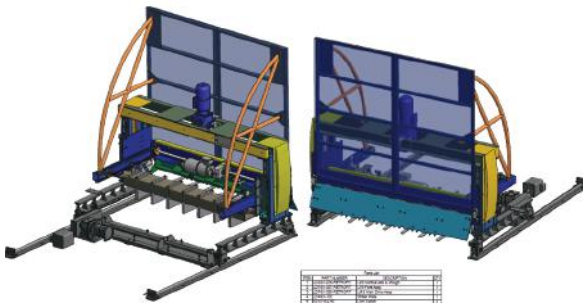
LOAD PALLETIZING DEVICE (LPD)

STANDARD – SINGLE LOAD



OPERATIONAL OVERVIEW

The device is designed to square; center and lift finished loads for placement on pallets. Constructed from high quality components and assemblies the Fastpal LPD is design for a long, low maintenance life.

The following features are standard on the LPD:

- Precision, long life V – guide tracks for the squaring heads.
- Vector drives for all axis of movement and stack centring and squaring by servo control.
- Precision rack and pinion lift guides.
- Mechanical pallet centring/squaring mechanism.
- The device utilises digital drives and advanced positioning system
- Diagnostics are included to pinpoint problems. These diagnostics include an alphanumeric display to insure user friendliness.
- Pusher entry device with servo drives for smooth and precise pallet insertion. All pallets are measure as they enter for precise stack/pallet positioning.
- Controls are provided for the device for automatic operation along with manual push-button controls.
- Active Turn-up plates to prepare base sheets for strapping.
- Automatic load centring.
- GRP sandwich squaring boards for improved stack quality.
- A sensor is installed and the program altered to sense when loads of low heights are in the LPD. The program will carry out a cycle with the plough plates retracted so as not to crush the load.
- The iMPRESS system can control the side pressure applied by the plough plates. This can be helpful if loads which are likely to fold up are being handled. The required plough plate pressure setting is attached to the order details in iMPRESS.
- Normal operation the load is dropped onto the pallet from approx. .79in above the tallest pallet height.
- The LPD sides come in again after the load has been positioned on the pallet and tamp the load square. This does, however, increase the load cycle time.

This equipment is warranted to handle pallets designed and generally manufactured and maintained to EN13382:2002 with the following caveats:

- The out of square of either the pallet or its orientation in the stack may exceed the standard 1%but shall not be more than 4in in any direction.
- 2-way pallets must be run with the bottom runners parallel to the normal stack conveying direction.
- 2-way entry pallets (solid sided) must have bottom slats greater than 3.14in in width.
- All stacks should be built on one or more base sheet to act as “Turn-up” sheets. These should protrude no more than 6in from the stack, have the flute running parallel to the long direction of the stack and should be slightly turned up before leaving the converting machine.

SPECIFICATIONS

Products	Unit loads of corrugated sheets, boxes or diecuts built on base sheets max load
Size	size 78.74in wide x 110.24in long
	Min load size 31.5in wide x 31.5in long
	Min stack height 15.75in
	All stacks have “turn up” sheets
Load Weight	Max load 2,204lbs
Pallet Sizes	Maximum Pallet size:
	61in Wide x 78.74in Long
	Maximum Pallet Height: 7in
Conveyor Speed	Nominal Conveyor Speed 59 ft/min
Rate	No rating for product flow rate
Performance	160 Loads/Hour for single pallet operation
Stack/Pallet Position Accuracy	Better than +/- .39in subject to pallet being square

OPTIONS

The LPD can be designed to accommodate from 78.74in to 141.73in in through length of the sides of the machine.

The width of the roller track matches any conveyors entering and leaving the LPD this is usually 63in to 94.49in.

The height of the side panels can be ordered to suit the height of expected loads. The control PLC system can be Allen Bradley or Siemens. Allen Bradley preferred.

Normal operation requires that the load be central to the pallet. It is possible through added PLC program to justify the load to an edge of the pallet if required. This is not in the standard PLC program.

An option is that the LPD can position baseboards of plywood or chipboard between the pallet and load.

If extra accuracy is required on load positioning on the pallet an additional option can be to add an array of sensors which measure accurately the length of the load when it has stopped in the LPD. This measurement is compared to the pallet position, which is fixed, and the roller track moves the load to completely centralise it. The motor driving the roller track has variable speed control. The rest of the pallet insertion procedure is then carried out.