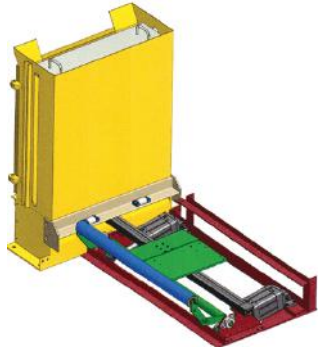


BASE PAD INSERTER (BPI) INSERTS PADS UNDER THE STACK



OPERATIONAL OVERVIEW

This equipment is used in corrugated or solid board factories where for whatever reason pads need to be introduced under a load to be automatically strapped with or without a pallet. These pads give protection to the load from the straps applied to the load to hold it secure with or without a pallet. The unit can be used when the load is strapped before being placed on a pallet.

The pads are scored to suit the customer and placed under the load in position along the length of the load and protruding by about 4in. This 4in folds up in the Palletiser on the score and acts as protection to the load edges where the straps are applied.

The equipment is in two opposite parts, or right and left, which almost cover the full width of the entry conveyor to the Palletizer, as shown in the photo above. The two pad inserters are bolted to the floor and levelled and are covered by an overhang on the entry conveyor leaving a gap of 9.8in between entry and exit conveyors, for the pad and rubber roller to raise. however, increase the load cycle time.



The system has a PLC program and sensors which measure the width of the load as it approaches the pad inserters. This information determines how the pads are positioned by the beam pad plates.

A further sensor measures the length of the load to determine when to start applying the pads and how many pads to apply. The pads are placed in position under the load by the action of a driven rubber roller, which raises, and applies the pads to the base of the load as it is still moving on the conveyor. The rubber covered rollers run at the line speed. Multiple pads, usually two or three pairs can be applied to the load. When no pads are being applied the rubber roller is positioned just below the level of the entry conveyors and supports the load as it moves between conveyors.

There is only one size of pad used in any one installation. The standard pad is 31.5in x11.8in and is .24in-.27in thick (just over 1/4"), normally BC flute double wall. The minimum pad is 31.5inx9.84in, .24in-.27in thick. Double wall corrugated board **only** can be used as pads and scored to help the folding up. The exact position of the score or scores will be determined on site after discussions with the end customer. The board grade used for the pads will also be confirmed on site with the end customer.

SPECIFICATIONS

Product transferred	Corrugated or solid board stacks or unit loads held together with interleave sheets.
Width of load	Min 31.5in Max 110in
Length of load	Min 31.5in Max 110.24in
Height of load	Min 16in height. Normal max load height 78.74in.
Weight of load	Nominal 4,981lbs on SSC 118inx118in
Minimum load dims	Minimum load 31.5inx31.5in, width x length
Carrier belts height	Normally 12in-13.78in, higher heights on request.
Carrier belts speed	Normally 45 ft/min, Can be adjusted if VFD's used.
Carrier belts	1in smooth plastic tiles, bound together by .2in fixing rods.
Carrier rollers	Independently driven rubber coated rollers.
Unit throughput	For the application of two pads standard throughput will be about 170 loads per hour two pads one each side.
Control system	Allen Bradley or Siemens. The unit can be used in automatic or manual mode from an HMI (Human machine interface) station using a PLC program. Control system 24vDC.
Electrical	Normally 440v 3 phase 50Hz, other possible on request.
Air supply	Clean dry air supply at 4 bar pressure or 55-60p.s.i.
Note	Loads to the pad inserter must be centralised on entry conveyors and not skewed. A load centraliser will ensure best stack entry position.