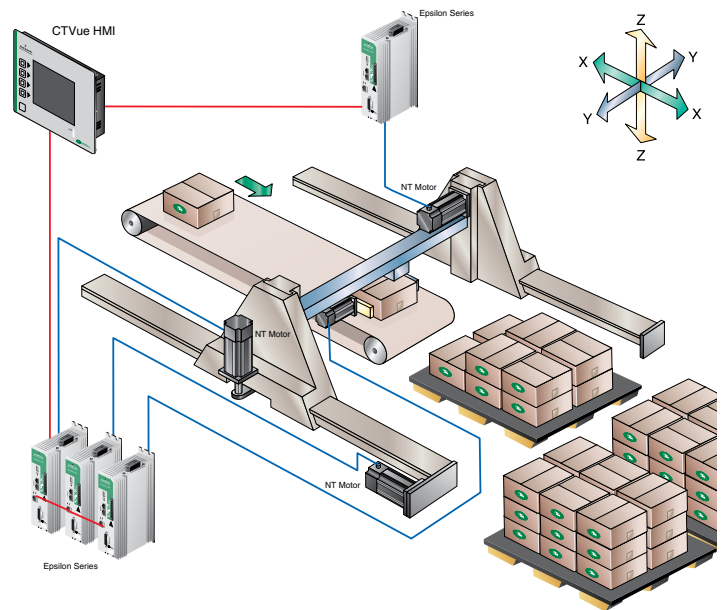


Automatic Palletizers

Application Overview

Low level palletizers are designed to take in single packaged products, either full cases or bags, and arrange them in a single layer on a pallet. High level palletizers collate full cases of product to form a complete pallet layer and then the layer is transferred onto the top of the pallet. Generally, these palletizers are designed to support only one type of package product, but in today's world, where lean packaging is a requirement, these palletizers must be versatile to handle a variety of product shapes and sizes.

Additionally, end users are increasingly paying more attention to life cycle costs associated with plant floor space, air consumption and machine flexibility. Servo controlled palletizers provide several benefits to greatly enhance the palletizer performance, increase flexibility, and can save in energy and maintenance costs.



Application Requirements

Lean manufacturing

- Increased product throughput
- Reduced machine footprint
- Support of multiple product sizes and weights
- Automatic product changeover

Green manufacturing

- Reduce noise
- Eliminate the need for compressed air
- No hydraulic fluids
- High efficiency VFDs and Servos reduce energy consumption

Control Techniques' Solutions

Servo Drives and Motors, VFDs, and HMIs

- Pre-defined motion functions make it easy to eliminate mechanical and pneumatic functions
- Advanced control and tuning algorithms compensates for load changes
- Rapid setup with intuitive software
- Multiple drive networking for distributed control
- User selectable pack patterns for quick product changeover



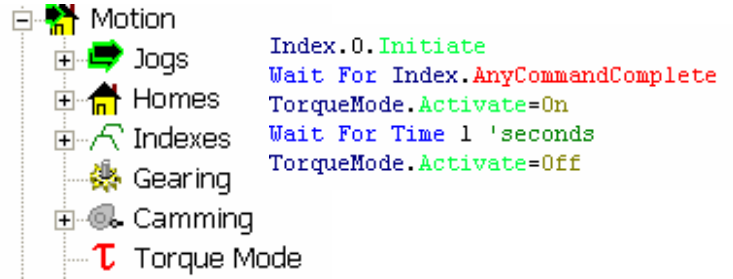
CONSIDER IT SOLVED™

Automatic Palletizer Solutions

Control Techniques' Performance Advantages

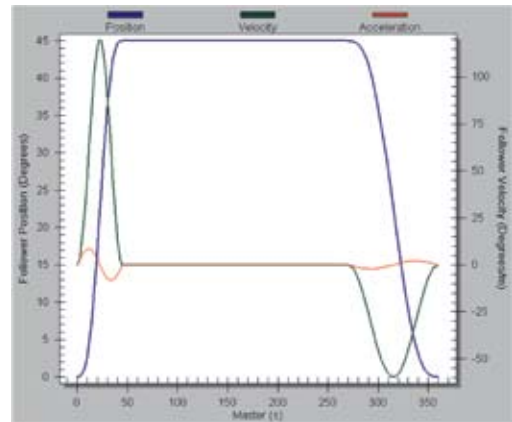
Built-in Motion Functions

- Seamless transitions from position or velocity modes to torque mode
- Adjustable acceleration and quick settling times increase throughput
- Program fill patterns
- Event handling for high speed I/O transfers
- On board Programmable Limit Switches



Advanced Control and Tuning

- State space control algorithm helps eliminate overshoot
- Load based tuning
- High bandwidth control loop
- Stable over wide range of inertia mismatches



Distributed Control

- Eliminate or reduce the need for costly PLCs
- Easily add I/O for total machine control
- Fast data transfers between Servo Drives, VFD's and HMI
- Low cost and easy to implement

Number of User Variables: 9

#	Name	Decimal	Initial Value
0	RecipeNum	0.	1.
1	PushDist	0.	220.
2	PushVel	0.	50.
3	LayerHeight	0.	15.
4	PacksLayer	0.	5.
5	TwobyThree	0.	1.
6	ThreebyOne	0.	0.
7	FourbyTwo	0.	0.
8	LayersPallet	0.	10.

Scalable Functionality

- Base drive for velocity / torque mode applications
- Indexing drive for precise positioning
- Programming drive for user flexibility
- Communications for both I/O and supervisory networks

World Class Products & Support

- Worldwide Application & Field Service Network
- 24/7 support line 1-800-893-2321



Compact Servo Drives

AC Drives

Intelligent Servo Drives

