



Mobile Cold Chain Solution

April 22, 2014

About ColdPICK

ColdPICK International is a mobile cold chain manufacturing and supply company. ColdPICK brings leading edge mobile cold chain technologies to the agricultural logistics industry which allow growers to pre-cool their harvest in the field and significantly reduce Time to Market.

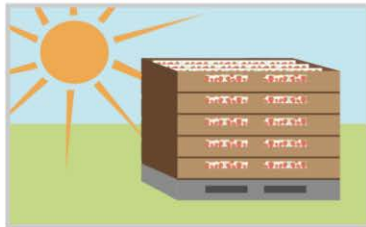
Our extensive engineering and manufacturing experience allows us to offer the following products and services:

- Mobile Post Harvest Pre-Coolers
- Cold Chain Extension Products
 - Insulated Blankets
 - Generators
- Secondary IQF Tunnels
- Primary VRT Blast Freezing Systems

Our vision is to provide our customers with equipment of quality, value with complete satisfaction.

ColdPICK Mobile Cold Chain Solution

CURRENT PRACTICE

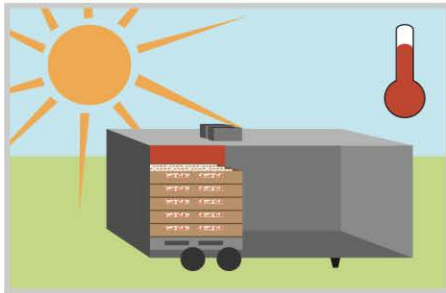


1. The pallet sits in the sun and heat for 2-6 hours which shortens the life span of the product

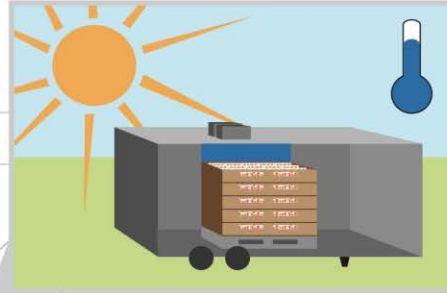


2. The un-insulated pallets are driven to a warehouse for chilling

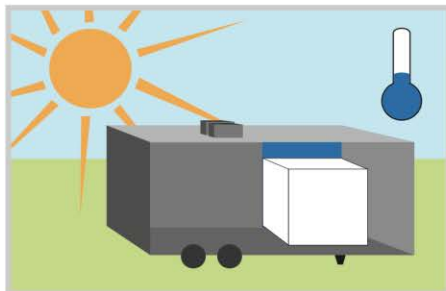
THE COLDPICK SOLUTION



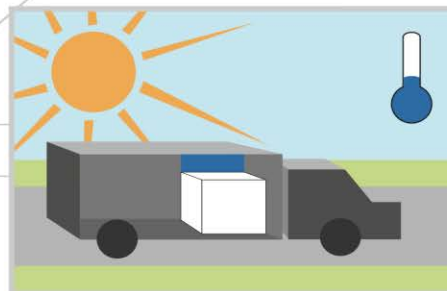
1. Pallet is moved into loading zone of ColdPICK pre cooler. (Not part of cold chain)



2. Pallet is moved to the central cooling chamber for 1 hour



3. Pallet transfers to unloading zone and shrouded with insulated blanket. (part of cold chain)



4. Insulated pallets are transported to warehouse or can be cross docked

ColdPICK Mobile Cold Chain Solution

Features & Benefits

- **Earlier Access to Temperature Management and Stability**
 - Cold Chain is brought to the field improving fresh product shelf life
 - Decreases water loss rate and microbial decay
 - Improved quality and fresh taste profile (Less loss of sugars and acids)
 - Increase in harvest quality through reduction of temperature variations
 - Maintains pre-cooled temperature of harvest within 1°F for up to 5 hours (using insulated covers for pallets)
- **Adjustable Temperatures to Meet Different Needs**
 - Ability to adapt for use on different crops
 - Provides efficient controlled temperature stage for further ripening
 - peaches @ 65°F, summer squash @ 45°F
- **Single Row Stack Cooling Chamber**
 - Better even air flow through produce
 - Quicker cooling time, less dwell time
 - Reduces moisture loss

¹ Precooling and managing Produce Temperature <http://www.colostate.edu/Depts/CoopExt/adams/cabas/pdf/Low%20cost.tech%20post-harvest%20handling.pdf>

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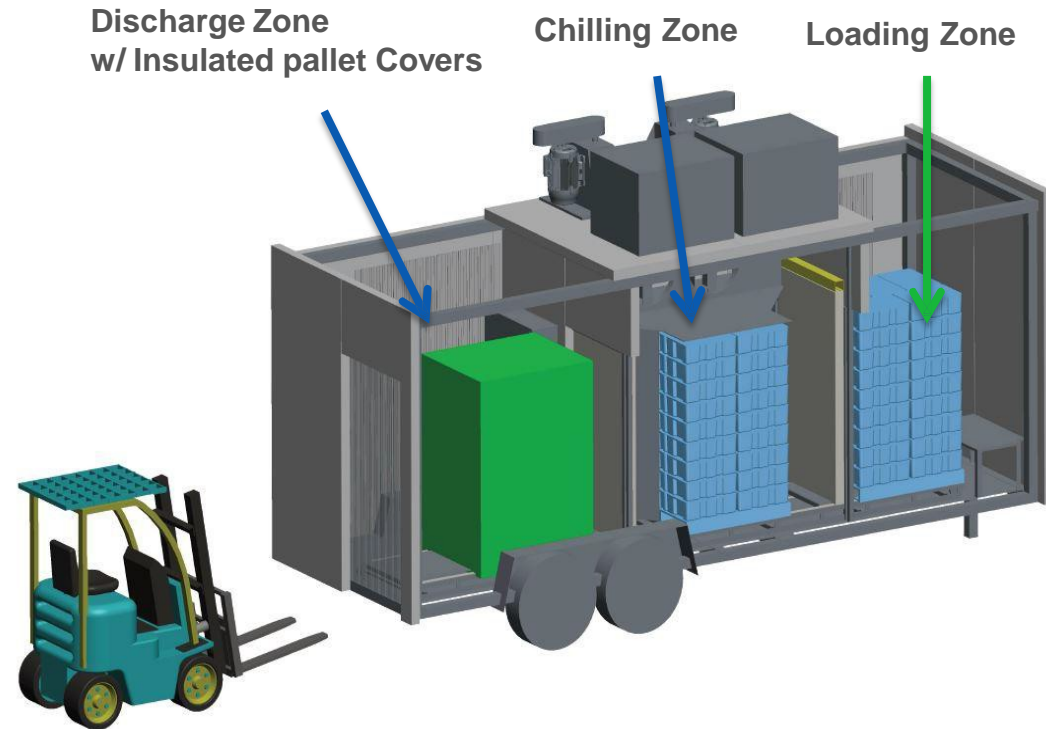
Features & Benefits Cont'd

- **Mobile pre-cooler that is easily transportable**
 - Can be placed in field near pickers
 - Can be easily moved between geographic locations during course of season
- **Modular Scalable Design**
 - Docking system available to link together. Can be used individually or together
 - Allow multiple crews working along with dock to improve efficiency
- **Cross Docking**
 - Direct to end customer or direct to cold storage.
 - Possible Elimination of pre-cooling step at DC.
 - Reduced labor and handling steps of produce between harvesting and entry to cold chain
 - Reduction of 2 touch points (forklift in and out of pre-cooling at DC)

ColdPICK Crew Design

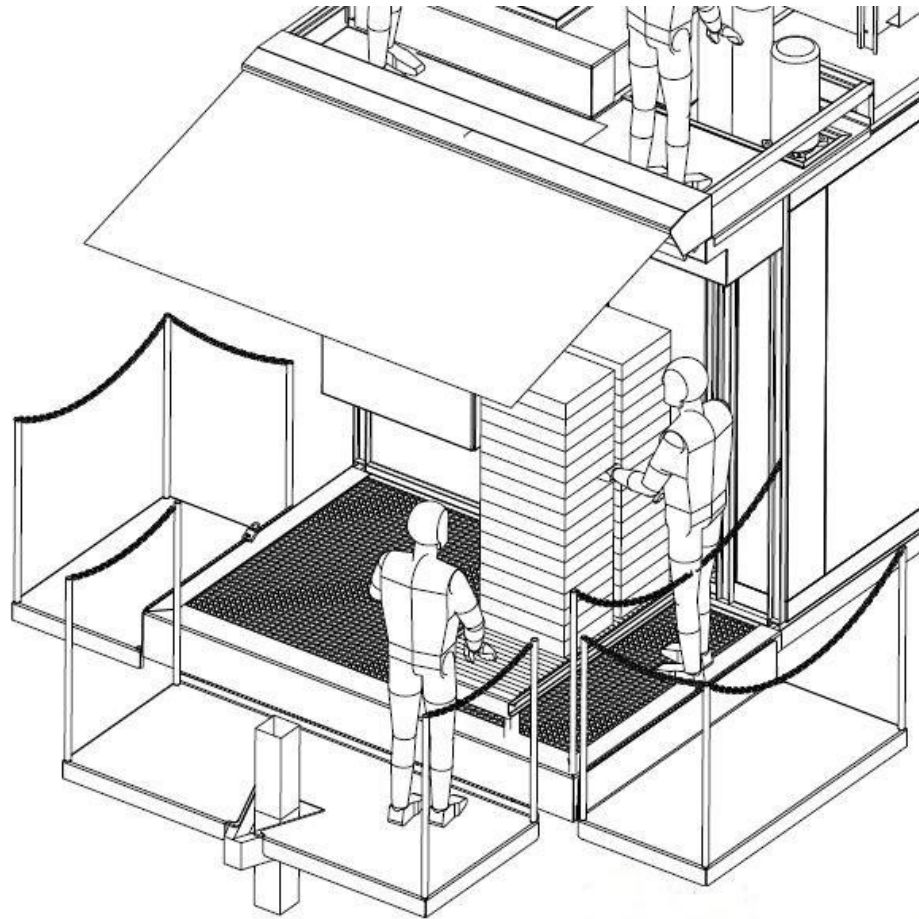
ColdPICK Crew is engineered with 3 processing areas:

- **Loading zone where trays are introduced and placed in stacks or palletized**
- **Chilling zone where finished stacks are loaded in for chilling**
- **Discharge zone where the chilled stacks or pallets are discharged and await placement of insulated blankets before trip to distribution center or direct loading into a refrigerated truck.**



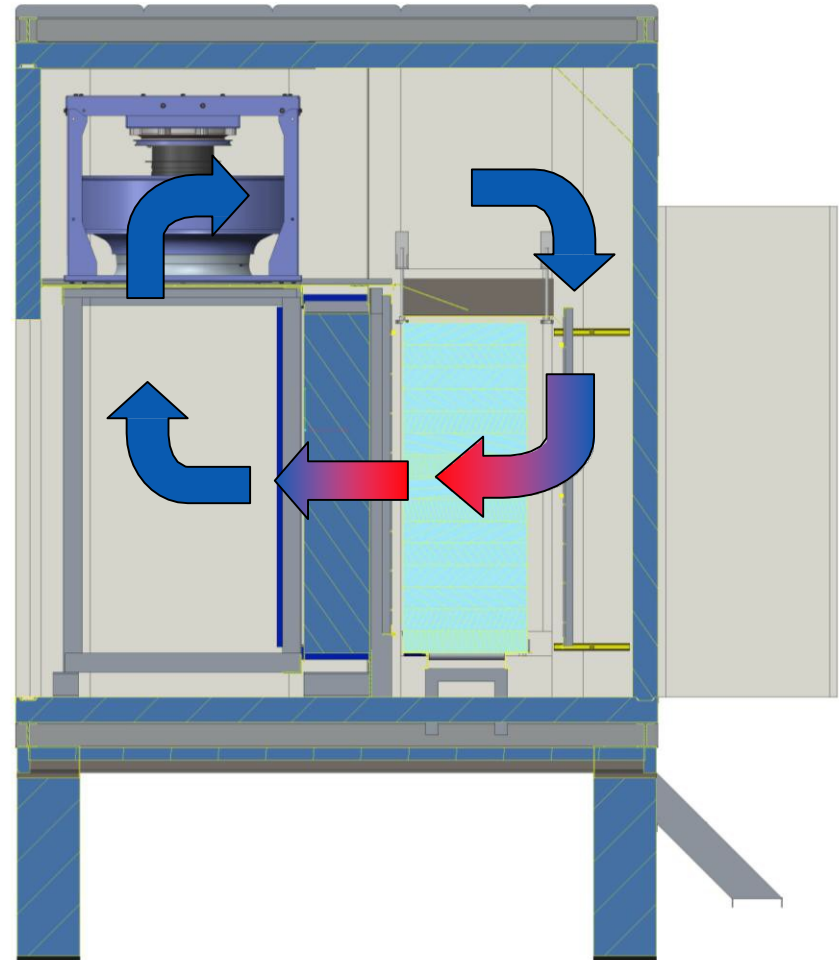
Loading Zone

- Can be configured to processing needs of specific products and its packaging
- Product loaded in single sequential stacks 5-6 ft tall for optimum air flow through all the boxes



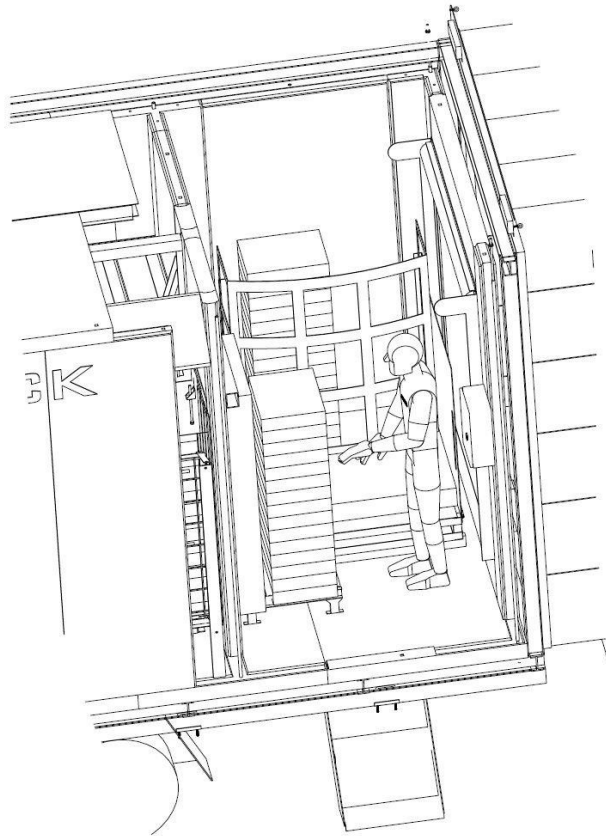
Chilling Zone

- Single layer vs. palletized stack offers even air flow and faster cooling
- High volume, high pressure fans pulls cold air efficiently through product



Discharge Zone

Discharge Area



Insulated Blanket



ColdPICK Crew HT32

The **ColdPICK Crew HT 32** (90°F-32°F) is engineered to quickly reduce high ambient temperature of harvest to 32°F target with minimal down time for defrost – target varies by physical characteristics.

Tech Specs		
Dimensions	Length	30 ft (9.1 m)
	Width	8.5 ft (2.6 m)
	Height	12 ft (3.6 m)
Processing Capacity	Chilling Capacity@90°F	Approx. 1000 lb/hr (450 kg/hr)
	Load Capacity	1200 lb (544 kg)
Refrigeration	Refrigerant	R407C
	No. of Fans	2 @ (12kW)
	Voltage	460 – 480 VAC 60 Hz, 3 phase
	Genset Power	60 kW
	Evaporator	12 TR, 27°F (-2.78°C)

ColdPICK System for Remote Sites

COLDPICK for Remote Site; a stand-alone mobile cold chain that is designed to bring ambient fruit / vegetable temperatures to desired stabilizing or packing / shipping temperatures at the harvest site.

Ideal cold chain application if Distribution Cold Chain Center (DC) is an undesirable distance from the harvest site.

- **Mobile Remote Packing Site**
- **Mobile Docking Site**

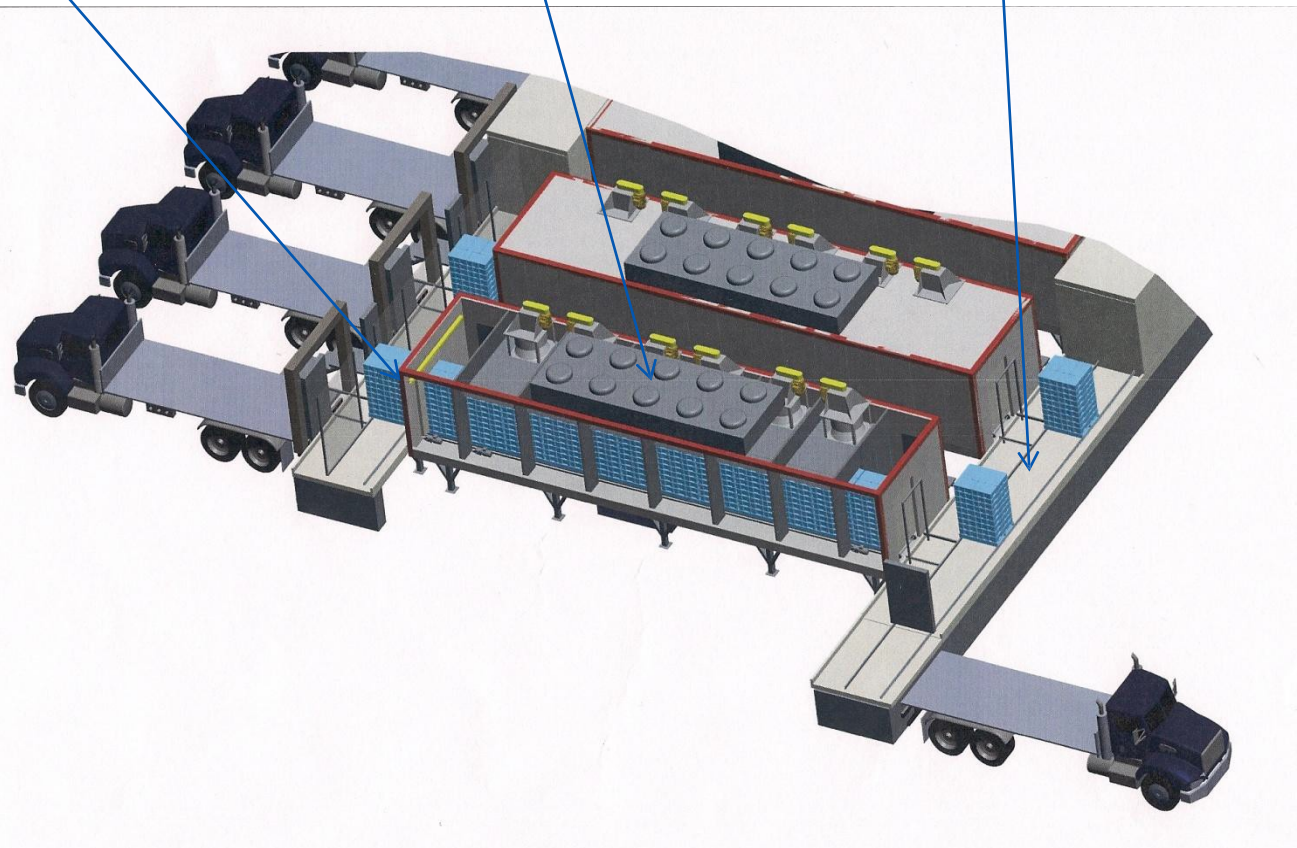
The COLDPICK can also be integrated externally at the DC to expand cold chain material handling space and improve throughput.

ColdPICK: Remote Site – Tunnel Pre-Cooler, Packing Line & Docking Chamber

ColdPICK Chamber (Loading Outbound)

ColdPICK Tunnel (12 pallets)

ColdPICK Chamber (Staging Pallets for Insert into Tunnel)



Chilling Chamber -
Size: 50' x 9' x 20'

Pallet Capacity: 12

Cap. @ 40° F: 8,000 lb/HR

Evaporator: 70TR, 30° F

Fans (15 HP): 6

Voltage: 460VAC 60 Hz

Genset Power = 300 kW

Refrigerant: R507