

# General Packaging/Assembly System

## Disassemble / Load / Assemble / Case Pack

### Project Brief

Complete two piece base and lid, carton packages (minus product) are manually loaded into removable magazines, which are placed onto a rotary dial for presentation to the assembly system. An Adept Scara robot removes packages from the magazines and places them into product-specific pallets.

The pallets circulate through the system on a Farason over/under pallet conveyor system that combines free-floating with captured indexing processes to achieve rate and placement accuracy. Pallets are lowered or elevated on each end of the conveyors.

A Thiele Streamfeeder dispenses a carton sleeve that is placed into the pallet and erected by a programmable pick and place. The Adept Scara Robot that removes a carton from the magazine and places it into the pallet also removes the lid from the base and places it into the pallet next to the opened base. The next Adept Robot removes the hinged display case and places into its pallet aperture.

A two axis device opens the hinged lid. Product enters the system lying on a plastic thermoformed tray in a specific matrix. Another Adept Robot is used to remove the product, pass it over a camera to determine rotational orientation, and then places the product down within a cavity in the case's internal platform oriented correctly.

The next Adept Robot closes the case and returns into the carton base. A second Thiele Streamfeeder dispenses a literature packet which is picked and placed by another Adept robot that also transfers the carton lid back onto the carton base. The completed carton package is pushed into the outer sleeve.

Lastly, an inverted Adept six axis robot is used to remove the package from the pallet and place it into a case. Cases are moved in and out of the assembly system on Farason provided case containment holders and recirculating conveyor system.



1. Rotary indexing product magazine



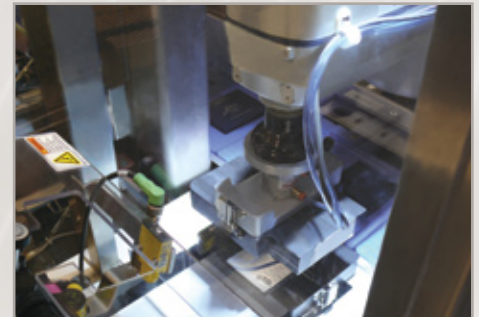
2. Graphics quality vision inspection



3. Product picked from tray and oriented



4. Product placed into carton base



5. Leaflet dispensed and placed

### Machine Data

- Feed, disassemble-reassemble
- Rotary product magazine
- Robotic product handling
- Vision orientation
- Vision quality inspection
- Corrugate and paper feeding
- Case packing

### Features

- Stainless steel construction
- Modular design
- Simple toolless change-over
- Allen Bradley CompactLogix PLC

- DeviceNet Communications
- Strong Arm Mighty Mount HMI
- With RS View ME Software
- Cognex Vision Pro

### More Information

For more information on this, and many other Farason projects, please visit our website at [www.farason.com](http://www.farason.com) or call us at (610) 383-6224.



6. Completed carton loaded into case