Innovation in vegetable handling

Planting & Harvesting



Grading & Packing



Handling & Logistics



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BrimaPack has become a leading player for vegetable handling solutions for Iceberg Lettuce, Broccoli and various other vegetables and fruits. BrimaPack has developed the "NicePack" packing systems giving superior shelf life and lower packing costs compared to other technologies. Through its focus on supplying System Integrated Solutions, rather than individual machines, BrimaPack offers complete packing solutions for pack house and field packing operations, which saves up to 50% on packaging costs and enhances shelf life and product presentation.

of state of the art self-propelled field rigs, have been developed. They are suitable for both planting and harvesting jobs. Each unit is tailor made to suit your needs. BrimaPack's unique e-Drive system is lowering fuel costs and greenhouse gas emissions drastically and is giving you optimal drivability suitable for today's demands and future expectations. Our approach toward System Integrated Solutions (including pre- and post-sorting technologies, data technology, labelling/printing and logistics) ensures an optimal solution tailored to your specific needs.



Disclaimer

Specifications may vary according to application, BrimaPack reserves the right to make changes without prior notice.

The VePack P-series were originally designed for Iceberg Lettuce and Broccoli. As a result of enhanced machine modifications and special film developments, the systems can now also be used for the packaging of Cauliflower, Melons and other Fruit & Vegetables. Each specially developed packing film has been optimi-

zed for processing and maximum shelf life. The packing system combines an innovative packing design (closed but breathable, tight packing with seal at the butt) with an efficient and modular machine concept. The machines are designed to be utilized as well in warehouses as directly in the field during harvesting.

Either plain or pre-printed film can be used and combinations are possible with automatic labelling and/or printing.

These options give you the best possible presentation and ensure that product identification and traceability requirements can be met.

- Increased shelf life combined with superior shelf presentation.
- Innovative packaging design, low packaging and labor costs.
- Wide range of indoor and outdoor packing solutions.
- Integrated labelling, coding and pre-printed film options can be used.









The new BrimaFilm AF has been exclusively developed to increase the shelf life of broccoli and other brassicas such as cauliflower and cabbage. The extension of the shelf life is at least 5 – 8 days (at 17 degrees centigrade). This is reached in a natural way by creating an optimal atmosphere for Broccoli storage and display. The anti-fogging characteristics and packing design further enhances the fresh produce image, which all together increases sales and reduces the amount of waste.

The film is optimized for broccoli, without

expensive perforation, without adding any chemicals or gasses and without substances applied in the film in order to absorb ethylene gas released from the product. The extended shelf life packaging consists of two unique elements; BrimaFilm AF and the VePack 200-PHBR-XL packing system. This combination was nominated for the Fruit Logistica Innovation Award.

Examples of shelf life tests in comparison with conventional packed produce (Stretch and Shrink/retractable film). Test results are after 8 days, held at 17 degrees Celsius.

Benefits of BrimaFilm AF:

- Extension of the shelf life of fresh broccoli for 5-8 days, compared to other packing materials and methods, is easily achievable!
- Improved sales & fresh product appeal.
- The shelf life is less affected by nonrefrigerated shelves at stores or broken cool chains.
- The retention of green color during storage as a measure of quality and freshness.
- Tastes better for longer.
- · Average weight loss less than 1%.
- Due to longer shelf life the waste at retailers is reduced by 50%. (Case study M&S UK)
- Reduction of production, distribution and complaint costs.
- Reduced pressure on the supply chain due to longer shelf life.
- Secondary packaging costs savings. No need for expensive EPS boxes and ice.
- Increases food safety, tamper proof packaging and full traceability.
- Easy to recycle packaging material.







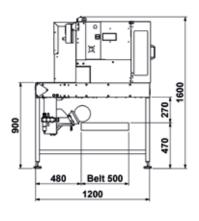


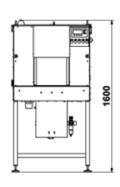
The VePack 200-PH is the stand alone module for pack house operations. This basic system, with manual infeed, is perfectly suited for low cost packing of various products. Either plain or pre-printed film can be used. Each system can be combined with automatic labelling and/or printing, saving additional labour, enhancing

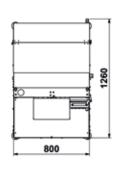
the product presentation and ensuring product identification. XL versions of the machine offer extended film sizes, up to a width of 650mm, especially intended for large products.

With one module, up to 20 products can be packed per minute. You can combine

multiple units into one high capacity packing system. Complete logistic solutions, with over 6 modules, can be designed to meet your specific needs and your available floor space with minimum personnel requirement. The VePack 200-PHBR-XL is the designated version for the Shelf Life packaging of Broccoli and Cauliflower.







- Low investment cost, unique product quality.
- · Easy to use, simple to maintain.
- Modular concept, system integrated solutions.
- Suitable for Iceberg Lettuce, Broccoli, Cabbage, Cauliflower, Melons and more.

Specifications	VePack 200-PH	VePack 200-PHBR-XL
Dimensions		
Length	1260 mm	1305 mm
Width	825 mm	825 mm
Height	1600 mm	1600 mm
Weight	150 kg	160 kg
Production		
Max. capacity	900 pc/hour 1	900 pc/hour ¹
Electrical Details		
Power supply	230 VAC 50Hz+PE	230 VAC 50Hz+PE
Power consumption	0.75 kW	0.75 kW
Pneumatic Details		
Air supply	7 bar	7 bar
Air consumption	100 L/min	100 L/min
Film specifications		
Film type	CPP	CPP
Width	450-600 mm	450-650 mm
Thickness	12-17 μm	12-20 µm
Possible VeCode options: Print/Label		





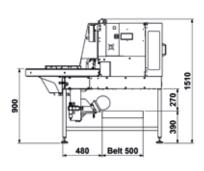
The VePack 200-PHH is equipped with a compact, automated, horizontal in-feed system (rotating table). This in-feed works as a "buffer", giving the operator the possibility to reach maximum capacity. There is also more flexibility in the number of people working on the packing machine.

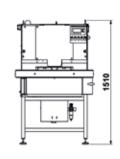
From one person feeding one machine, to two people feeding four machines (in case of pre-cleaned produce).

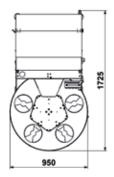
The VePack 200-PHH is perfectly suited for the packing of Iceberg Lettuce. On request, the VePack 200-PHH modules

can be modified for other vegetables. More than one VePack 200-PHH module can be integrated into one high capacity packing system. We offer turn-key solutions including logistics, label dispensers and/or printers, which can be supplied as an option.

- Compact version with automated in-feed.
- Buffer function, giving you a higher effective output.
- Flexibility in the number of people working on the line.
- Suitable for stand-alone and system integrated operation.











Specifications	VePack 200-PHH
Dimensions	
Length	1710 mm
Width	950 mm
Height	1510 mm
Weight	230 kg
Production	
Max. capacity	1100 pc/hour ¹
Electrical Details	
Power supply	230 VAC 50Hz+PE
Power consumption	1 kW
Pneumatic details	
Air supply	7 bar
Air consumption	125 L/min
Film specifications	
Film type	CPP
Width	450-600 mm
Thickness	12-17 μm
Possible VeCode options:	
Print/Label	

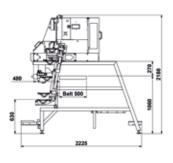
¹ The capacity is depending on product size, packing conditions and the type of film used.

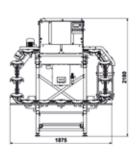
The VePack 200-PHV has a vertical infeed system, designed for Iceberg lettuce. The standard version (VePack 200-PHV 16-5) has 16 cups (of which 5 are on the bottom part of the in-feed). This system is 1900 mm wide, and perfect for 1 - 2 operators. A wider version with more cups can be supplied, so more operators can

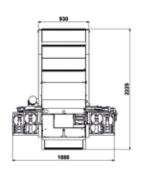
work on one unit. In-feed systems with an effective length of up to 3500 mm (VePack 200-PHV 26) suitable for a maximum of 4 operators are available.

The VePack 200-PHV can be supplied as stand-alone, or as a multiple system solution with integrated logistics.

All systems can be supplied with labelling and/or printing. In combination with the vertical in-feed system, integrated grading (by weight and/or size) and film length optimization options can also be offered, ensuring that underweight products are not packed, thus saving on product recall, labor and film costs.

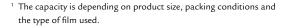






- Maximum flexibility in the number of operators per machine.
- Optimal solution for pre-cleaning at the line.
- Optional integration of grading by weight (and/or size).
- Complete packing & handling solutions can be offered.

Specifications	VePack 200-PHV
Dimensions	
Length	2225 mm
Width	2000 – 3500 mm
Height	2320 mm
Weight	250 - 300 kg
Production	
Max. capacity	1100 pc/hour ¹
Electrical Details	
Power supply	230 VAC 50Hz+PE
Power consumption	1 kW
Pneumatic details	Detalles del neumático
Air supply	7 bar
Air consumption	125 L/min
Film specifications	
Film type	CPP
Width	450-600 mm
Thickness	12-17 μm
Possible VeCode options:	
Print/Label and	
integrated grading	

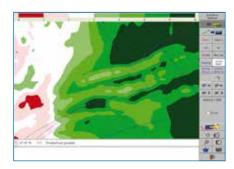




The most cost effective way of packing vegetables is by using the packing system in the field. For this BrimaPack has developed a range of harvesting headers. At field level the workers cut & clean the product and put it in in-feed systems which transport the vegetables to the packing machine(s). After packing the vegetables, processing is continued in state of the art packing and boxing stations. On Iceberg lettuce Rig headers the VePack 200-PRV modules are used but also various flow pack systems can be integrated.

BrimaPack supplies the VePack 200-PRV modules in complete System Integrated harvesting headers. These can be supplied with 1 to 9 packing units, from 2 to 16 meters wide. Packing efficiency can be

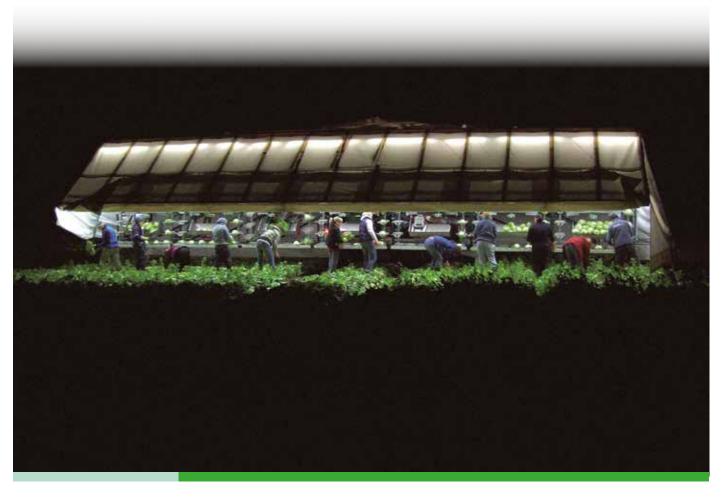
more than doubled, up to 400 heads/ worker per hour. Total rig capacity can be 9900 heads/hour, effectively produced throughout the day.



Optionally automatic grading, by produce weight and/or size, can be integrated into the packaging systems. Combined with the actual GPS-data and our in-house developed BrimaNaut software, you can

obtain powerful data for optimizing your crop and harvest strategy. Together with our VeCode capabilities, full produce traceability is guaranteed and available at your fingertips.

There are currently three different rig header designs for harvesting. Each rig header can be combined with our own BrimaPack e-drive rigs and most third party harvesting rigs. The logistics inside the harvesting header and rig are tailored to your specific requirements. Based on our wide expertise, we are able to offer you the highest possible packing efficiency. We not only design for you, but also build the complete harvesting header and integrate it with the rig of your choice, including commissioning, training and start-up on site.











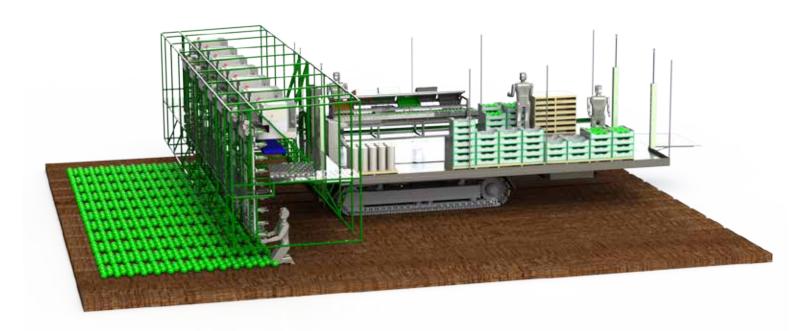
The Atlantis harvesting header system is the packing solution based on conventional / traditional harvesting systems, and can easily be used on fields with different planting concepts. The cutters can be assigned freely (within limits) to the different in-feed systems, and iceberg rows. The Atlantis header system itself can be operated in both harvesting directions, forward and

reverse. The header is suitable for wheeled and tracked drive units. The foldable roof shields the workers against various weather conditions.

Harvesting widths are available from 4 up to 16 meters. Depending on the number of packing systems in the harvesting header, capacities between 2200 packs

and 9900 packs per hour are achievable. Depending on the configuration, an average productivity of up to 360 heads per worker, per hour throughout the season is realistic. The ergonomically designed packing stations also contribute to these efficiencies.





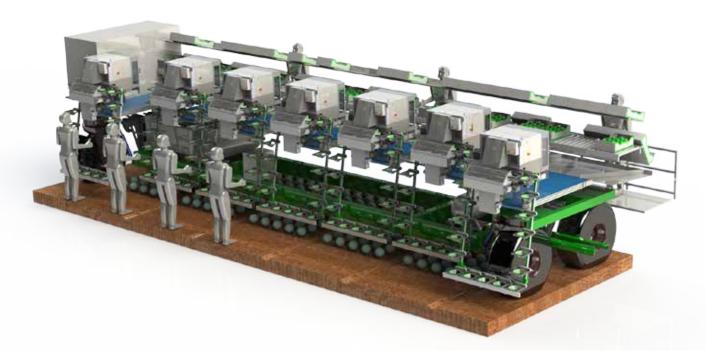
The Columbia harvesting header system is customer optimized to achieve highest productivity. In the optimal configuration the cutters are in a kneeling position, the most efficient and ergonomic working position. Each cutter is assigned to specific rows and to a specific in-feed system(s). The header also allows produce to be cut in a conventional working position. The

cutters are always facing the produce, making this system suitable for wheeled and tracked drive units. By using tracked rigs the system is not depending on driving furrows or bed configurations.

Due to its innovative design all workers are shielded from weather conditions. Harvesting widths vary from 6 to 16

meters. Depending on the number of packing systems in the harvesting header, capacities starting from 2200 packs up to 9900 packs per hour are achievable. An average productivity of up to 400 heads per worker, per hour throughout the season is realistic. The ergonomically designed packing stations also contribute to this efficiency.





The Discovery is a self-propelled Gantry style harvester, designed to meet specific regional requirements, such as those found in the United States. The system has multiple packing units, box erecting and packing stations and logistics integrated into the harvester. The combination with the side off-load, for the packed

boxes to a transportation trailer on the side, makes this system the perfect fit into existing Gantry style operations.

Wheelbases from 8 up to 14 meters are available. Upon request a variable wheelbase to suit 40" and 42" beds can be integrated. A typical 12 bed system

(40 Feet, 12,2 m) has a production capacity of 7700 packs per hour with only half the crew size of a conventional harvester. The Gantry style rig can also be utilized for other tasks. Road transport is carried out by low loader or with an add-on dolly axle.



BrimaPack has developed a range of harvesting aids to fit the needs of growers with smaller fields and/or the need for more agile and flexible harvesting systems. For this, various harvesting belts and logistical solutions are available. Packing

machines, or bundling systems, can be integrated in this concept. The harvesting aids are suitable for vegetables like Broccoli, Iceberg lettuce and for example cabbages. The systems are also utilized in the growing process of potted plants in

trays. All harvesting aids are easy to fold and stay within the 3 meter transportation width. In the field the harvesting width can be up to 12 meters.



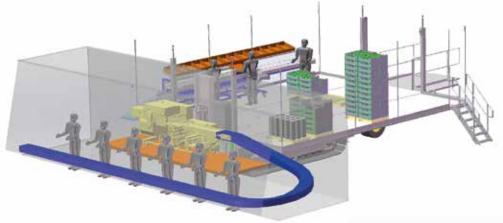




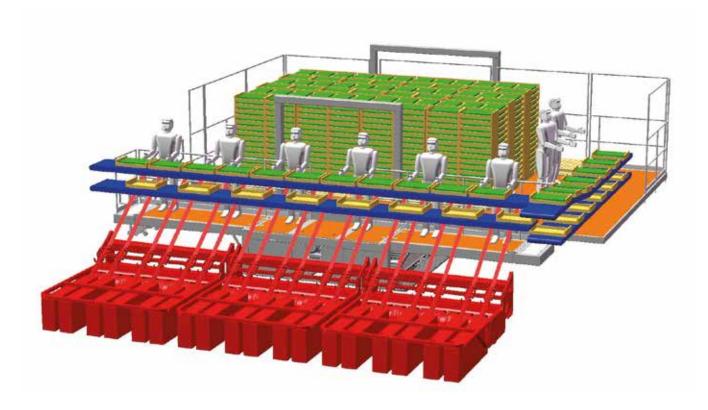
The VeTrac is a self-propelled, electro driven, caterpillar tracked rig. This drive system results in a very low and efficient fuel consumption, low noise emission and is uniquely precise on driveability. The VeTrac can be delivered in a standard configuration or Tailor-made to customer preferences.

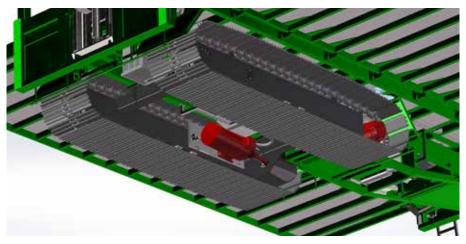
The drive unit can carry and support harvesting, packing, bundling or planting equipment for a wide range of vegetables, salads and herbs. The caterpillar tracks ensure flotation and prevent soil damage under the worst environmental conditions. If equipped with our BrimaNaut system precision farming or autonomous

operations are within reach. The VeTrac can be transported on a low loader or can be equipped with a retractable integrated drive axle to be towed behind a tractor.



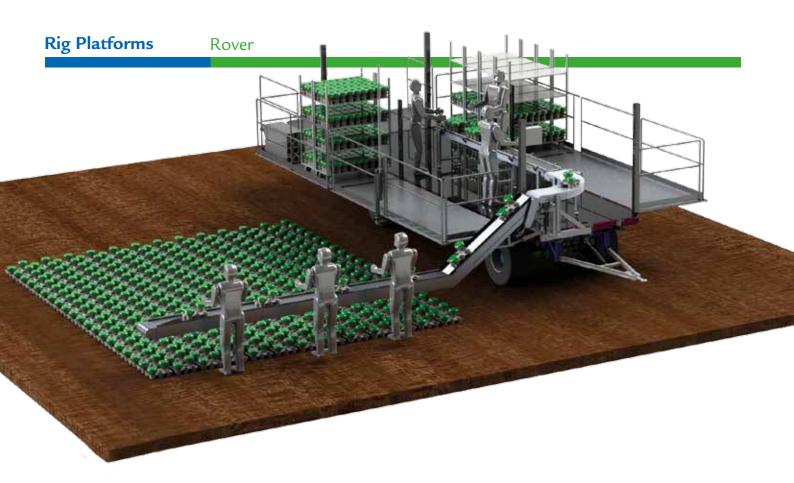








- Platform dimensions up to 9 x 10,5 m. Transportation width 3 m.
- Tracks from 0,5 0,9 m. wide and 4,5 m length.
- Hydraulically foldable wings and roof.
- Lifting capability up to 10 Tons front and/or rear.
- Diesel consumption as low as 3,5 liters/hour.
- Noise emission less than 75 dB!
- Speed from 35 to 3500 m/hour.
- Optional Autopilot, GPRS, Wireless remote control, clean water system, Automatic levelling system.



The Rover rig is a self-propelled, electro driven, 2 axle system. The Rover is self-propelled while harvesting and towed during field change giving maximum efficiency and flexibility. The large working

platform folds into a compact trailer unit in less than 15 minutes.

The agile and compact Rover harvester can be equipped with packaging machine-

ry, for packing iceberg lettuce or broccoli, or can be customized for tailor made harvesting, handling or processing system for all kinds of vegetables, herbs and potted plants.



- Platform dimensions up to 5.5 m. wide and 9 m. long. Transportation width 2.55 m. or 3 m.
- Drive system: electrical.
- Steering system: Mechanically connected dual fifth wheel steering.
- 100% differential lock on each axle.
- Diesel consumption as low as 2.5 liters/hour.
- E-drive speed from 35 to 1800 meters/ hour. Allowed towing speed up to 25 km/h.
- By request Autopilot, GPRS, Wireless remote control, Automatic levelling system.





VeLabel

Depending on the size of the labels, different models are available. The VeCode 660 can dispense labels up to 60 mm wide and 60 mm long, the VeCode 860 can dispense up to 80 x 80 mm. Both can be mounted on the VePack P-series. The VeCode 860 can be combined with an in-line inkjet printer.

VePrint

With the VePrint you can print your text directly on the film. We can also offer you the printer in combination with a label dispenser, so you do not have to preprint your labels at the office any more. Optionally you can communicate through WLAN with your printers.









BrimaNaut

BrimaNaut is a PC based data collection and storage center offering endless possibilities. The basic system gives online access for monitoring productivity, online diagnostics and the possibility for online service to assist you whenever you need it. The system is accessible, for example, by your sales department to check the progress of the harvest, your service depart-

ment, to check when service is needed, or for us to assist you. This can be done from your office computer or even by smartphone. Alarm system(s) can be added.

The BrimaNaut Data collection functionality opens the gateway to precision farming and gives you the possibility to evaluate not only the production line itself but also the seed varieties, fertilization,

water management and even the crew. An optional GPS system can be added, just for tracking and tracing purposes or to be used as an automatic guiding system on our VeTrac rigs. With this even autonomous driving is possible. Combined you have the tools for optimizing your crop and harvest strategy and the capability for full produce traceability.





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VeSort

With the VeSort series we offer a very cost effective grading system for broccoli and other products. It can grade up to 60 products per minute, in up to 5 grading categories. The VeSort combines high cost savings with an increase in grading accuracy.

The VeSort 3600-PST is the standard grading system which has been developed for packed produce. The system is positioned behind the packing machine(s).

The VeSort 3600-PRE is a so called "wet" grading system, developed for sorting unpacked broccoli and other produce where moisture and small debris is an issue. Both sorting systems can be combined with (turn-key) system integrated logistics.

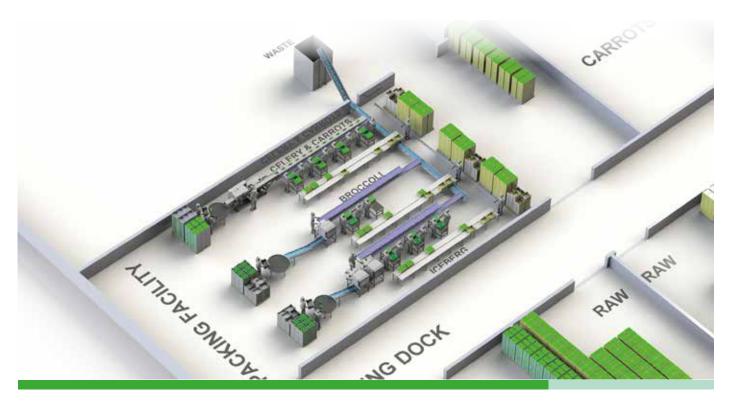




Logistic Solutions

BrimaPack does not only supply packing machines or field harvesting rigs, but offers you system integrated handling solutions, delivering you a cost efficient,

high capacity process which fits your requirements. Each customer is unique, and each question needs its own answer. Based on our vast expertise we gladly offer you a solution which has been designed to exceed your expectations and is based on a range of tailor made systems. In projects BrimaPack technology can also be combined with externally sourced components or modules.





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