

## Case handling systems

Packer to Palletising

## Contech case handling systems incorporates the latest technology from hand or automated case packing through to palletising.

Ensure maximum return on investment for your back-end projects - from initial planning to final installation and beyond. Whether you're building a new plant, expanding an existing facility, or undertaking a reconfiguration, our team can help you reach key performance indicators (KPI's) and limit project risks.





# When choosing a back-end case handling system there are typically two types of systems.

Straight end to end palletising or direct palletising packer direct to palletiser.



## 2.

Integrated case handling system which is flexible "any case to any palletiser".



#### Our layout consulting engineers work with you to determine:

- Functionality
- Floor space and operator / maintenance movements
- Capability to deliver the target Throughput / Line Speed
- Future ready lines that are flexible
- Overall System Cost
- Gentle product handling
- Reliability
- An overall confidence in the solution

## Sometimes there is a combination of both.

To understand what is required we have several questions that we need to evaluate before offering a system. Contech help identify and solve line problems. We optimise line layouts and implement solutions.

Our design evolves from our specific questions and information that we gather.

Then using physics-based simulation technology we can demonstrate the effective and proven direct results that Contech conveying technology have on the entire layout.

### End of Line direct palletising





End-of-Line Palletising offers simple packaging line and distribution warehouse design, with the output of each packaging line transported to a single, dedicated palletiser or palletiser infeed. The palletiser is designed to handle more volume than the packaging line will run uninhibited during steady state operation. The choice of this design hinges on easy-toanswer, yet critical, questions.



#### Integrated palletising





Integrated Palletising seeks to increase flexibility within your palletising area and minimise the cost of equipment, installation, operations, maintenance, and floor space. This is done by reducing the number of palletisers and

maximising their utilisation through a conveyance system designed to include merging, switching, and/or sortation. The packaging lines share some, or all, of the palletisers. Integrated Palletising gives additional

control to production management. If a single palletiser is down, the operations staff can reduce rates on any of the packaging lines to avoid exceeding the capability of the other palletisers.



#### Contech solution - P2P Key components within an integrated case handling system



1. After cases are lifted with the CRVC Contech combine them on one line via a combining conveyor known as the virtual pocket conveyor. We can combine cases up to 80 CPM (depending on case sizes and rates from each packer) Cases then run on one case line

which gives the plant the ability to send any case to any palletiser. Depending on layout after questions and answers from our consulting engineers we can perform the following functions to the cases with our conveyor technology.

- 2. Accumulation where required between our CRVC and palletising.
- **3.** Case merging when there are several incoming lines from different parts of the plant. (This is also needed for any case to any palletiser)
- **4.** High speed case metering and scanning to determine which cases go to which palletiser. Flexibility here to change case to different palletiser.
- **5.** High speed switch conveyors 1:2, 1:3, 1:4 etc
- **6.** Date coding conveyors with the ability to move cases from one side of the conveyor to the other side of the conveyor.
- **7.** Case vision systems and or case check weighing to determine case size / open flaps / tape seal problems / case data.
- 8. High speed rejects for the above for rework of product
- **9.** Transfer conveyors
- **10.** Spiral conveyors
- **11.** Case sorting conveyors deliver cases to the correct palletising in feed conveyor.

### Contech reciprocating vertical conveyor (CRVC)



#### Features:

- High speed servo motor drive providing fast acceleration.
- Synchronous belt drive
- Low noise
- No maintenance



**12.** Contech reciprocating vertical conveyor (CRVC) provides highly efficient transportation of goods from case packing up to height for conveying. With its small footprint and speeds of up to 10CPM it is perfect to integrate to automatic

case packing machines or hand packing systems. The use of the Contech reciprocating vertical conveyor (CRVC) is to prevent land locking automatic case packing machines and hand packing areas. By using our CRVC operators and maintenance personal have free access to packing machines and hand pack stations, also allowing for packaging material (cases and film) to be delivered to packing stations.

The CRVC can be used both to direct end to end palletising or integrated flexible palletising.



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