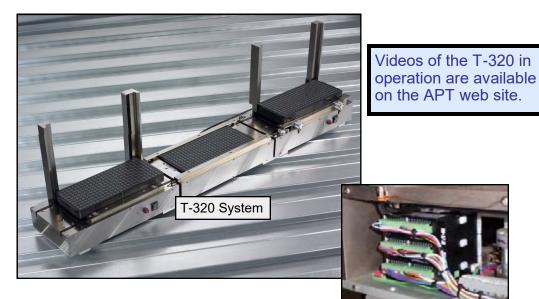
T-320 Tray Presentation System

Precise Feeding, Locating and Stacking of Molded JEDEC Trays & Thermoformed Trays

Engineered for Machine Builders and Systems Integrators



The APT Advantages

- Lower Cost
- Fast to Market
- Reduced Design Risk

- Internal Controller
- Easy Integration
- Advanced Features
- No Special Software

The Handling Process

A stack of trays is placed on the topside of the input station. Upon command, each tray is automatically removed from the bottom of the stack, transferred into the presentation station and precisely clamped in position for processing by the user.

When processing is complete, the clamps release and the tray moves automatically to the output station where it is stacked. As it is being stacked, the next tray moves onto the presentation station, and the process repeats.

Trays may be added or removed from the system at any time without process interruption. Sensors, coupled to an internal controller monitor the handling process and alert the user to any fault conditions.



T-320 Tray Presentation System

Features

- Top loading and un-loading allows trays to be added or removed from the system at any time without process interruption.
- An initialization routine performs a complete self-check of the system at each power up.
- The user is automatically signaled if the input stack is low or output stack is full. This is in addition to seven "fault condition" alerts that stop the process and warn the user.
- A "soft stop" feature prevents component shift or upset during tray moves.

JEDEC Tray Stack

Typical Applica-

- Laser Marking
- Assembly In-feed
- Tape & Reel

*Specifications

Tray types accommodated: Stack Capacity Tray exchange time: On-board controller: Position repeatability: Tray transport: Fault Annunciation: User interface access: Surface finishing: Services required: Footprint dimensions:

*Specifications subject to change



- An internal controller automatically directs all motions, identifies fault conditions and provides alerts to the user.
- Trays are accurately clamped in position (x and y axis) during processing.
- The user's interface with the T-320 only requires a few simple signals (contact closures). No special user software is required, making integration quick and easy.
- A diagnostics mode can be entered with a simple switch closure. This allows the user to manually check all sensors and actuators for proper operation.



Clear Thermoformed Tray



Waffle Packs in Carrier

- Vision Inspection
- IC Programming
- Die Handling
- Dispensing
- Singulation
- Media Transfer

Thick & Thin JEDEC per Std. 95.1 & Thermoformed 11 KG (25 lbs.) 3-5 seconds typical (w/o process time) Programmable Logic Controller (PLC) +/- 0.038 mm (+/- 0.0015") Micro stepper driven belts with "soft stop" 6 fault conditions alerted automatically Bottom or end entry Exposed tooling— Nickel; Covers— SS 24 VDC, 3 A, 60 - 80 PSI clean air 1308 x 204 mm (51.5 x 8") - [3 module system]