

# Roll produce on a narrow aisle platform truck

If you currently move flats of berries or boxes of produce by hand, switching to a narrow aisle platform truck may save you time and reduce stress on your body. For example, you can roll 30 flats of strawberries or 15 crates of cabbage from truck to cooler in one trip, turning the load around tight corners as you go.

## How does it work?

The narrow aisle platform truck is a low hand truck with a 16 by 48 or 60 inch deck 10 inches off the floor. It has 52 inch tall sides on either end to stabilize the load and make the truck easy to push. There are four rubber swivel casters at the corners, and two taller rigid wheels in the center so you can tilt and turn the truck on its axis.

## What are the benefits?

**Efficient.** You can move loads of 500 lbs with a narrow aisle platform truck using far less effort than it would take to hand carry ten loads of 50 pounds. A narrow aisle platform truck easily holds 30 (8 quart) stacking flats of berries at once. If you were to hand carry the same load it would take you ten trips carrying three flats at a time. Hand carried flats must be restacked in the cooler, whereas you can roll the loaded narrow aisle platform truck into the cooler and leave it there. A narrow aisle platform truck will save you time relative to hand carrying (see table below). You can cut your total number of trips by at least 75%.

Distance from truck to cooler	Time to hand carry 25 boxes, 3 per trip	Time to roll 25 boxes in one trip with the NAPT <sup>(1)</sup>
25'	3 min. 33 sec	2 min. 18 sec.
50'	4 min. 35 sec.	2 min. 28 sec.
75'	5 min. 38 sec.	2 min. 38 sec.

*This data is based on a case study with the same worker performing all tasks. (1) Narrow Aisle Pallet Truck.*

## Less fatigue and discomfort.

Hand carrying flats or boxes is stressful on your back, and forces you to adopt awkward carrying positions. Gripping the thin cardboard handles of full produce boxes or berry flats for long periods of time can strain your fingers.



*Dave Witte of West Bend WI, uses the Narrow Aisle Pallet Truck to move berries into his cooler.*

Although the total amount of lifting in one trip may not seem that significant, the cumulative effect can cause strain or trauma to your body. Pushing flats on a narrow aisle platform truck can reduce this stress and strain considerably. You may not need to do as much bending and lifting, and you will spend less time carrying heavy loads. In our trials, the amount of time spent under load was reduced by 84% (20 sec vs. 125 sec over 50 feet) when using a narrow aisle platform truck to roll berries into the cooler, compared to hand carrying three berry flats at a time.

**Fits in tight spaces.** Many berry and small-scale vegetable growers store their produce in converted barns, older buildings, and coolers with tight spaces and narrow doorways. The narrow aisle platform truck fits through narrow cooler doors which might be too small for a full sized pallet jack, pallet dolly, or other commonly used cart such as a feed cart. You can use a narrow aisle platform truck to move produce from truck or wagon to cooler and back again, or leave produce stored on several narrow aisle platform trucks in the cooler.

## WORK EFFICIENCY



## Tip Sheet

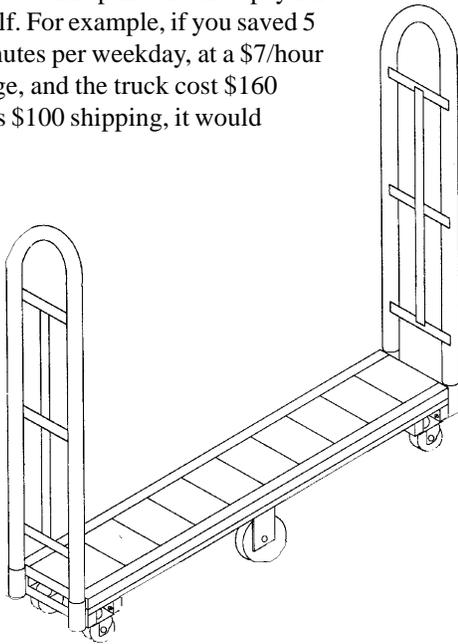
A series of tip sheets on labor efficiency for vegetable and berry growers.

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**Faster cooling.** Since boxes are stacked one row deep on the narrow aisle platform truck, each box will have at least two sides exposed to the air. This promotes faster, more even cooling than if boxes are tightly stacked in multiple rows on a full-sized pallet or on the floor. Faster cooling maintains crop quality.

**Quick retrieval.** With several narrow aisle platform trucks in your cooler, you could set up a system to rotate stock or to quickly retrieve specific produce without hand carrying boxes. You could have cabbage on one narrow aisle pallet truck and cauliflower on another, and roll out each load as needed to retrieve produce from your cooler. At a farm stand, you can also use the narrow aisle platform truck to stock shelves because it fits in tight spaces and can turn around sharp corners.

**Cost analysis.** A new narrow aisle pallet truck costs \$160 to \$275 plus shipping. If you calculate the time saved by reducing the number of trips you take to hand carry boxes, and then multiply that by your hourly wage, you'll have an idea of how long it will take for the narrow aisle pallet truck to pay for itself. For example, if you saved 5 minutes per weekday, at a \$7/hour wage, and the truck cost \$160 plus \$100 shipping, it would



pay for itself in 22 months. The narrow aisle platform truck also saves money in reduced back pain and therefore fewer visits to a chiropractor or massage therapist.

## Where can I get a narrow aisle platform truck?

Look for used narrow aisle platform trucks from supermarkets and department stores, where they are commonly used to stock shelves. A local fabricator might also be able to build a cart to your specifications. For a new narrow aisle platform truck, look under “materials handling” in your phone book, at large wholesale department stores such as Sam’s Club, or contact the following companies:

- **Rand Materials Handling**  
P.O. Box 3003  
515 Narragansett Park Dr.  
Pawtucket, RI 02861  
1-800-366-2300
- **C & H Distributors, Inc.**  
770 South 70th St.  
P.O. Box 14770  
Milwaukee, WI 53214  
1-800-558-9966
- **Badger Material Handling**  
16805 W. Victor Rd.  
New Berlin, WI  
1-800-242-0541

Shipping can be expensive depending on the manufacturer’s location. Narrow aisle pallet trucks are usually made of steel, with either a wood, plastic, or steel deck. Spray a clear coat of paint such as Rustoleum for patio furniture on the steel to prevent corrosion in the moist environment of a cooler.

*These references are provided as a convenience for our readers. They are not an endorsement by the University of Wisconsin.*

*This material was developed by the Healthy Farmers, Healthy Profits Project, whose goal is to find and share work efficiency tips that maintain farmers’ health and safety and also increase profits. For more information, call (608) 262-1054 or visit our website at <http://bse.wisc.edu/hfhp/>*

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**Work Efficiency Tip Sheet: Narrow aisle platform truck**

