf, mushroom category, sea hibernate category, fruits, herbs, and other various types of agricultural and sideline products.

Technical parameter

Processing capacity	800~1300kg/h
Power	7.5kw
Water consumption	300kg/h
Overall size	4355*1400*1630



IV) Roller Brush Washing Machine

General

This equipment is composed of motor, roller, drum, supporter, brush, water spraying tubes, feeding funnel, water box, transmission shaft, motor supports, electric control switches etc. this machine adopts brush can effectively remove the stains, dust and pesticides in the surface of fruits and vegetable by rotating the brush.

Technical parameter

Dimension	4050*1050*1725mm
Power	3.70kw
Water consumption:	1.0-1.5t/h
Diameter	760 brush
Washing speed: manual adjust:	30s-150s



6) Blancher

I) PVG Spiral Blanching Machine

General

This is used for blanching and sterilizing of vegetables, fruits and aquatic products before dehydrating, especially suitable for products in granules and small lumps.

Technical parameter

Model	Capacity:	Power:	Steam consumption:	Water consumption:	Dimensions:
SPT-I	0.5~1.5t/h	1.5kw	0.5t/h	0.3t/h	4385*1480*2180mm
SPT-II	-----	3.0kw	0.8t/h	0.5t/h	5465*1900*2700mm



II) PVG Basket Blanching Machine

Generals

This machine used for blanching and sterilizing of easily breakable products such as asparagus, mushroom and fruit slices indispensable blanching equipment for quick-freezing, dehydrating and freeze-drying pretreatment.

Technical parameter

Processing capacity	500~1500kg/h
Power	2.6kw
Steam consumption:	500kg/h
Water consumption:	200kg/h
Overall size	7640×710×1500mm (not including exhaust cover)



III) PVG Chain Blanching Machine

General

This machine is use for blanching and sterilizing of vegetables, fruits, aquatic products before quick-freezing and dehydrating, especially it is suitable machine for easily damageable products and products in strips.

Technical Parameter

Processing capacity:	500~1500kg/h
Power:	1.5kw
Steam consumption:	500kg/h
Water consumption:	500kg/h (including some cooling water)
Overall size:	6500×810×1100mm



IV) PVG Spraying Blanching Machine

General

This is widely used for various kinds of bag-packed products such as pickled mustard tuber, dried turnips, pickled vegetables; products packed with thermal-insulation plastics like jelly and ice bars; as well as the food of easy-open tins, is indispensable sterilizing equipment for salted food processing.

Technical parameter

Model	Capacity (kg/h)	Dimension (mm)	Power required (kw)	Water consumption (kg/h)	Steam consumption (kg/h)	Variable frequency speed adjustable
PVG-LPT-I	1000	7380*1100*1380	3.0	1000	600	0.7-7.0min
PVG-SPT-I	1000	4385*1480*2180	1.5	300	500	1.0-10min
PVG-PPT	1000	17150*1200*1655	11.85	1500	500	

7) Winnowing machine

General

Vegetable winnowing separator machine is used for auto separating It can separate almost all kinds of products which has different specific gravity It can separate almost all kinds of products which has different specific gravity the leaves and stems of the cut cabbage, leafy vegetable, parsley, coriander etc. Also applicable for removing the sundries and grading of the corn, green soy bean, pea, garlic etc.

Features

This machine is featured by simple structure, stable operation, low noise, low energy consumption, excellent separating and grading performance.

Technical parameter

Model	Capacity	Dimension	Power	Speed	Air volume
PVG-FSJ-A	1500kg/h	4200*1445*3000mm	4.75kw	1.5~7.5m/min	adjustable
PVG-FSJ-M	200kg/h	1740*1000*1900mm	1.55kw		



8) Hair removing machine

General

Hair removal machine is suitable to removing the stringy material from the surface of fruits and Vegetables.

Technical parameters

PVG- MSJ-30 Hair removal machine

Water consumption	400kg/h
Power	2.57Kw
Speed:	83r/min
Dimension	2070mmX1075mmX1070mm
Weight of machine	520kg
Production capacity	1500~2000kg/h

PVG-MSJ-20 Hair removal machine

Water consumption	300kg/h
Power	1.87Kw
Speed:	83r/min
Dimension	1338mmX1075mmX940mm
Production capacity	500~1000kg/h



9) Ice water pre cooler

General

The cooling machine is used for cooling vegetables, fruits, juice and milk from the blanching machine before freezing machine.

Features

1. The tank is made of the stainless sheet of 304/2B high quality.
2. Conveyor belt is composed of stainless chain and stainless web,
3. Protect sheet is made of hem stainless sheet and punching sheet.
4. Steadier is made of stainless square pipe
5. Guide course is made of hem stainless sheet.
6. It is fixed forcefully with propeller.

Technical parameter

Power(W):	7.5kw
Water consumption:	500kg/h
Belt width:	650mm
Voltage:	440
Weight:	500kg
Cold consumption:	35kw
Manual speed adjustment:	1.5-7.5m/min



10) Roller grader machine

General

The roller grader is mainly composed of rack, motor drive, rank output hopper, drive device cover, roller etc. It is suitable for grading various kinds of fruits and vegetables, such as potato, orange, litchi, red dates and mushroom etc.

Technical Specification

Dimension:	6060*1340*2126mm
Power	:1.5kw
Speed	5.4-26.8r/min(manual adjustment)
Roller diameter	900mm
Capacity	2000-3000kg/h

It grades into three levels, the diameters are 27.8, 30.8 and 32.8. (Based on litchi)



B) Vegetable & fruits dryer

1) Hot air dryer

I) Vegetable belt dryer

General

The belt type drying machine is suitable for drying garlic, onion, ginger, carrot, potato, bean, chestnut, almond, shelled shrimp and other granular materials. Belt dryer is continuous through-flow drying equipment for drying breathable good sheet, strip, granular material; the dryer has a fast drying, high evaporation strength, good product quality advantages.

Belt Dryer Feature:

1. It can be adjusted the amount of air, heating temperature, material residence time and feeding speed to achieve the best effect
2. Configuration is flexibility, with flushing system for network and material cooling system.
3. Recycling air, energy conservation.
4. Unique air distribution means more even distribution of hot air, to ensure product quality and Consistency
5. Source may be steam, thermal oil, or electric etc

The belt type drying machine has a box type structure. The box is provided with single layer or multiple layers of conveying belts. The belt type drying machine includes:

1. Single-Layer - Single-Layer belt type with the commonly-used drying area specification of 20 m², used in two sections or three sections. The temperature can be controlled in different sections and can be automatically adjusted according to the settings.

2. Multi-layer - Multi-layer belt type (turning plate type).The conveying belt can be screen mesh or turning plate. The commonly-used drying area specifications are 25 m² and 60 m² the conveying speed and fan volume of the drying machine adopt frequency conversion steeples speed adjustment to meet drying requirements of different materials.

Technical parameter:

Category 1

Model	Overall dimension (mm)	Power (kw)	Capacity (t/h)	Steam consumption (t/h, peak value \geq 0.4mpa)	Valid width of belt (m)	Valid length of belt (m)
PVG-SBJ-2S-24	13700*3140*2990	53.22	1 (calculated as potato dice)	1.8	2.0	12.0
PVG-SBJ-2M-60	14900*2940*3900	21.0	1 (calculated as potato dice)	0.8	2.0	10.0
PVG-SBJ-2-32	18400*5500*3500	59.22	1.5 (calculated as wheat)	4.0	2.0	16.0
PVG-SBJ-2-16	11900*5500*3500	34.50	0.5 (calculated as wheat)	1.8	2.0	8.0

Category 2 :

Model	PVG-DW-1.2-8	PVG-DW-1.2-10	PVG-DW-1.6-8	PVG-DW-1.6-10	PVG-DW-2.0-8	PVG-DW-2.0-10
length of drying section(m)	8	10	8	10	8	10
Thickness of raw material	$\leq 60\text{mm}$					
Temperature($^{\circ}\text{C}$)	40~120 $^{\circ}\text{C}$					
Steam Pressure(MPa)	0.2~0.8Mpa					
Steam consumption(KW)	150~350	200~400	200~400	250~500	300~600	350~700
Drying time(h)	0.25~1.2	0.3~1.5	0.25~1.2	0.3~1.5	0.25~1.2	0.3~1.5
Drying strength(kg/h)	6~30Kg/m ² h(water)					
Installed power(kw)	7.3kw	12.1kw	12.7kw	21.1kw	17.2kw	23.1kw



II) Tunnel dryer

Generals

Tunnel drying machine has advantages of large charging quantity and simple operation. It is mainly applicable for drying of dehydrated vegetables, fruits and other agricultural and sideline products, herbs and various kinds of pellet materials, tobacco, seafood, timber, flowers, herbs, seeds, and all kinds of dehydrated vegetables.

It mainly consists of a trolley, drying tray, heat exchanger, blower fan, control cabinet and drying room, the machine is fully made by stainless steel. Hot Air Circulation Drying Room is adopting the technology from the USA. The hot air circulation system has heating area and drying area, which is creating high thermal efficiency and temperature uniformity. The body of drying room is using double-sided color-steel with insulation materials. The heat source can be generated by using coal, electricity, oil, gas, etc.

The control system consists of industrial control computer (microcomputer) and various modules and actuator. The drying room has automatic control point and it is easy to operate. The Network Systems can monitor the temperature changes, humidity, and drying time. The temperature data will be automatically recorded.

We have upgraded the system according to the practical experiences to ensure the drying uniformity which makes the color of the product look more natural.

Working principle

After the air is altered, by the heat exchanger, the air in the drying chamber is heated through heat radiation and heat convection. Under the function of fan, the air is diffused in the whole drying chamber and the hot air and material carry out sufficient heat exchanger. Under the function of humidity removing fan, the vapor is discharged outside drying chamber so as to achieve the purpose of drying.

Main technical parameters of the PVG tunnel drying machine

Parameters Model	Loading amount/each (T)	Number of trolley (set)	Number of drying tray (pcs)	Power (kw)	Overall dimensions (mm)
PVG-I	2.5	7	462	10.5	11300×2580×3120
PVG-II	4	11	726	16.5	15300×2580×3120



III) Swirl type dryer

General

Swirl type dryer is mesh belt type continuous production of drying equipment. The device is suitable to dry food of a long time and require drying temperature can be not too high. The material moves slowly on the spiral mesh belt. Hot air through the material from the bottom, so that the material is heated evenly. After drying as much as possible to maintain the shape and color of materials to ensure product quality. Swirl type dryer won national invention patents, four utility patents.

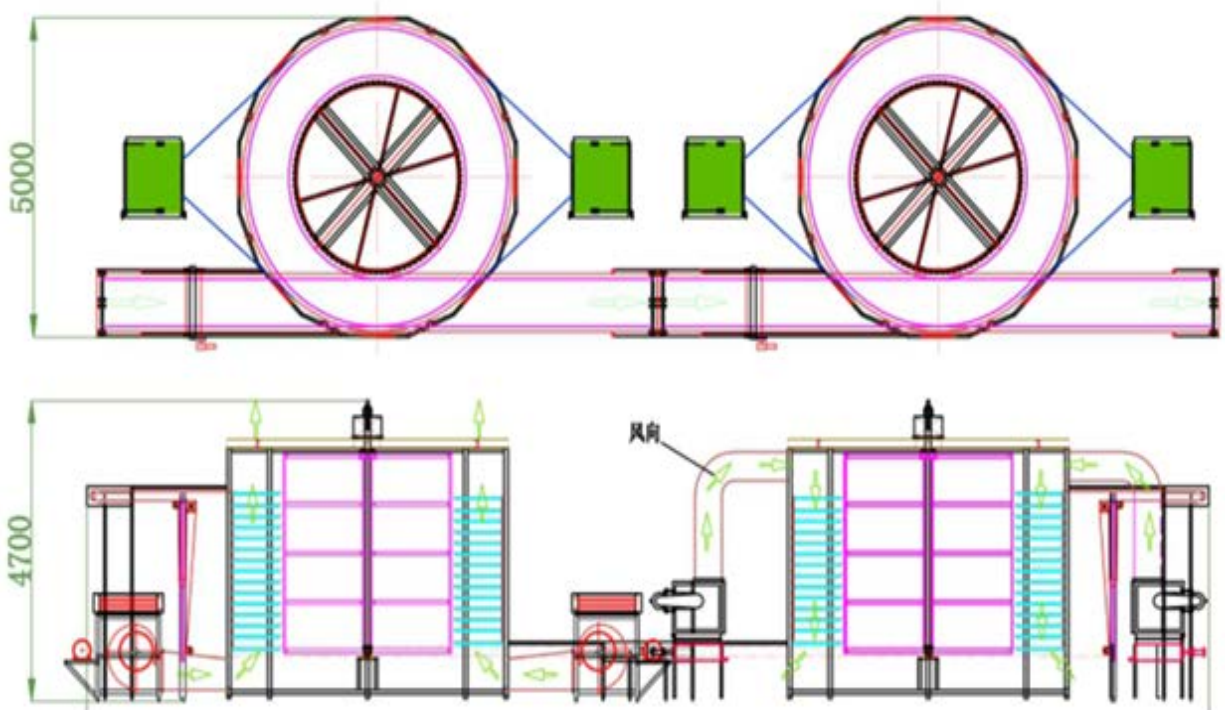
It can be dry Mushrooms, white fungus, herbs, ginger, shrimp, sea cucumbers etc.

Futures

- 1. Compact small footprint** - As a result of multi-slice spiral structure, compared with ordinary belt dryer which covers less than 1/2.
- 2. Mesh belt with a long, adequate drying time** - The length of the spiral belt can be up to 500 meters; to a single drying time can be more than four hours.
- 3. Reasonable design, operational safety** - Helical structure drawing spiral freezer principle has been years of experience as well as the absorption of foreign advanced technology. By mechanical, electrical double protection, reliable operation.
- 4. Simple operation, easy maintenance** - This operation does not require special technical equipment, after simple training to operate induction heating section is mounted outside the drying cabinet body, easy maintenance.

Technical specification

Model	Size (L*W*H) (M)	Drying Area (square meter)	Steam(T/H)	Power(KW)	Drying temperature(°C)	Drying time (h)
PVG- XLR- 100	16*7.5*4.5	110	0.4-1	40	10-120	1-5
PVG- XLR- 200	18*8*4.8	190	0.5-1	51	10-120	1.4-7
PVG- XLR- 300	20*9*4.8	288	0.8-1.8	67	10-120	2-10



2) Cold air dryer

General

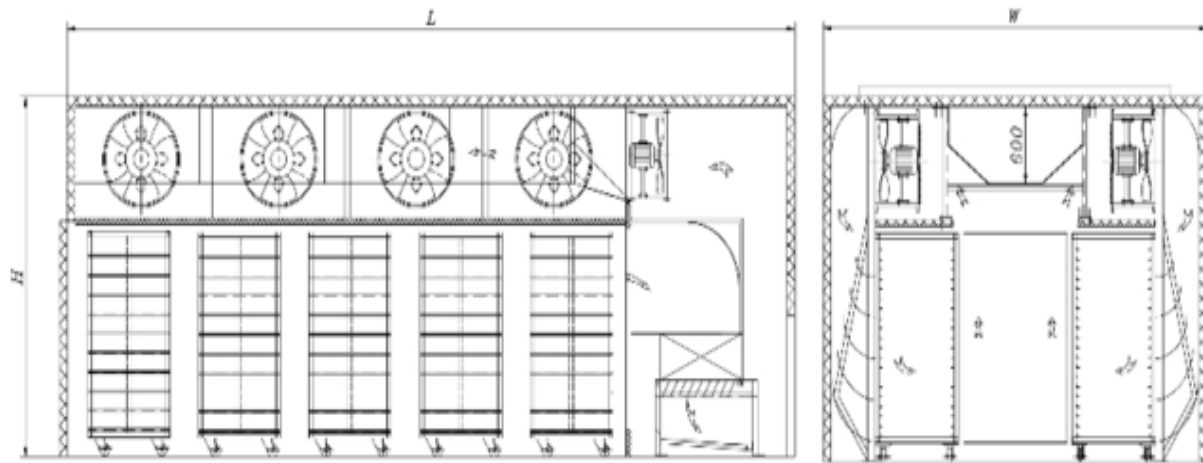
Cold air dryer is widely used in a variety of fish and other seafood, poultry and other products; it is the first choice for this food. But also by the traditional extensive processing intensification transaction to industrial equipment requirement. After the cold dry product can not only maintain the original quality and good flavor, but also more convenient packaging, storage and transport; currently mainly applied to somber japonicas, butterfly fish, sardines, fish chopsticks, spirinchus lancelets, xiaochun fish, squid, capelin, a variety of fish, sea cucumbers, and chickens, ducks, geese, rabbits, etc., equipment performance fully comparable with similar foreign product.

Cold Air Dryer Feature:

1. Integrated design, high degree of automation, simple operation.
2. Efficient low temperature dehumidifier properties to ensure food quality and flavor in the process of.
3. Wide application
4. Using heat source of refrigeration unit, without any auxiliary heat source, significantly reducing operating costs.
5. Using food grade stainless steel, structure is simple, safety and sanitary
6. The machine also can be used as high temperature storage.

Technical Parameters:

Model	Drying Temperature (°C)	Installed power (kw)	Trolleys (quantity)	Capacity (kg)	Dimension Size (mm)	Power(V)
PVG-XYF-45	15-35	10	4sets	450	3500*3700*2800	AC440/220
PVG-XYF-65	15-35	14	6sets	650	4300*3700*2800	AC440/220
PVG-XYF-90	15-35	16	8sets	920	5100*3700*2800	AC440/220
PVG-XYF-110	15-35	22	10sets	1100	6200*3700*2800	AC440/220



3) Box type dryer

General

Box- type dryer, the device evenly, fast, high efficiency, and the material is not easy adhesion, temperature-controlled, automatic scheduling tide, enabling drying material to keep better shape, color and drying of materials morphology, improved products quality.

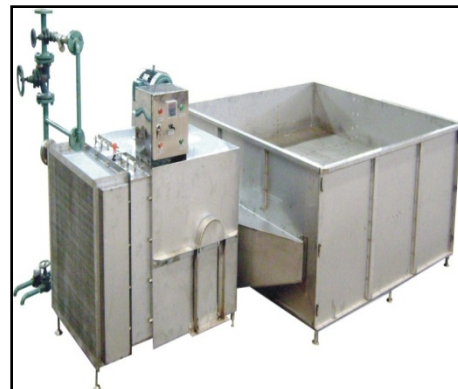
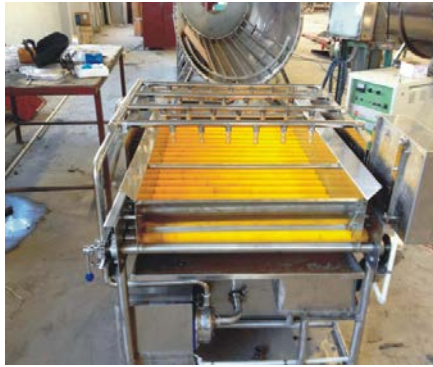
Box type dryer Feature:

1. Using food grade stainless steel, conform to the export standards of food hygiene
2. Fan is multi blade centrifugal fan, large air volume, high air pressure, low noise, low energy consumption. Each fan air volume is 5500~11000m³/h and air pressure is 740~450Pa, the air volume can be adjusted according to the material.
3. Automatic temperature control system, easy operation, stable performance
4. Wide application

Technical parameters:

Model	Box area (m ²)	Heat source	Power (kw)	Radiator (quantity)	Temperature (°C)
PVG-SHT-I	4	steam	4	1	50~130
PVG-SHT-II	8	steam	8	2	50~130
PVG-SHT-III	4	fuel	4	1	50~100







Looking forward to the future, our company will take "build the international first-class enterprise, and create world famous brand " as its objective, forge ahead and continuously innovate, and provide perfect solution for global food processing

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