

PROVEG ENGINEERING AND FOOD PROCESSING PVT. LTD.

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"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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1) Almond Cracking & Shelling Machine

General

Almond shelling machine is one necessary shelling machine in almond processing factories. We offer different capacity (200-1000kg/h) to meet your demand. How can we crack almonds fully without breaking inner kernel? It depends on the gap almond passing though. Small almonds cannot get cracked while large almonds will be pulverized. So if your almonds are in different size, you'd better grade them firstly. Do not throw almond shells away, as they can be furthered made into compost products such as animal bedding material or co-gen plants for energy production.

Guidance on Almond Further Processing Market

- As tree nuts, almond has much nutrition and benefits to humans. Almonds are rich of Vitamin E and carbohydrates.
- Generally almonds are consumed as food or snacks. Raw or toasted, almond kernel is also a
 part of various dished. Almond can be pressed to almond oil and be made into almond butter
 or almond milk. Having almond roasted is the basic way to process almond and the price
 goes to 4500 USD per ton.

Almonds are a rich source of oil, with values ranging between 36 to 60% of kernel dry mass. The almond oil is an emollient to skin as plant essential oil. Purified almond oil can be used as lubricant to protect musical instruments such as oboe and clarinet.

(200-300 kg/h)Mini Almond Shelling Machine

This mini almond shelling machine is our smallest almond shelling unit. It mainly has two machines: Almond cracking shelling machine and Almond gravity separator for shells & kernels. Compact structure and low yield make it suitable for small-scale almond processing factories. This almond processing unit enjoys the following features:

- 1. The almond cracking rate can reach 98% with broken rate less than 1 %. (For a better cracking effect, you should grade the almonds first)
- 2. Easy operation. All these procedures are automatic and two people can control the whole almond shelling and separating line.
- 3. Efficient separating rate in almond shell and kernel gravity tables.
- 4. Rotary and adjustable rollers make this almond shelling unit suitable for almond with all hardness.
- 5. Main components all adopt stainless steel and has a long service life.

- 6. High shelling efficiency with low energy consumption.
- 7. Low land occupancy and investment.

(300-500 kg/h) Almond Cracking & Shelling Machine

Unlike smallest almond hulling unit, there are three main parts in this automatic almond shelling machine.

A: Almond Grading Machines (Optional)

Almond grading machine can grade almond into several levels based on different size and dimension.

B: Almond Shell and Kernel Separating Machine

Almonds get into sheller though feeder and are cracked by inside force. The almond in shell will move to the sheller where it will pass through a series of sheer rollers and crackers. The mixture of almond kernel and almond shells will be separated automatically.

C: Almond Kernel Peeling Machine (Optional)

This process can remove the almond nut thin peel to get pure almond kernels.(You can choose according to your need).

300-500Technical parameter kg/h

Model	Capacity (kg/h)	Power	Dimension	Cross Weight	Perfect Kernel	Almond in hull	Kernel with Shell
Almond Shelling Unit	300-500	9.08k w	18.5*1.6*1 .7m	3000kg	> 98%	<0.3%	<2%

(1000 kg/h) Almond Cracking & Separating Line

This Almond Shelling Machine and Gravity Tables have the largest capacity up to 1000 kg/h. Apart from the main machines, it requires other accessories like conveyor, feeder and elevator to work together.

Vibratory Feeder

Using a high frequency vibratory feeder, almonds in shell are gently and evenly fed into the hard shell cracker. An even feed to the hard shell cracker is necessary for optimum cracking results.

Hard Shell Cracking Machine

The corrugated, hard rubber rolls operate with an adjustable distance of each other to produce hairline cracks in the hard almond shells. Multiple roller bearings are mounted beneath the hard roll carriage for ease of adjustments.

Automatic Kernel & Shell Separating

- 1. This unit capacity can be up to 1000kg/h, choice for large scale nuts processing factory.
- 2. With good quality and cost-effective price, almond processors will find it profitable for their business.
- 3. Almond sheller unit is suitable for all almond sizes because of the adjustable rotary & adjustable rollers.

Technical parameter

Model	Capacity	Power	Dimension	Rate	Broken Rate	Cross Weight
Almond Hulling 10001 / 200 / 751 2 1*2*/		2.1*2*2.15	Cracking	10/	10001	
Machine	1000kg/h	380v/6.75kw	3.1*2*2.15m	>95%	<1%	1900kg
Almond Gravity Separator	1000kg/h	4kw	3.5*1.1*1.65m	Separating		360kg

2) **Buckwheat Seeds Hulling Machine**

<u>General</u>

We can provide you with buckwheat hulling and separating equipment, which is one of our patented products owing the independent intellectual property. And it is also widely used with better hulling result all over the world. During the hulling process, the buckwheat kernel-shell can be separated automatically, and meanwhile the machine can sort out the broken from the kernels. It adopts dry method hulling process, no preheating to buckwheat required beforehand. The hulling and separating machine features easy operation, high rate of whole kernels and perfect kernel-shell separation works.

Highlights

- 1. The ideal hulling result can be achieved due to the adjustable design of the hullers, the inter space of the emery rollers can be adjusted according the various materials.
- 2. Screen mesh is made of premium quality cold rolled sheet, durable service. Prevent mesh from blockage due to the bouncing ball design.
- 3. The hulling and separating machines adopts the vibrating and negative-pressure separation machine and spiral materials-unloaded to make the shells collecting work easier and meanwhile reduce the dust accumulation greatly during the working process.
- 4. The vibrating source of the equipment adopts vibratory motors design. This hulling equipment features easy and quick installation.

Working Principles

Components: The buckwheat hulling and separating machine consists of feeding hopper, bucket elevator, huller, and electric control cabinet.

Working Process

Raw materials \rightarrow Elevating \rightarrow Shelling & Separating \rightarrow Checking the un-hulled buckwheat \rightarrow Flowing back for Re-hulling \rightarrow Pure kernels

Technical Parameters

Model	Capacity	Power Source	Weight	Dimensions (L*W*H)	Perfect Kernel s Rate
PVG/TFQ/ M400	200kg/h	9.84kw/440v	2200kg	6000*3000*4500mm	98%

3) Castor Seed Shelling Machine

General

Considering the small size of castor seeds and compact castor beans, we design the latest low-frequency castor shelling machine unit. It can ensure a high shelling efficiency and low broken rate in castor seed shelling procedure. If you are in castor business, you will never regret to buy our castor seed shelling machine.

Castor seed shelling machine has similar shelling functions like other nuts shelling machines. Light caster shells are blowed out by airflow from inner shaker tables. Other kernels and castor seeds mixture will be separated by gravity tables. Our castor shelling equipment can process castor seeds in different size at one time. Castor seeds are cracked in various gap and pressure. Unshelled castor beans will flow to next sheller to be cracked again. Multiple and repetitive cracking steps ensure a 100% shelling rate.

300 kg/h Castor Seed Shelling Machine

- 1. In view of the fact that castor seeds are small in size and little clearance between shell & kernel, we design this shelling machine with low frequency which can improve the shelling rate and at the same time reduce broken kernel rate.
- 2. We adopt the negative pressure vibrating separator to sort out all the shells, and discharge the shells out through shells-discharger.
- 3. Our kernels separator combines gravity separation with vibration to achieve the percentages of seeds in final kernels is less than 1%.
- 4. The unshelled seeds after first round of shelling will be lifted by elevator to de-hullers for reshelling.
- 5. Easy operation, high automatic degree, safe and reliable.
- 6. An optimum equipment for large-scale, small and medium-sized enterprises that are in oil crushing industry with castor bean kernels or in pharmaceutical industry made of castor bean shells or husks.

Castor Seed Shelling Machine Specifications

Model	Capacit y (kg/h)	Power	Dimension	Gross Weigh t	Perfect Kernel	Castor seeds in hull	Kernel wit h Shell
PVG/AMS -CS300	300	4.36k w	8*2.5*2.8 m	4000k g	> 98%	<0.5%	<2%

Common sense about Castor Oil Plant and Castor Seed

- 1. The castor oil plant, springing from Eastern Africa and India, is widespread throughout the world. In warm climate, castor oil plant can grow up easily and often be found on wasteland.
- 2. The castor oil plant has different appearance in various species. Generally, we sort them for leaf and flower (that's ornamental value) and for oil production. The castor oil plants have a fast-growing cycle that they can reach the height of a small tree, in around 12 meters or 39 feet.
- 3. The seed of castor oil plant is the castor bean while it not a true bean. Castor seed is the source of castor oil, which has a wide variety of uses. The castor seed contain oil in 40%-60% that is rich in Ricinoleic Acid. Castor oil and its by-products are mainly used in the manufacturing of soaps, lubricants, paints, dyes, coating, inks, cold resistant plastics, waxes, nylon and pharmacy. Castor essential oil also has beauty functions.

4) <u>Hazelnut Shelling Machine</u>

General

Are you seeking a high quality nut cracking and shelling machine designed for processing hazelnuts efficiently. Here you find the right place. Let us discover together how you can increase your income by selling de-shelled hazelnuts to a higher value market. Our hazelnut shelling machine can help you de-hull raw hazelnut easily. Easy operation and compact structure make it popular in hazelnut processing manufacturers.

Application of Hazelnut Shell

Have you ever thought of how to deal with the hazelnut shells? In fact, the shells are also valuable in energy industry. It is of high calorific value with 4100-4410 cal/kg. Approximately 0.5kg hazelnut shell is gained from 1kg in-shell hazelnuts. Many of our customers will further process their hazelnut shells into briquettes or charcoal by the biomass briquette machine.

(200-300 kg/h) Hazelnut Shelling Machine and Separator

The hazelnut shelling machine with capacity of 200-300kg/h is capable of effectively cracking a batch with varying nut sizes, making it ideal for small or medium sized hazelnut producer who wants to access higher prices for the shelled nuts. The outstanding features are low energy consumption and high cracking rate.

Technical parameter

Model	Capacity (kg/h)	Power	Dimension	Rate	Broken Rate	Cross Weight
Hazelnut Shelling Machine	200-300	1.5kw	2.35*0.777*1.6m	Cracking	<1%	260kg
				>95%		
Hazelnut Gravity S	200-300	2.2kw	1.97*0.92*1.35m	Separating		230kg
eparator				>98%		

300-500 kg/h Hazelnut Cracking and Shelling Machine

This hazelnut shelling unit is equipped with a grading machine to classify hazelnuts into several levels according to their sizes and dimensions. Graded hazelnuts in similar size would be cracked fully avoiding unshelled or crushed. Hazelnuts cracked by hazelnut shelling machines will flow to gravity tables to be separated from shells.

Hazelnut grading machine not only helps you save a lot of labors but also minimizes waste for less crushed kernels. Unshelled hazelnut is less than 0.3% and kernels which are not fully cracked are less than 2%.

300-500 kg/h Hazelnut Cracking and Shelling Unit Specifications

Model	Capacity (kg/h)	Power	Dimension	Cross Weight	Perfect Kernel	Hazelnut in hull	Kernel with She ll
Hazelnut Sheller Unit	300-500	9.08 kw	18.5*1.6*1.7 m	3000kg	> 98%	<0.3%	<2%

1000 kg/h Hazelnut Shelling & Separating Machine

Hazelnut shelling machines can crack hazelnuts in different size at one time. Different hazelnuts are screened by sizing decks in hazelnut shelling machine and then cracked by proper pressure Multiple sizing and screening procedures ensure a full cracking and shelling steps, avoiding repetitive labor work and saving time and labors. What you just need to do is to put raw hazelnuts into feeders and wait for pure hazelnut kernels.

Technical parameter

Model	Capacity	Power	Dimension	Rate	Broken Rate	Cross Weight
Hazelnut Shelling Machine	1000kg/h	6.75kw	3.1*2*2.15m	Cracking> 95%	<1%	1900kg
Hazelnut Gravity Separator	1000kg/h	4kw	3.5*1.1*1.65 m	Separating	1	360kg

5) Macadamia Nut Cutting Machine

General

Macadamia nut cutting machine is a kind of nuts grooving machine. It is designed for opening a slot on the macadamia shell. As macadamia nuts are spherical and wrapped by hard nut shell, in order to make the condiments infiltrate into nuts when frying and make it easy to eating with a piece of iron, making a slot on the shell is really needed. Therefore, macadamia nut cutting machine is quite important in producing macadamia nuts.

The macadamia nut cutting machine can slot into macadamia nuts shell automatically. It operates easily and efficiency. What's more, macadamia nut cutting machine will not damage the nutlet. This machine includes frame, feed mechanism which installed in the upper frame, and slot mechanism installed at the bottom of feed mechanism.

Features of 120kg/h Macadamia Nut Cutting Machine

- 1. This machine is the professional machine of breaking macadamia nuts.
- 2. This machine adopts unique brush leak-proof broken shell technology which can solve the problem of blind spot during the broken shell nuts leakage production. The brush roller can prevent some of macadamia nuts which do not enter into received material concave hole from feed channel.
- 3. This macadamia nuts cutting machine has ejecting mechanism. It can prevent two macadamia nuts got stuck at the entrance of received material concave hole.
- 4. This machine also adopts unique blade and cone the broken shell technology, which can solve the issues such as feed the outside due to inconsistent uneven broken shell is not complete.
- 5. with high broken shells rate, over 99%.

Technical Specifications

Model	Capacity	Power	Dia. of the nut	Working manner	Weight	Dimension
PVG- SL-150	120kg/h	2.2kw	20-30mm	Electric & pneumatic	150kg	1050mm*700mm*1150 mm

Process Flow of Macadamia Nut Cutting Machine

- **1.** <u>Feeding</u>: Pour the macadamia nuts on the feeding port. With the piston rod of cutting cylinder stretching out and the sliding block moving forward, the stuffing plate comes forward and the clip holding mouth open. As the stuffing plate and the sliding block moves forward, the feeding roller contra rotates, and the macadamia nuts falls into received material funnel, then entered open clip holding mouth and stays in retainer plate.
- 2. <u>Slotting:</u> With the forward movement of piston rod of clip material cylinder and sliding block and the clip holding part, macadamia nuts are clamping firmly, then slot by high speed rotating circular blade which is driven by electrical machine. Due to the stuffing plate connected to the roller of the arc guide component, the stuffing plate moves backwards along the curved tack of the arc guide component, thus makes arc cutting into macadamia nuts which reduces damage to the nut.
- **3.** <u>Unloading the Nuts:</u> After slotting, the piston rod of cutting cylinder back stretch and the clip holding part moves to the end. As the piston rod of clip material cylinder retracted, macadamia nuts drop from collection and the processing finishes.

6) Palm Nut Shelling Machine

<u>General</u>

This palm nuts shelling and separating machine is specially and newly developed to be used for cracking and separating palm nuts. It consists of palm nuts shelling machine and palm nuts kernel separator machine. The palm nuts shelling machine is mainly applicable for dividing the palm kernels into the outer hard shell with high efficiency. The separating machine is for separating the palm nuts kernels from the cracked shells clearly and completely. There are two different types with capacity of 200-300kg/h and 1000kg/h as your choice.

(1000kg/h)Large Unit of Palm Nuts Shelling and Separating Machine

- 1. Different with the small one, the large palm nuts shelling machine is with big capacity and equipped with an elevator to transmit materials and a barrel.
- 2. It cracks nuts hard shell at one time, with grading system, shelling completely and no broken kernels.
- 3. The large palm nuts separating machine separates shells and kernels completely at one time with kernels pure and clean finally.
- 4. It is professionally used for separating meat from hard-shelled nuts, such as palm nuts, walnuts, Cashew nuts, almonds and other types of hard-shelled nuts.

Advantages of Large Palm Nuts Shelling and Separating Machine

- 1. Taking advantage of different gravity of shell and kernel to separate
- 2. High shelling rate over 95%
- 3. Good quality, suitable for different nuts
- 4. Easy operation. Just put the mixture in the shaft, then kernel and shell will flow from two sides.
- 5. Reasonable design and low broken rate

Large Palm Nuts Shelling and Separating Machine Technical Parameters

Function	Model	Capacity	Power	Cracking Rate	Broken Rate	Weight	Dimensions (L*W*H)
Shelling	PVG- TK-02	1000kg/h	440v/6.75k w	>95%	<1%	1900kg	3100*2000*2150m m
Separatin g	PVG- FL-02	1000kg/h	4kw	>95%	/	360kg	3500*1100*1650m m

200-300kg/h)Small Unit of Palm Nuts Shelling and Separating Machine

- 1. Palm nuts shelling machine is available for palm nuts cracking and shelling of different size and hardness.
- 2. It cracks palm nuts one time one size and the roller gaps can be adjusted for other sizes cracking.
- 3. Palm nuts shelling machine also can be used for cracking other kinds of nuts, such as apricot nuts, hazel nuts, almonds, etc.
- 4. Palm nuts kernel separating machine is available for separating nuts kernels from hard shells with the help of airflow.

Advantages of Small Palm Nuts Shelling & Separating Machine

- 1. Professional and advanced skill, big capacity, equipped with belt conveying elevator and feeder.
- 2. High shelling rate over 95% and low damage rate of 1%.
- 3. Easy operation, fast processing, no broken kernels in the separating process.
- 4. Compact structure and reasonable design.
- 5. Saving time and energy, improving working efficiency.

Technical parameter

Function	Model	Capacity	Power	Cracking Rate	Broken Rate	Weight	Dimensions (L*W*H)
Shelling	PVG/TK-01	200- 300kg/hour	440v/1.5 kw	>95%	<1%	260kg	2350*770*1600m m
Separating	PVG/FL-01	200- 300kg/hour	2.2kw	>95%	/	230kg	1970*920*1350m m

7) Peanut Shelling Machine

General

Peanut Shelling Machine is produced according to the national standards strictly. It consists of rasp bar, stake, intaglio, fan, gravity separator and second bucket, etc. The whole machine frame is made of high-quality steel and the shelling chamber is made of stainless steel. This peanut shelling machine has compact structure, easy operation and reliable performance. It is used to shell peanut; can separate shells and kernels with high-efficiency and almost without damage to the kernel; and the shelling rate can be $\geq 95\%$, the breaking rate is $\leq 5\%$. While peanut kernels are used for food or the raw material for the oil mill, the shell could be used to make wood pellets or charcoal briquettes for fuel.

Working Principle of Peanut Shelling Machine

After starting, the shells of peanuts are shelled by the rolling force between the rotating rasp bar and the fixed intaglio, and then shells and kernels fall through the grid mesh down to the air duct, and the fan blows shells out. The kernels and the unshelled small peanuts fall into the gravity separator. The separated kernels are sent upward to the outlet and the separated unshelled small peanuts are sent downwards to the elevator, and the elevator sends the unshelled peanut to the fine grid mesh to be shelled again until the whole batch of peanuts are all shelled.

Advantages of Peanut Shelling Machine

- 1. Cheap price, high efficiency and low energy consumption
- 2. It can shell peanut completely; separate shells and kernels purely and almost without damage to the kernel; and the shelling rate can be $\geq 95\%$, the breaking rate is $\leq 5\%$.
- 3. It has compact structure, easy operation, reliable performance and easy maintenance.
- 4. Small occupation space.
- 5. The shelled kernels meet the hygiene standards.

Peanut Shelling Machine Technical Parameter

Model	PVG/AMS- 400	PVG/AMS- 800	PVG/AMS- 1500	PVG/AMS- 1600	PVG/AMS- 3000	PVG/AMS- 3300
Capacity(kg/h)	400	800	1500	1600	3000	3300
Power(kw)	2.2	4	5.5	7.5	11	11-15
Shelling rate	≥95%	≥95%	≥95%	≥95%	≥95%	≥95%
Breaking rate	≤5%	≤5%	≤5%	≤5%	≤5%	≤5%
Losing rate	≤0.5%	≤0.5%	≤0.5%	≤0.5%	≤0.5%	≤0.5%
Cleaning rate	≥95.5%	≥95.5%	≥95.5%	≥95.5%	≥95.5%	≥95.5%
Weight(kg)	137	385	775	760	960	1315

8) Pine Nuts Shelling Machine

<u>General</u>

These Pine nuts shelling machine is our latest developed shelling equipment, specially designed for shelling pine nuts. Pine nuts, in 10 mm dimension, are much smaller than other tree nuts like almond, hazelnut, and walnut. Our pine nut shelling machine can crack pine nuts with no damage to pine nut kernels. Kernels will come off pine nut hulls and flow to gravity tables when cracked pine nuts are shaken by sizing decks.

Pine nuts Shelling Equipment Component

Our pine nuts sheller unit can help you shell raw pine nuts in one step. It has overcome some functional problems in pine nuts processing. The pine nuts shelling unit have grading and shelling steps, multiple screening and re-cracking functions.

Pine nuts Shelling Equipment Components

- 1. Pine nut grading machine: consist of input hopper, elevator and sizing machine.
- 2. Pine nut shelling machine: consists of input hopper, elevator, de-hullers (it varies with different kinds of pine nuts), separating screen, laminated spring plate conveyor.
- 3. Kernel peel removing machine: consists of input hopper, spiral elevator, peel-kernels separator and twin-outlet elevator.

Pine nuts Shelling Machine Features

- 1. Pine nuts shelling machine combines the friction and impacting force perfectly to achieve high shelling efficiency and meanwhile broken rate is greatly reduced.
- 2. The shelling rollers gap can be adjusted according to nuts sizes.
- 3. We adopt the best performance positive-pressure combo gravity-separator to separate the pine kernels from the shells.
- 4. The pine nut shelling unit features easy operation, high degree of automation, safe and reliable performance.
- 5. It is truly the best pine nuts cracking machine in the world, if you have interest in pine nuts business, please do not hesitate to choose our high quality nut shelling unit.

Pine Nuts Shelling Equipment Specifications

Model	Power	Capacity	Height	Cross Weight	Perfect Kernel
PVG/AMS- PNS150	9.68kw	Pine Nut Grading Machine: 800- 1000 kg/h	2	4000kg	> 98%
		Pine Nut Shelling Machine: 150- 180 kg/h	3m		



1) Almond Peeling Machine

General

Wet type almond peeling machine is specially designed for peeling the brown skin of almond kernels. High quality automatic almond peeling machine have a high peeling rate and low broken rate. It's a necessary device in almond processing. Peeled almond enjoys a good taste and flavor and it can be used in deep processing of canned almond, almond dish, almond drink and almond dew.

Features and Advantages of Almond Peeling Machine

- 1. Moderate peeling ways protect almond kernels from being crushed.
- 2. High peeling rate up to 98% and low broken rate less than 1%.
- 3. Wet type peeling machine needs soaked almonds.
- 4. Main parts are made from stainless steel and have a long service life.
- 5. This almond peeling machine is also suitable for peeling peanut, soybean, pine nut, cashew nut etc.

Working Principle of Almond Peeling Machine (Wet type)

- 1. Please soak almond nuts into hot water for a few minutes before peeling. This wet type almond peeling machine would run smoothly with soft soaked almond and have a high peeling rate.
- 2. Pour wet almonds into feeder and they will flow to the inner cabin. Almonds rub against the soft rubber rollers. The mixture of peeled almonds and peels are separated by separators.
- 3. Peeled almond kernels and peels will flow out of almond peeler in different outlet. The final almonds are perfect and intact.

This almond peeling machine is not only for peeling almond but also suitable for peeling peanut, soybean, cashew nuts etc. Almond peeling machine is applied in automatic almond shelling line. Peeled almonds are good materials in deep processing of canned almond, almond dish, almond drink and almond dew.

Technical Parameters of Almond Peeling Machine

Model	Capacity	Power	Peeling Rate	Dimension	Weight
Almond Peeling Machine PVG-I	150kg/h	440v/0.75kw	> 98%	1.2*0.7*1.1m	230kg
Almond Peeling Machine PVG-II	200kg/h	440v/1.1kw	> 98%	1.2*0.85*1.1m	280kg

2) <u>Cashew Peeling Machine</u>

General

We offer premium quality Cashew Peeling Machines. They play a multi-purpose role as they can be used with variety of nuts like almonds, peanuts or soybeans. This cashew peeling machine is of gas method, specially developed to be used for peeling the cashew nuts, separating the nuts kernels from the skin of the kernels efficiently. This machine is a key part of cashew nut shelling line, so it is a great choice for the factories specialized in cashew processing.

Features of Cashew Peeling Machine

- 1. The cashew peeling machine adopts dry pneumatic principle effectively to peel the nuts or beans automatically, saving manpower, being advanced.
- 2. This peeling machine can save eclectic consumption with high capacity, and easy to maintain.
- 3. The machine has beautiful appearance and convenient operation.
- 4. Peeling rate reaches above 95% and high whole kernels rate.

Highlights of Large Cashew Peeling Machine

- 1 Completely automatic dry-peel operation
- 2. High peeling efficiency.
- 3. Automatic in feed device.
- 4. Peeling different sizes and varieties of cashew nuts.

Election and Storage of Cashew Nuts

- 1. Cashew nuts are available in the market year round. In the stores, only shelled cashew kernels are sold since the shell contains phenolic resin, urushiol, which is a potent skin irritant toxin.
- 2. Different forms of cashews are available; raw, salted, sweetened or ground...etc. Buy shelled nuts that are bright cream-white in color, compact, uniform in size and feel heavy in hand. They should be free from cracks, mold, and spots and free of rancid smell.
- 3. Store shelled nuts inside an airtight container and keep in the refrigerator in order to avoid them turn rancid. Under ideal conditions, fresh nuts should last for 5-6 months.

Technical Parameters of ST-300 Cashew Peeling Machine

Model	Capacity	Power Source	Dimensions	Weight
PVG-ST- 300	300kg/h	0.2kw/440v/50HZ	1000*750*1500mm	110kg

3) Mung Bean Peeling Machine

General

Mung been peeling and separating equipment is designed for peeling mung beans. The machine has the function of mung bean peeling, bran and peeled beans separation, whole bean and split bean separation. The whole process is automatic. The mung bean peeling machine is the best equipment for peeling mung beans.

Features of Mung Bean Peeling Machine

- 1. Reasonable design, compact structure, simple operation, easy maintenance.
- 2. High automation degree, automatic processing from feeding, grinding to bean separation.
- 3. Timed processing, sound-light alarming, self-locking after stopping working, reliable performance.
- 4. High peeling rate, high whole kernel rate, good peeling effect, good separation effect

TFD150 Mung Beans Peeling and Sorting Machine

• Components of PVG-TFD150 Mung Beans Peeling and Sorting Machine

TFD150 mung bean peeling machine mainly consists of grinder, separating sieve, loading hopper, electric control cabinet.

• Working Process of PVG-TFD150 Mung Beans Peeling and Sorting Machine

feeding \rightarrow grinding \rightarrow removing bran \rightarrow separating whole and split beans \rightarrow decorticated beans

Technical Parameters

Model	Capacity	Power	Dimensions (L*W*H)	Weight	Peeling Rate	Whole Kernel Rate	Operator
PVG- TFD150	150kg/h	9kw	4m * 2.2m * 2.4m	2.8mts	≥75%	≥42%	1-2 persons

PVG-TFD600 Mung Bean Peeling & Separating Unit

- <u>Components of PVG-TFD600 Mung Bean Peeling and Separating Equipment</u> PVG-TFD600 mung bean peeling line mainly consists of feeding hopper, elevator, top-mounted trolley, grinder (4 sets), vibrating screen (2 sets), bran removing sieve, beans separating sieve, loading hopper, electric control cabinet.
- Working Process of PVG-TFD600 Mung Bean Peeling and Separating Equipment feeding → elevating → conveying → grinding → vibro-screening → removing bran → separating whole and split beans →peeled mung beans

Technical Parameters

Model	Capacity	Power	Dimensions (L*W*H)	Weight	Peeling Rate	Whole Kernel Rate	Operator
PVG- TFD600	600kg/h	34.1kw	11m*2.1m*3.2m	14mts	≥75%	≥42%	2 persons

4) Peanut Peeling Machine

General

We offer advanced peanuts peeling machine, which is specially designed for removing the red skin coat of the peanuts and making the peanuts taste much savories. And at the same time, our peanuts peeling machine keeps the peanut kernels as integral as possible. It is an ideal peanuts shelling machine to deal with different sizes of peanuts. Two kinds of types are available: Dry Type Peanuts Peeling Machine and Wet Type Peanuts Peeling Machine. This peanuts peeling machine is also suitable for pine nuts, almonds, soybeans, broad beans etc.

Features of Dry Type Peanuts Peeling Machine

The Dry Type Peanuts Peeling Machine adopts pneumatic principle and fully automatic digital control so as to deal with roasted or dried peanuts kernels with low broken rate and perfect appearance.

- 1. It adopts dry method, no water consumption and environmental pollution.
- 2. The peeling rate is over 98%. Easy operation and hygienic peeling process
- 3. Labor and energy saving, simple to clean and maintain.

Technical Parameters of Dry Type Peanuts Peeling Machine

Model	Power Source	Weight	Size(L*W*H)	Capacity
PVG- GHT150	0.2kw/220v	70kg	640*660*1370mm	150kg/h
PVG- GHT300	0.2kw/220v	110kg	740*740*1685mm	300kg/h
PVG- GHT600	0.2kw/220v	160kg	1040*910*1750mm	600kg/h

Features of Wet Type Peanuts Peeling Machine

Wet type peanut peeling method is quite different from dry type peeling which disposes roasted or dried peanuts. It is to peel soaked or immersed peanuts, almonds, soybeans, mung beans and broad beans. The unique residue separation device ensures clean and integral peanut kernels.

- 1. The peeling rate of over 98%, high peanuts kernel quality.
- 2. High integral rate, original nutrition is preserved.
- 3. Peeling and separating of peanuts and coats automatically.
- 4. Small in size, energy saving and high efficiency.
- 5. Reasonable design and stainless steel material.

Technical Parameters of Wet Type Peanuts Peeling Machine

Model	Power Source	Weight	Size(L*W*H)	Capacity
PVG- HTP150	0.75kw/440v	220kg	1180*720*1100mm	150kg/h
PVG- HTP200	1.1kw/440v	280kg	1180*850*1100mm	200kg/h



1) Cashew Nut Shelling Processing Line

General

Cashew nut processing plant is a whole line for shelling cashew nuts and roasting cashew kernels. Fully-automatic cashew nut shelling and cashew kernel peeling machines save lots labors.

Cashew nuts processing line procedures

- I. Cashew Nut Grading
- II. Cashew Nut Cooking
- III. Cashew Nut Shelling
- IV. Cashew Kernel Separating
- V. Cashew Kernel Peeling
- VI. Cashew Kernel Roasting

Cashew Nut Processing Flowchart

1. Cashew Nuts Auto Grading

Cashew nut grading machine can classify raw cashew nuts into several levels on basis of size and dimension. Generally cashew nut grading machine has three or four grades.

2. Steam Cooking

Raw cashew nuts in shell are steamed under pressure to soften the shells. The shell of cashew nut is very hard and it contains harmful oil ingredient. Cooked cashew nuts are easy to be cracked and shelled. The process of steam cooking helps in shelling cashew nuts with minimal effort.

3. Cashew Nut Cracking & Shelling

Cooked cashew nuts are cracked in automatic cashew nut shelling machines. A roller bearing is used to adjust the distance between rollers for cashew nuts in different size. The capacity of cashew nut shelling machine can reach 40 kg/h, and for cashew nut shelling line in 300 kg/h, we equip 7 shelling machines here.

4. Cashew shell & Kernel Separating

Cashew kernel separating shaker is used to separate cashew kernels from cashew shells and unshelled cashew nuts. After through cashew nut shelling machine, cashew shell pieces and kernels are separated by cashew shaker, and unshelled cashew nuts are returned to be re-shelled.

5. <u>Cashew Peeling Machine</u>

The red skin of each cashew kernel is removed by cashew kernel peeling machine for deepprocessing products. This automatic cashew kernel peeling machine works with a air compressor and the internal parts of peeling machine are made from high quality stainless steel.

6. Cashew Kernel Roasting (Optional)

Roasted cashew kernels have a beautiful appearance and good flavor. Cashew roaster is fully automatic and high efficient. In the roasting process, cashew kernels are heated evenly in high temperature and they would not stick on the inner wall.

300kg/h cashew nut processing line specifications

Model	Capacity	No.	Power	Weight	Dimension
Cashew Nut Grading Machine	400 kg/h	1	1.1KW/440V	1000 kg	3.7*0.85*1.6m
Cashew Nut Steaming Machine	200 kg/h	2	440V/50HZ	300 kg	1.4*0.6*1.6m
Cashew Nut Shelling Machine	40 kg/h	7	1.1KW/440V	350 kg	1.36*0.8*1.75m
Cashew Kernel Separating Shaker	300 kg/h	1	1.1KW/440V	120 kg	1.95*0.83*1.15m
Cashew Kernel Peeling Machine	300 kg/h	1	0.2KW/440V	110 kg	1* 0.75*1.5m
Air Compressor	/	1	15KW /440V	300 kg	1.65*0.7*1.3m
Cashew Kernel Roasti ng Machine	300 kg/h	1	1.1KW/ 440V	460 kg	1.6*1.02*1.47

2) <u>Industrial Hemp Seed Shelling Machine</u>

General

His industrial-hemp-seeds shelling & separating unit is an improved hemp seeds processing plant And this processing plant is capable of completing impurity removing, seed dehulling, kernel peeling, shell and kernel separating and re-separating for the hemp seed in one operation.

Main Operating Equipment of the Industrial-hemp-seeds Shelling & Separating Unit

- 1. Feeding hopper,
- 2. Raw materials elevator,
- 3. Multi-function impurity remover,
- 4. Bucket elevator,
- 5. Main engine with double Sheller,
- 6. Re-separator (3 sets),
- 7. Hopper that contains materials after process,
- 8. Wind-driven back-feeder,
- 9. Concentrated control cabinet

Industrial-hemp-seeds Shelling & Separating Unit Features and Superiority

- 1. This shelling & separating unit can be used for processing sunflower seeds.
- 2. The multi-function impurity remover can remove various kinds of impurities, such as stones, glasses, hairs, etc.
- 3. Special design of double-Sheller with conversion technology that helps adjust the working frequency of the Sheller according to the operating condition; the Sheller has all-steel structure, 99% alumina porcelain blade, which betters the shelling effect and prolongs the service life of the Sheller device.
- 4. The wind-driven back-feeder system returns the non-shelled seeds into the Sheller for second shelling process, which means a shelling result with high efficiency
- 5. The fish-scale-shaped sieve makes the separation of shell and kernel easy, and by adjusting inclination angle of the sieve, it will get ideal separating result; the sieve is coined with high-quality cold-rolling steel sheets, so it is solid and durable.
- 6. Screw dis-charger facilities the collection of the hemp seed shell and reduction of dust.

- 7. This unit is conducted by a concentrated control cabinet, having simple and visualized operation; the vibration source of the plant is a vibration motor.
- 8. High automation and easy maintenance.

Industrial-hemp-seeds Shelling & Separating Unit Technical Data

Model	PVG/TFMA1200		
Power	14.59KW/440V		
Perfect Kernel Rate	≥90% (the broken kernel is less than ½ whole one)		
Non-sorted Kernel Rate	≦2-5%		
Capacity	0.5- 0.8t/h (differing by raw materials that is to be processed)		
Covering Area of the Whole Unit	14.4×2.8 m		
Installation Height	4.1m		
Weight	5t		

3) Melon Seeds shelling Machine

<u>General</u>

Melon seeds shelling line is one advanced automatic shelling equipment for pumpkin seeds and watermelon seeds. Both pumpkin seeds and watermelon seeds are cracked and separated from hulls at one time and unshelled pumpkin seeds can be cracked again, saving time and labor.

Highlights of Latest Melon Seed Shelling Line

- 1. Pumpkin seed de-hulling machine is suitable for hulling watermelon seeds and pumpkin seeds.
- 2. Separate pumpkin kernels from shells automatically, no need of gravity tables.
- 3. Wet type pumpkin seed shelling machine processes soaked pumpkin seeds, while negativepressure separator separates pumpkin kernels from shells without blowing air which can reduce the dust content in processing procedure.
- 4. Made of quality stainless steel, our pumpkin seed hulling machine has a long service life.
- 5. Newest pumpkin seed hulling machine has overcome the previous shortcomings in broken rate.
- 6. Re-hulling system can crack un-hulled pumpkin seeds, saving time and labor.

Melon Seeds Hulling Machine Specifications

Model	Capacity	Power	Dimension	Cross Weight	Perfect Ke rnel	Kernel with Shell
Pumpkin Seed She Iling Machine	200- 300kg/h	8.19kw	6.5*2.9*3. 5m	2500kg	> 95%	<2%

Pumpkin Seeds Further Process

Pumpkin seeds are a very good source of vitamin E and there is a large amount of B-complex group of vitamin. Shelled pumpkin seeds can be made into delicious butter and oil.

1. Pumpkin seed butter

Pumpkin seed butter full of iron and acids is well known for its immune stimulating properties and supportive benefits to male health. Like pine nut butter, pumpkin seed butter works well combined with other things, such as honey, salad, chocolate and bread. For people allergic to nuts, pumpkin seed butter is the best choice.

2. Pumpkin seed oil

Pumpkin seed oil is a culinary specialty of south eastern Austria, eastern Slovenia, Romania, north western Croatia and Hungary. Pumpkin seed oil has an intense nutty taste and is rich in unsaturated fatty acids. Pumpkin Seed Oil is helpful in preventing bladder and prostrate problems as well as intestinal parasites. Pumpkin Seed Oil has also been used to maintain weight loss, help relieve muscle fatigue, arthritis, and help regulate cholesterol levels.

4) Oat Seeds Hulling Line

General

We offer oats hulling & separating equipment, which is designed for hulling and separating your oats. It features compact design, easy operation. The oats hulling and separating machine is the leading equipment in China for oats processing on the technical specifications like high rate of hulling and high percentage of whole kernels. It's the optimum equipment for oats primary processing, and the difficult problem to hull oats has been solved properly.

Advantages of Oats Hulling and Separating Machine

- 1. The core parts of hullers adopt all-steel materials, and the vanes of the huller adopt 99% alumina porcelain which improve the hulling result and give a longer service time. External motor is easy for maintenance and replacement.
- 2. You can achieve ideal separating result by adjusting angle of screens.
- Adopting the vibrating and negative-pressure separation machine and spiral materials-unloaded to
 make the shells collecting works easier and at the same time reduce the dust accumulation greatly
 during the working process.
- 4. The vibrating source of the equipment adopts vibratory motors design. This hulling and separating equipment features easy and quick installation and no installing experience is required.

Working Process

Raw materials \rightarrow Elevating \rightarrow Shelling & Separating \rightarrow Checking the unshelled buckwheat \rightarrow Flowing back for Re-hulling \rightarrow Pure kernels

Technical Parameters of Oats Hulling and Separating Machine

Model	Capacity	Power Source	Weight	Dimensions (L*W*H)	Perfect Kernels Rate
PVG- TFYM1000	600- 800kg/h	12.25kw/380v	2800kg	7300*2800*3900mm	≧95%

5) Sunflower Seeds Hulling Line

<u>General</u>

We supply professional sunflower seeds hulling and separating equipment. The sunflower seeds shelling and separating equipment possesses high automatic characters. If they are exists any unshelled seeds, they will be sent to the next shelling machine for hulling clearly. The shelling and separating equipment, owning independent intellectual property rights, is a perfect machine to deal with sunflower seeds. First, this equipment removes the miscellaneous impurities from the raw materials such as little stone, flat seeds etc. And next it follows the working procedures: cracking, shelling, separating, grading and rechecking the sunflower seeds and kernels.

Features of PVG -1200 Sunflower Seeds Hulling and Separating Line

- 1. The PVG-1200 sunflower seeds shelling and separating equipment adopts the unique double shelling machines and takes use of digital variable frequency technology to control the machines accordingly.
- 2. This equipment owns the special wind-recycling system, which helps the unshelled seeds into the following shelling machine for hulling again so that it saves labor and time and improves the shelling efficiency at the most extent.
- 3. This shelling and separating equipment has the quality of high shelling rate, few broken kernels, high automatic degree, and easy operation and maintenance.
- 4. This equipment consists of the following nine machines: Hopper, Material Hoist, Muti-functional Impurities Remover, Bucket Elevator, Hulling Machines (2 sets), Separating Machines (3 sets), Wind-recycling Unshelled Materials System, Kernels Container and Controller Cabinet.

Working Process

Feeding materials \rightarrow Lifting materials \rightarrow Impurities removing \rightarrow shelling seeds \rightarrow Separating husks and kernels \rightarrow checking the kernels \rightarrow recycling the unshelled seeds \rightarrow Shelling the unshelled seeds again \rightarrow Pure Sunflower kernels

Technical Parameters of PVG-TFKH-1200 Sunflower Seeds Hulling and

Model	Power Source	Capacity	Perfect Kernel Rate	Dimensions (L*W*H)	Weight
PVG- TFKH- 1200	14.59kw/440v	500kg- 800kg/h	≥90%	1440mm*280mm*410mm	5000kg

Features of PVG-TFKH-1500 Sunflower Seeds Hulling Machine

- 1. The PVG-TFKH-1500 sunflower seeds shelling and separating equipment adopts four shelling machines and design of vertical wide screen so as to improve the shelling and separating efficiency largely and also save the space.
- 2. The better ideal separating effect can be realized by adjusting the tilt of the screen. Besides, the core of the shelling machines is made of the full steel and the blades is made of 99% alumina ceramics in order to enhance the shelling effect and prolong the service time.
- 3. The operation of chaffer screen can separate the seeds and kernels easily during the shelling process. The blades of screen are made of high-quality cold-roll steel sheets, so they are tough and durable.
- 4. This equipment is consisted of the following eight parts: Hopper, Material Hoist, Muti-functional Impurities Remover, Bucket Elevator, and Hulling Machines (4 sets), Vibrating Conveying and Separating Machine, Wind-recycling Unshelled Materials System and Controller Cabinet.

Technical Parameters of PVG-TFKH-1500 Sunflower Seeds Hulling Machine

Model	Power Source	Capacity	Perfect Kernel Rate	Dimensions (L*W*H)	Weight
PVG- TFKH- 1500	16.47kw/440v	500kg- 1000kg/h	≥90%	1130mm*330mm*550mm	5200kg























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