

3D STORAGE SYSTEMS



FLOW STORAGE SOLUTIONS

PALLET FLOW
& CARTON FLOW

WWW.3DSTORAGESYSTEMS.COM

Pallet Flow Racking

Keep Your Inventory Moving

HOW PALLET FLOW RACKS WORK

Pallet flow racks, or flowrack, is a pallet storage method that uses gravity and wheels or rollers, to convey and accumulate pallets in a storage module. Depths can range from 2 to over 20 pallets deep, thereby giving you higher storage density than other forms of racking.

Because pallets travel from the load end to the unload end on their own, forklift travel is reduced, and different forklift operators can independently load and unload pallets. The first pallet loaded into a lane will be the first pallet unloaded, giving you First-in First-out or FIFO.



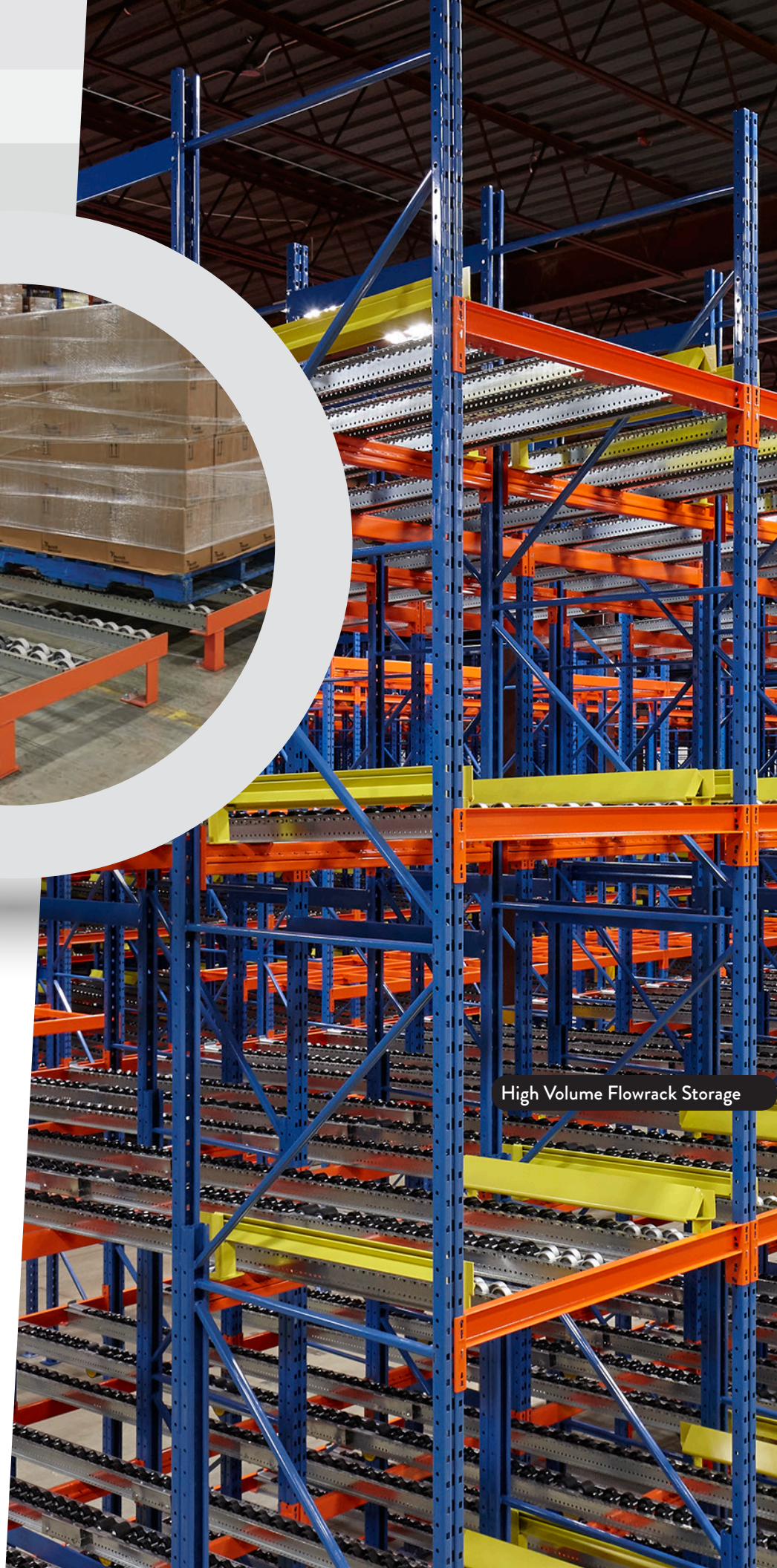


Floor Mounted Pallet Flow

WHY YOU SHOULD USE PALLET FLOW RACKS

Pallet flow technology typically involves high volume products; they can be found primarily in manufacturing environments where many pallets of the same item are produced.

Others will use flowrack to stage orders for shipment, or in picking systems to store pallet loads of goods for high volume case picking.



High Volume Flowrack Storage

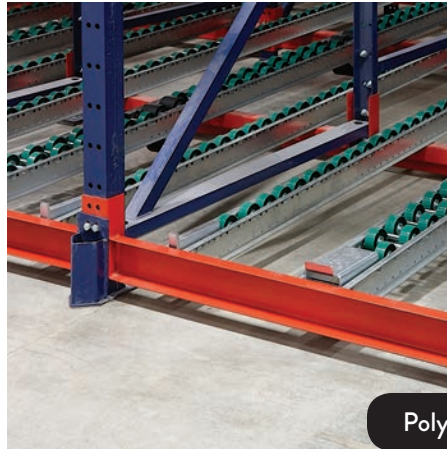
WHAT DETERMINES THE TYPE OF WHEEL OR ROLLER USED IN A PALLET FLOW RACK?

There are many factors considered when determining the type of wheel to be used in a pallet flow rack system. First and foremost is the pallet depth and application. If the system is only 2 or 3 pallets deep and to be used as a picking operation, then 1.9" diameter steel skatewheels may be used.

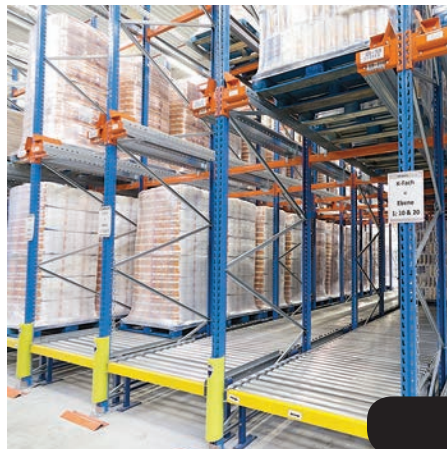


Skatewheel

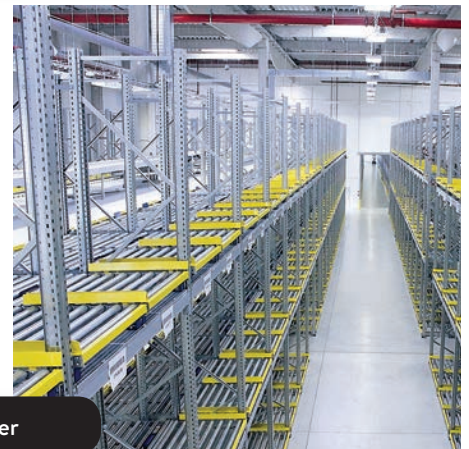
Deeper gravity flow rack storage lanes tend to use larger diameter and wider polycarbonate wheels. Rollers are applied most often when the bottom of the pallet is not suited to wheels – plastic pod pallets, steel bins etc. 3D Storage Systems will test the pallets to find the best configuration for your pallet flow system.

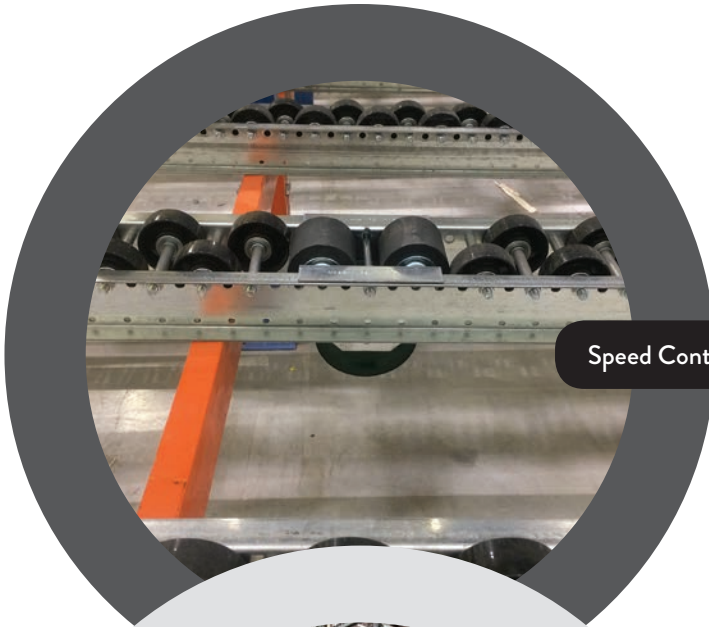


Polycarbonate

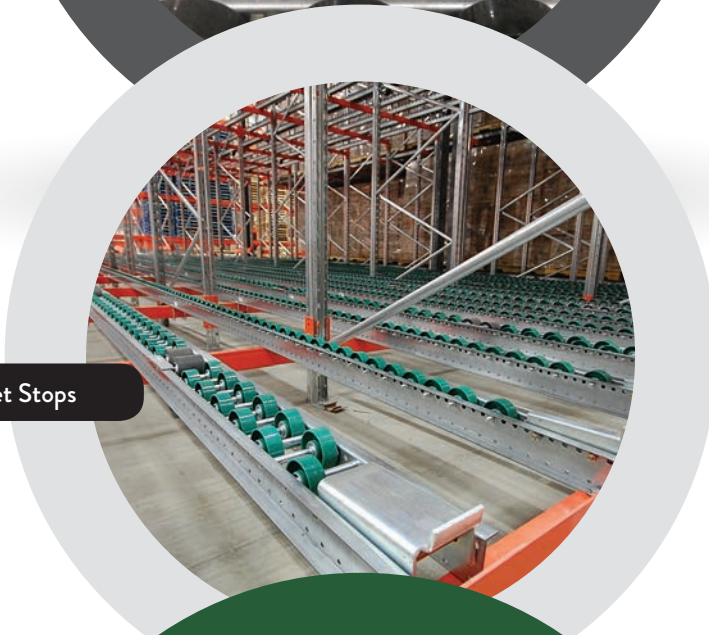


Roller





Speed Controllers



Pallet Stops



Steel Rollers

COMPONENTS FOR EVERY FLOWRACK STORAGE APPLICATION

- Skatewheel Tracks
- Polycarbonate Wheels
- Steel Rollers
- Pallet Stops
- Speed Controllers



Deep Lane Pallet Flow - Polycarbonate Wheels



Deep Lane Pallet Flow - Rollers

DEEP LANE PALLET FLOW SYSTEMS

When you partner with 3D Storage Systems for Deep Lane Pallet Flow Systems, we will help you develop the solution and work with you from start to finish to ensure all the details are taken care of – resulting in a successful installation that you can be proud of.

- High volume of pallets
- Many pallets per SKU (over 30)
- FIFO
- CHEP and GMA style pallets are recommended

How many pallets deep can 3D pallet flow racks go?

Common depths range from 2 pallets deep to 20 pallets deep. When we go beyond 20 pallets deep we look at it on a case-by-case scenario.

Do I need special forklifts for 3D pallet flow racks?

No. 3D pallet flow systems can be installed with counterbalance, reach, deep reach, swing reach and even clamp trucks.

Are there temperature restrictions for pallet flow racks?

We have pallet flow installations that function in temperature from 122 ° F to -40 °F, including blast freezers.

How difficult is it to load and unload the pallet flow racks?

Many operators state that pallet flow is easier to load and unload than standard pallet rack. Operating instructions are sent with each system.



Layer Pick with Separator



Pallet Flow Loading

Carton Flow Storage

Carton flow is a storage method that uses wheels or rollers, as well as gravity to convey cases from one end of a rack or shelving module to the other.

In a given storage bay you can create multiple levels of carton flow racks (also known as case flow racks), and each level will have a number of lanes of product, thus giving many more pick faces when compared to standard rack or shelving.



Multiple Levels

CARTON FLOW RACKS PROVIDE MORE PICK FACES IN A SMALLER AREA

This reduces pick paths and increases picking efficiencies. As well, thanks to the gravity flow design, when a case is removed from a carton flow rack, the remaining cases roll forward to the front – pickers do not have to reach into the racking and First-In First-Out (FIFO) is maintained.



Picking Solutions

KEEP YOUR INVENTORY MOVING

Who Uses Carton Flow Racking?

In general, fast moving products are picked directly from pallets, and very slow moving products belong in storage systems like static shelving. Carton flow systems and case flow racks are suited to the middle range of product movement.

As a rule of thumb, products that are suitable for carton flow are picked at least once a week, but not more than a half pallet worth of cases in that same week.

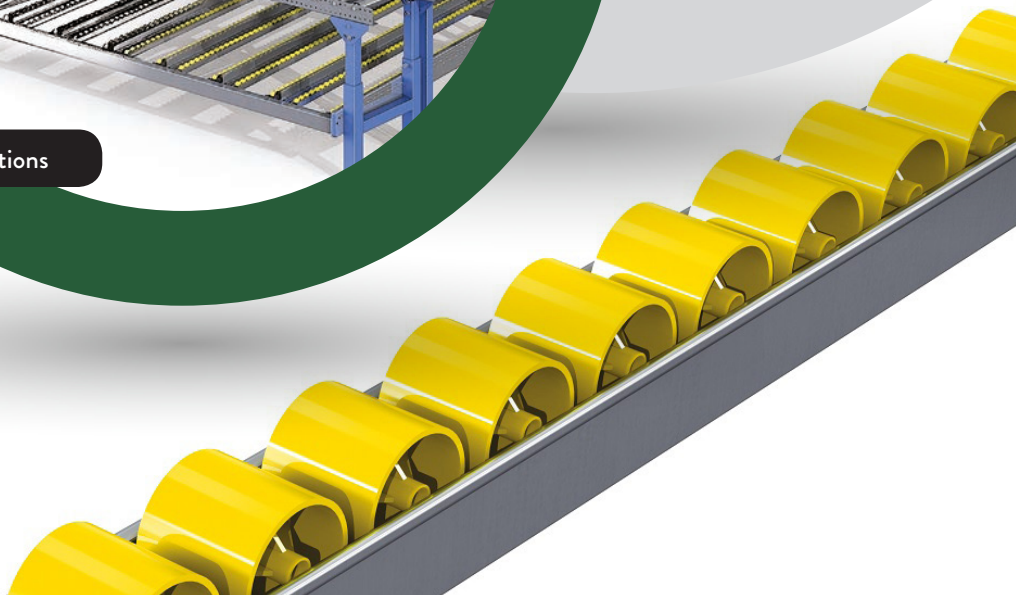
Gravity can be used to help pick orders with either full or split cases. Learn more about the benefits of using carton flow racks in your warehouse and browse photos of our completed carton flow systems.



Versatile & Adaptable



Multiple Configurations





Wheel Track Carton Flow

At the heart of our wheel track carton flow conveyor frames with integrated roller tracks, that the goods run safely and in a controlled a slope from the loading side to the picking carton flow systems are available in numerous Features include;

- Easily configured and adaptable
- Save up to 30% storage space
- Work and pick routes are shortend
- Increased productivity
- Ergonomically designed
- Reduced picking errors

Ergonomic Design

3D STORAGE HEAVY DUTY CARTON FLOW SYSTEMS HAVE MANY BENEFITS, INCLUDING:

- Both plastic and steel wheels available
- Plastic wheels typically range to 25 lbs. per sq. foot.
- Steel wheels allow weight ranges up to 50 lbs. per sq. foot
- Steel shafts run the width of the bed adding impact resistance and weight capacity
- Welded one piece bed frame with a durable powder coated finish
- We can add impact plates and tilt shelves for greater carton flow access
- Optional snap-in wire dividers
- Dividers adjust with just one hand and snap in virtually anywhere on the bed
- Carton flow racks are available with a variety of mounting styles, for use with step, channel or angle beams





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ABOUT 3D STORAGE SYSTEMS

3D has grown to become one of the largest producers of dynamic storage systems in North America. We manufacture pushback and flowrack systems in both our Georgia, USA and Ontario, Canada plants.

Our system solutions have been implemented in small warehouses and in large facilities exceeding one million square feet.