

# S120

Solution for the gantry palletising, with automatic pallet input and output, compact and flexible.



The modular gantry palletiser type Pick & Place **S-120** has been specifically designed to handle cardboard cases, shrink wrap packages or any other regular shape package in a small area.

The **S-120** is a gantry palletiser with automatic pallet output, compact and flexible.

## Characteristics

- > Gantry type palletizer using high speed servodriven motion.
- > Optimal machine height by using telescopic mast (optional).
- > High safety standards by using sensor barriers and optionally interlocked doors.
- > Ergonomic and compact footprint.
- > 10 inches touch screen panel view with manuals and pallet patterns included.
- > Open design structure provides simple & quick access for cleaning and maintenance.
- > Automatic full pallet output until the waiting area.
- > Automatic dispenser of empty pallets.
- > Different layouts available depending on the application.
- > Customized gripper to handle multiple boxes with fast and automatic change-over.
- > Format edition and modification fully electronic by user.

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# S120 Solution for the gantry palletising, with automatic pallet input and output, compact and flexible.

The S-120 palletiser has been conceived to be adapted directly after one or two output conveyors of a casepacker, completing this the end-of-the line.

This unit is ideal for low and medium capacities. As a general concept, it is considered a cycle speed of 10/min.

If the pallet pattern allows to carry two cases/cycle then the speed will be of 18 cases/min.

It allows working simultaneously with boxes and patterns of different sizes in the following case:

**Single product conveyor.** In this case, the equipment S-120, with a single palletising station, complete one pallet and it moves automatically to the second pallet to end the process. The empty pallet positioning (in the loading place) is manually done and the full pallet output is performed automatically until the pallet waiting area.

**Automatic pallet dispenser mod. dp-100** Automatic pallet dispenser composed of a vertical magazine with capacity for 10 units. Equipped with movable fingers, driven by pneumatic cylinders, fixed to a lifting and lowering system, driven by gearmotor. The dispenser place the first pallet on a motorised roller or chain conveyor or on a transfer trolley and raise the rest of the load. Fully protected, it is especially designed for multiple palletising premises. Unloading pallet speed: Until 250 units/hour.

**Pallet conveyor** Automatic pallet changeover, with three possible working stations:  
Loading station: Motorised roller conveyor 2000 x 1100 mm placed under the automatic pallet dispenser.  
Palletising station: Full pallet conveyor waiting to be discharged on both conveyors of 1500x1100 mm.  
Output station: Full pallet conveyor waiting to be unloaded on both conveyors of 1500x1100 mm.  
Once a pallet is completed in the palletising station, it automatically moves forward to the waiting pallet position and the empty pallet of the loading position moves to the palletising position; the pallet dispenser place then the empty pallet in the loading area.  
The conveyor working height is of 100 mm.

The access to the palletising station can be open provided is always protected by means of a photoelectric barrier with "muting". The signal "inside to outside" allows the automatic pallet output while any object interfering with an "outside to inside" generated an emergency stop. Safety in this operation is according to the CE Norms and fully guaranteed.

The head is adapted to every specific case; however, there are three main universal picking systems: side pressing shovels . set of multiple suction cups by Venturi effect or grippers.

The X, Y and Z axes are controlled by servomotors to increase the speed and efficiency of the process. A fourth axe (product rotation) is optionally available.

The frame has been designed to be as compact as possible and robust. Polycarbonate doors and windows offer full visual inspection from any area around the machine. The doors allows free access and clear of obstacles into the machine. Security microswitches in case of opening are included.

**Touch screen** The touch screen has a simple operation and it is friendly-user, with constant indication of status and axes position. Modifying or creating a new palletizing pattern is done by the operator through the touch screen and requires no external assistance. Touch screen and PLC programming interface accomplish with the OMAC (Open Modular Architecture Controls) PACK ML standards. The

## Technical information

Maximum palletising height (pallet included)	1700 mm (Other upon request)
Maximum payload ( head included)	30 Kg
Capacity	10 cycles/minuto
Available heads	Side pressing shovels, suction cups, fork
Pallet dimensions	1000x1200, 800x1200 (Other upon request)
Electrical power	5,5 kW

equipment is controlled by a multifunction touchscreen, providing the operator all necessary information for a correct operation, changing and adjusting format. Moreover, thanks to multiple password levels, the main parameters of the equipment can be modified.

PRODEC has succeeded bringing together in this equipment outstanding design and functionality features such as:

### Accessible

The clean and open design without mechanical barriers, makes this equipment extremely simply and easy-to-use, whether a format changing, by a simple regulation or usual cleaning and maintenance.

### Flexible

Its advanced concept allows an expansion of its functions to suit the required project needs.

### Ergonomy

For its development, specific methods design has been used to optimise the staff operating comfort in the machine.

### Information management

A powerful software developed by our technical team allows a complete control of all machine functions, as well as easy-format changing through its touchscreen. Thanks to this, it is also possible to verify the production efficiency of each work shift or time slot, becoming thus a effective analysis instrument. It is prepared to integrate working lines according to OMAC standards.

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