

MOBA

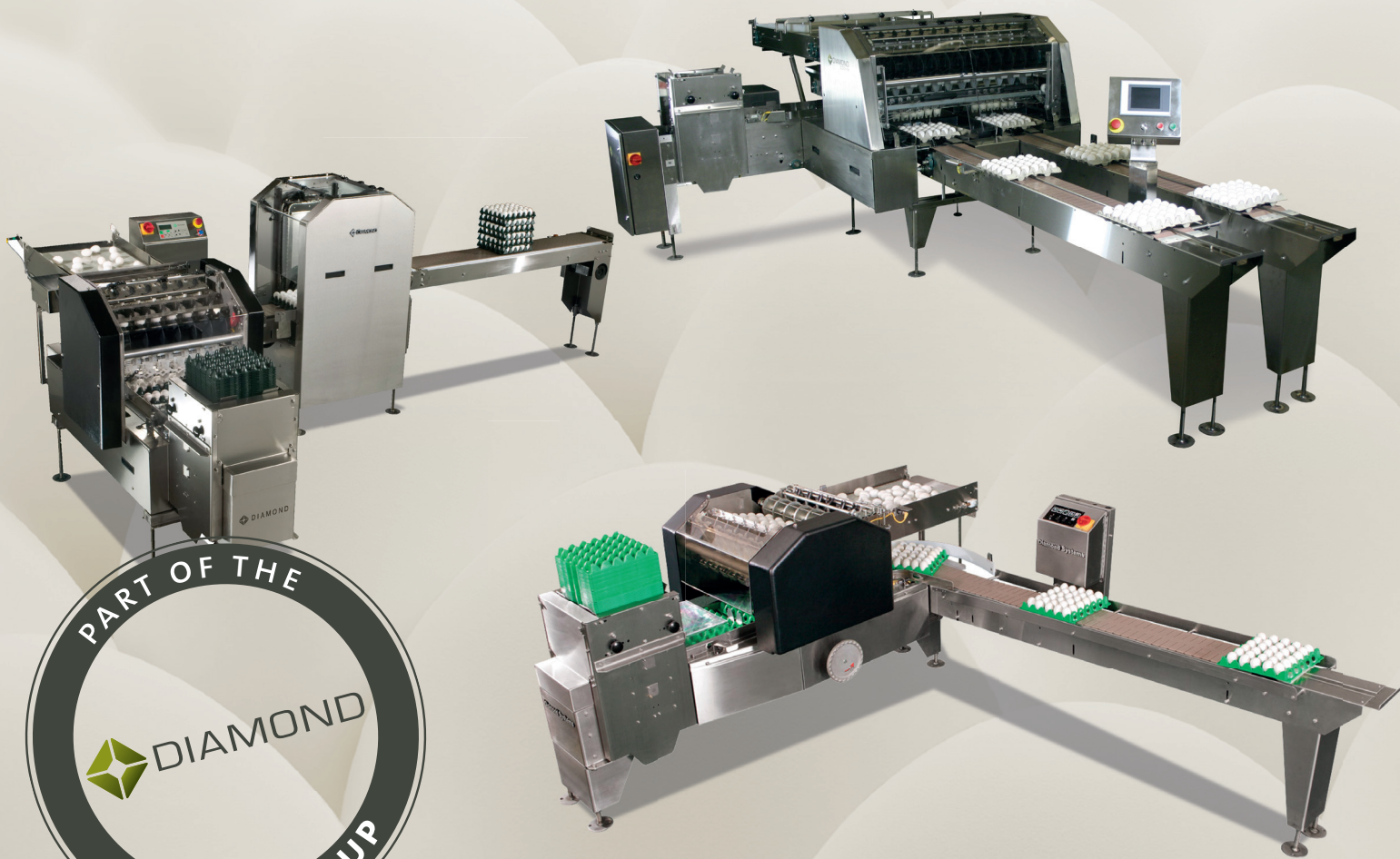
GRADING - PACKING - PROCESSING

Farmpackers

DIAMOND 70 FP

DIAMOND 100 FPX

DIAMOND 200 FPX



PROFIT STARTS WITH CARE

www.moba.net

Right hand Diamond 200 FPX.



Right hand Diamond 100 FPX shown with 90 degree takeaway conveyor and optional tray stacker.



Farmpackers for operations of all sizes

The Diamond line of farmpackers are available in 70, 100, and 200 cases per hour models. They are made of stainless steel and are designed for easy operation and simple clean up.

Farmpacking

The first automatic farmpacker was introduced in the 1960's to help the egg producer collect and pack eggs at a higher rate than by gathering them by hand. Farmpackers have allowed our customers to make the collection process more efficient and gentle on the eggs. Automatic stacking of 30 egg trays was introduced in the 1980's, which made the collection process even more efficient by reducing labor and egg breakage while increasing throughput. Servo technology has now been applied to the Diamond 100 FPX and Diamond 200 FPX, which allows these machines to have very accurate indexes and extremely precise placement of the eggs into the trays. The Diamond line of farmpackers has many different infeed configurations and output product flow arrangements available, which allows our customers to configure the machines to fit their needs. The industry proven denester does an excellent job of denesting all paper and plastic 30 egg trays, and the height of the farmpackers can also be adjusted to handle a complete range of incoming egg belt heights.

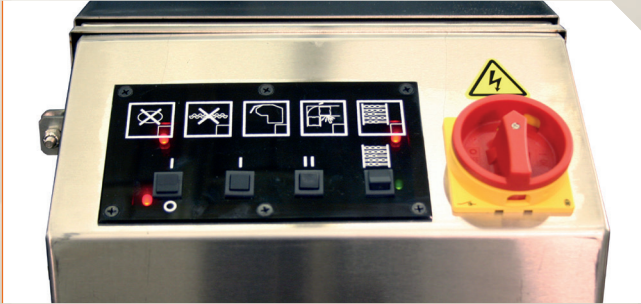
Operation

Eggs are conveyed from the layer houses to the farmpacker by a belt or rod conveyor system. These conveyors receive a signal from the farmpacker to start and stop the belts as needed to regulate the flow of incoming eggs. Eggs are fed from the conveyors onto the reservoir of the farmpacker and are separated into rows 6 or 12 eggs wide depending on the farmpacker model. The eggs are then gently cycled through the head of the farmpacker, get end aligned, then are placed into egg trays. The full trays of eggs are conveyed out of the farmpacker where they can be stacked by an optional tray stacker, or can be manually stacked by hand. All of the Diamond farmpackers are available in right or left hand configurations to optimize the space available in the packing room.

Construction

All of the Diamond line of farmpackers are made of Stainless steel and are designed to give you many reliable years of service. Several of the components in the head area can be removed without using tools to allow quick access to all of the egg touching parts. This makes the cleanup process very quick and simple.

The control panel of the Diamond 70 FP is icon based for easy operation. All functions are selected and activated by push buttons and toggle switches. LED lights indicate the functions selected.



Eggs are passed from the reservoir, through the head area where they are aligned and placed into trays.



Diamond 70 FP

The Diamond 70 FP is a compact, stainless steel packer that easily handles 25,000 eggs per hour on plastic or paper 30 egg trays. The trays dispense from the denester, and the eggs are gathered on the reservoir and routed through the head where the eggs are automatically end aligned and gently placed into the trays.

Control system

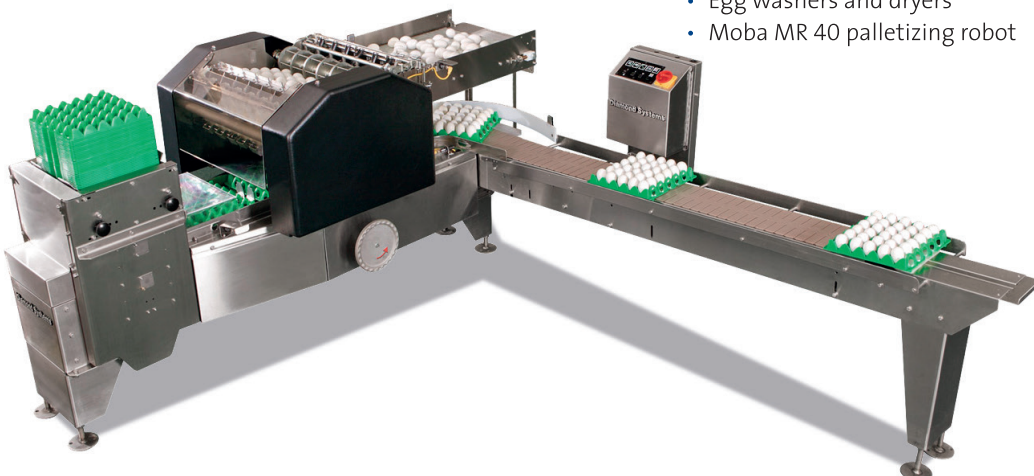
The control system of the Diamond 70 FP is very straight forward and simple to operate. All of the controls are icon based utilizing pushbuttons and toggle switches located on the electrical control box. Sensors on the reservoir will send a signal to stop the incoming housebelts if the egg flow from the houses gets too heavy. The machine is driven by a variable speed AC motor and variable frequency inverter. The denester and head are activated by clutches and cycled as needed to pack the eggs.

Features

- Simple to operate
- Compact footprint
- Easy access for cleaning and Maintenance
- Industry proven, reliable denester

Options

- Right or left hand configuration
- 90 or 180 degree takeaway conveyors
- Automatic tray stacking
- Various sized pre-accumulator tables
- Egg washers and dryers
- Moba MR 40 palletizing robot



The keypad and display of the Diamond 100 FPX allow the operator to select different tray settings from the tray library. The display shows machine speed and number of eggs packed.

The servo-driven pushers of the Diamond 100 FPX gently and precisely guide the trays into position to receive the eggs from the farm packer head.



Diamond 100 FPX

The Diamond 100 FPX can process up to 36,000 eggs per hour. Its interactive display and keypad allow various machine functions to be accessed easily. The automatic speed up and slow down feature can be enabled to automatically adjust the machine speed to match the flow of the incoming eggs.

Control system

The Diamond 100 FPX utilizes a servo system to control the pusher motion. With this system, all tray index settings can be accessed through the HMI (Human machine interface). Simply select the tray setting for the trays that you will be running, and the pushers will advance the tray to the proper cell location for optimal egg placement. You can also access a service screen which allows you to read all input sensors and to fire all output devices. This will allow you to jog the pushers or the head to a certain position to make clean up easier.

Features

- Servo driven pushers
- Auto speed up and slow down feature
- Interactive display and keyboard
- Built in egg counter

- Electronically adjustable speed control
- User friendly design
- Easy access points for routine maintenance
- Continuous motion head

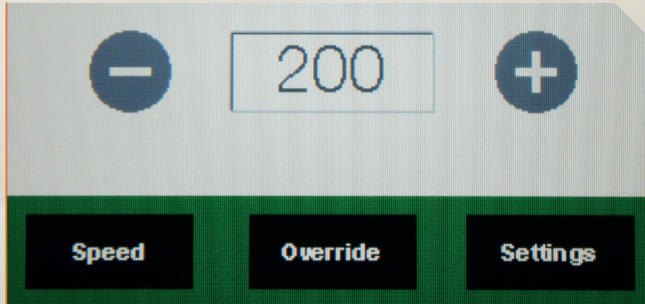
Options

- Automatic tray stacker
- Right or left hand configuration
- 90 or 180 degree takeaway conveyors
- Various size pre-accumulators
- Egg washers and dryers
- Moba MR 40 Palletizing robot



The HMI (human machine interface) of the 200 FPX is an all new touch screen unit. It allows the operator to select different tray types from the tray library. The display shows machine speed and number of eggs packed.

The servo drive system on the Diamond 200 FPX assures that the trays are in the optimum position to receive eggs from the head.



Diamond 200 FPX

The new Diamond 200 FPX can pack up to 72,000 eggs per hour. It's interactive, touchscreen display allows various machine functions to be accessed easily. The smooth servo indexing allows eggs to be gently and accurately placed into 30 egg trays.

Control system

The servo system on the Diamond 200 FPX controls the pusher motion. Both the main pusher section and the cross pusher section have individual servo motors, which allow the pushers to accelerate as they start to move the tray into the proper position for receiving the eggs, then decelerate right before it stops to assure that the tray is in the correct position for egg placement. Just like the the Diamond 100 FPX, all tray index settings can be accessed through the HMI (Human machine interface) by selecting the desired tray settings from the list. The pushers will then advance the tray to the ideal cell location for eggs to be placed into the trays. All screens including settings and service can be easily accessed through the HMI. The low tray warning alerts you to add trays to the denester when they get low.

Features

- Dual servo system to control pusher movement
- Automatic homing of machine at startup
- Auto speed up and slow down feature
- Interactive touchscreen display
- Built in egg counter
- Electronically adjustable speed control
- User friendly design
- Easy access points for routine maintenance
- Continuous motion head
- Low tray warning

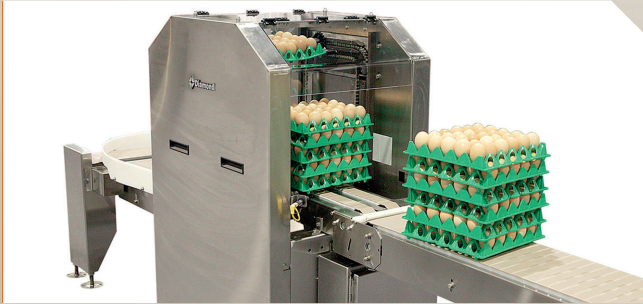
Options

- Automatic tray stackers
- Right or left hand configuration
- Various size pre-accumulators
- Egg washers and dryers
- Moba MR 40 Palletizing robot



Automatic tray stacking is optional on all Diamond farmpackers. It saves labor by mechanically stacking the full trays 6 high.

Pre-accumulator tables of various sizes are available to gather eggs from several belts and direct them to our farmpackers.



Farmpacker Options

There are many different options available to help our customers gather eggs. From tray stackers to egg washers, pre-accumulator tables and a palletizing robot, we offer many different options to help you with your packing needs.

Tray Stackers

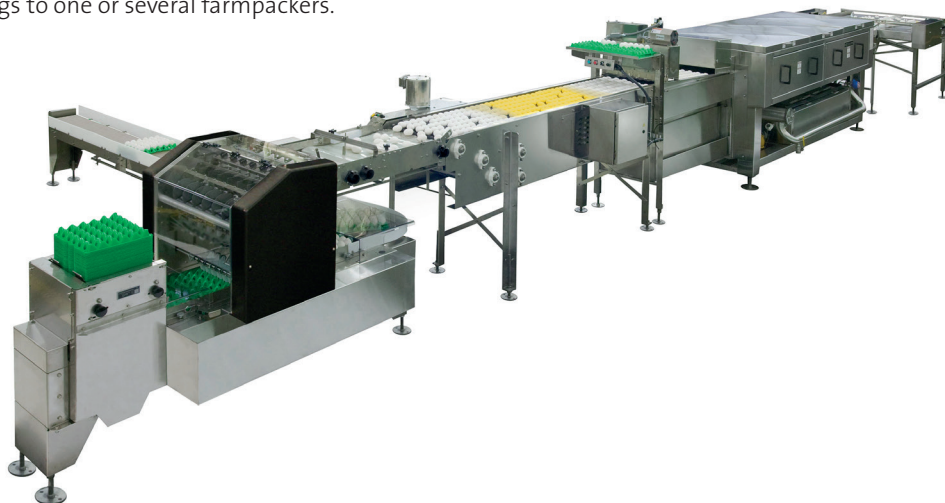
These units can be added to any of the Diamond farmpackers. They stack trays of eggs 6 high to save time and labor. This unit is also more gentle on the eggs than stacking them by hand. The 200 FPX uses 2 tray stackers, where the 70 and 100 FPX models use one.

Pre-accumulator tables

A wide range of pre-accumulator tables are available for the Diamond farmpacking line. Standard sizes range from 4' wide x 4' long (1.24m x 1.24m) to 10' wide x 8' long (3.05m x 2.44m). These tables can accommodate several incoming egg belts and can funnel the eggs to one or several farmpackers.

Egg washers and drying systems

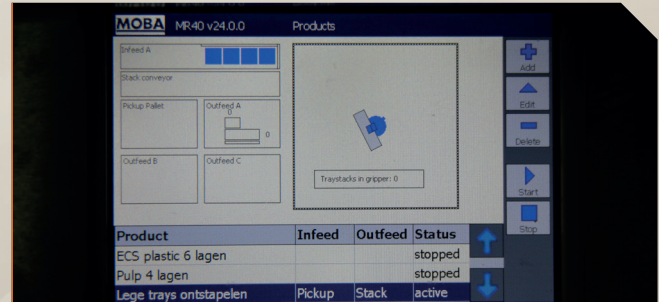
Special infeed systems can be designed to wash the eggs before they reach the farmpacker. Eggs can be fed to an accumulator which orients the eggs on to a spool bar system. Once the eggs are seated in the spools, they can be carried into an egg washer and be cleaned. The spool bar system can also carry the eggs through an egg drying system after washing. Egg washers are available in both 6 wide and 12 wide to accommodate the entire line of Diamond farmpackers. These types of systems can also be fitted with a candling system so unwanted dirt, cracks, bloods, and other unwanted eggs can be removed by hand before entering the farmpacker.



Optional handling of paper trays



User friendly touch screen



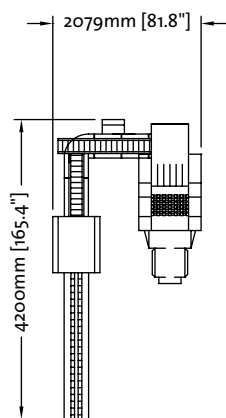
MR 40 Tray Palletiser

MR 40 Tray Palletiser is a robotic system that automatically places a row of stacks, 6 trays each on a pallet. The MR 40 is capable of palletizing stacks of trays coming from 1 or 2 farmpackers or packing lanes from an egg grading machine. It has a max capacity of 108,000 eggs (300 cases) per hour and can process both plastic and pulp trays and stacks on wooden pallets with cardboard layer pads, as well as on the *Egg Cargo System™* (ECS).

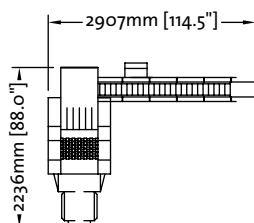
The stacks are picked up and placed on the pallet with our patented pick-up forks. Its unique construction allows the stacks to be set down in exactly the right position rather than being slid into place. The pins are withdrawn effortlessly from underneath the trays. Besides the stacks of trays, the gripper head can pick up layer pads and empty tray pallets then stack them neatly.



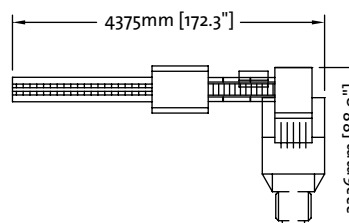
	Diamond 70 FP	Diamond 100 FPX	Diamond 200 FPX
Capacity (cases per hour)	70 cph	100 cph	200 cph
Capacity (eggs per hour)	25,000 eph	36,000 eph	72,000 eph
Reservoir Height	35"-42" (.89m-1.06m)	35"-46" (.89m-1.16m)	42"-50" (1.07m-1.27m)
Drive System	Variable Speed AC Drive	Servo Drive	Servo Drive (Dual)
Head Width	6 Wide	6 Wide	12 Wide
Power Usage	208-240 VAC 1PH 50/60 hz, 4A	208-240 VAC 1PH 50/60 hz, 4A	208-240 VAC 1PH 50/60 hz, 4A



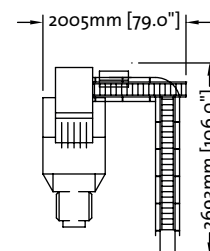
LH Diamond 70 FP
w/ 180° takeaway and tray stacker



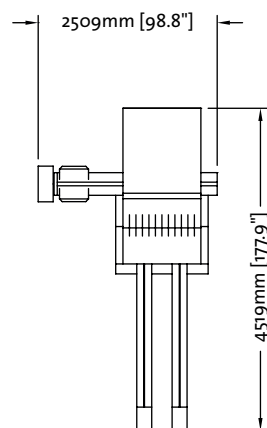
RH Diamond 70 FP
w/ 90° takeaway



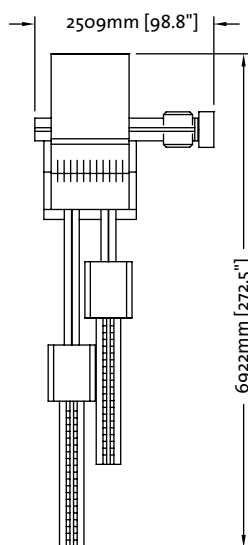
LH Diamond 100 FPX
w/ 90° takeaway and tray stacker



RH Diamond 100 FPX
w/ 180° takeaway



RH Diamond 200 FPX



LH Diamond 200 FPX
w/ tray stackers

For worldwide offices and agents' network, please look at www.moba.net

PROFIT STARTS WITH CARE

www.moba.net