



# V R C S / L I F T S S T A I R S C R O S S O V E R S G U A R D R AI L

Elevate your possibilities with Rideable Lifts and VRCs.

Industrial lifts are a cost effective, safe and easy way to move materials from one level to another. From simple pallet lifts to multi-level vertical freight lifts, our Automation Engineers can assist you in finding the best solutions for your lifting needs.

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# MATERIAL LIFTS & VRCs

Material lifts provide a safe, easy and cost effective solution for the transport of staff and product from one elevation to another.

Vertical lifts are safer than a forklift, can handle much heavier loads, are faster, and offer a wide variety of flexibility in carriage size, capacity and traffic patterns. They offer a great deal of versatility and dependability for high speed and multi-level transport to mezzanines, rack storage systems or upper floor levels.

Thomas Conveyor has transport solutions for applications of every shape and size. From Rideable Materials Lifts (RMLs) to Vertical Reciprocating Conveyors (VRCs) we can customize a system that meets your needs.

Vertical Reciprocating Conveyors (VRCs) are designed for the transfer of goods only; Rideable Material Lifts (RMLs) allow authorized personnel to travel with their cargo from floor to floor.

# Whatever you need to lift, Thomas Conveyor is here to help!





# RIDEABLE MATERIAL LIFTS

### RIDERLIFT™ RML



Production lines and shipping/receiving areas require ample space to run efficiently and smoothly. As your business expands, installation of a multi-purpose mezzanine may be an effective and budget friendly alternative to new construction, allowing you to stay in your current facility for years to come!

Modular mezzanine systems allow for growth and expansion, with easy adaptability. Components can be disassembled, relocated and expanded any time allowing you flexibility and adapting to the changing needs of your business.

#### DRIVERLIFT™ RIDEABLE VEHICLE LIFT

Increased storage density and order picking efficiency are key features of mezzanine systems. Typical layouts allow for improved ergonomics, pick speed and inventory controls.

Mezzanines can be configured with incline conveyors to assist in the transport of parts and bins from level to level: Another layout could showcase fast moving items arranged on the ground level while lower demand items are stored on the upper level according to priority.

With your increased square footage, in-plant traffic circulation and item accessibility will be significantly enhanced..





### VERTICAL RECIPROCATING CONVEYORS (VRCs)

Mechanical vertical lifts or Vertical Reciprocating Conveyors (VRCs) provide a safe, easy and cost effective solution for the transport of product from one elevation to another.

Vertical lifts are safer than a forklift, can handle much heavier loads, are faster, and offer a wide variety of flexibility in carriage size, capacity and traffic patterns. They offer a great deal of versatility and dependability for high speed and multi-level transport to mezzanines, rack storage systems or upper floor levels.



The smallest VRCs are modular units, occupy a 3×3 ft space - and can still carry loads up to 500 pounds.

VRCs take up very little space, and they can be strategically installed within close proximity to where materials need to be transported. If there's no room inside the building, VRCs can also be installed on an outside wall.





## MATERIAL LIFT TYPES

### **MECHANICAL OR HYDRAULIC**

Hydraulic lifts work by compressing fluid to generate power and lift the cage. They offer many of the same benefits of a mechanical lift.

#### Hydraulic Lifts:

- Well suited for sinale level lifting
- Come in straddle and cantilever styles
- Tend to take up less space than mechanical lifts
- Are fully automated and can be controlled remotely, with no overhead structural requirements
- Are less expensive to purchase and install.

Mechanical lifts work by implementing a cable lifting system. . . . . .

Mechanical Lifts:

. . . . . . . Ideal for multi-level applications or higher lifting capabilities

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- Come in straddle and cantilever styles •
- Provide a smooth ride, ensuring less damage to materials
- Can travel between multiple levels
- Require less maintenance than an elevator or hydraulic lift
- Are customizable with manual controls or fully automated
- Can run almost continuously; with very little
- downtime and very little maintenance

#### **Typical Application Guidelines**

	Mechanical Lifts	Hydraulic Lifts		
Lift Capacity	100 - 30,000 lbs.	1000 - 4,000 lbs.		
Lifting Height	Up to 150 ft	Up to 19 ft		
Lifting Speed	28 ft per minute	20 ft per minute		
Max Platform Size	12 ft. wide x 30 ft long	8 ft. wide x 12 ft long		
Automated Capabilities	Yes	Not Recommended		
Initial Cost	Higher	Lower		







# MATERIAL LIFT CONFIGURATIONS

VRCs can be customized to lift your product to integrated mezzanines, multi-level warehousing, catwalks, racking in an archival facility or any other area needing material elevation. With hundreds of configurations possible, let our experienced Automation Engineers design a custom solution for you.

### **Material Lift Configurations**





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Cantilever



Straddle

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4 Post (Mechanical)

Larger Applications

#### **SAFETY CONTROLS**

Thomas Conveyor VRCs come standard with a host of safety features including overload detection systems. AutoSenz™, SmartControl™ and LiftLok™ are devices designed to enhance your lifts' safety, efficiency and performance.

Thomas Conveyor can provide you with a completely customized material lift system that is either manually controlled, regulated by your conveyor controls, or is fully automated with the controller handling both the material lift and conveyance portions of your handling systems.





### **MECHANICAL LIFTS**



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### **VRC CARRIAGE GATES**

Thomas Conveyor carriage gates meet all applicable codes and are equipped with elevator style "electromechanical" interlock devices for commanding performance and long lasting durabilty.

Featuring floor level entrance or carriage mounted gating, our safety gates come in a wide variety of configurations, designed to provide optimal safety and performance for you and your staff.

- Single Panel Swing **Bi-Parting Swing**
- **Bi-Panel-Vertical**
- Powered Gates
- Single Panel Vertical
- Specialty/Custom Gating



### CARRIAGE SAFETY OPTIONS

SafeLock™ and DeckStop™ systems are available for Wildeck VRCs. These optional carriage locking devices add heavy steel locks to each VRC column to prevent an accidental drop of a raised carriage. When the VRC carriage stops at a raised level, the system locks the carriage in place either through an automatic (SafeLock) or manual (DeckStop) process.

A CargoLok<sup>™</sup> bi-parting safety locking carriage gate for Wildeck VRCs is the ideal solution for constraining heavy carts or other rolling loads placed on the VRC carriage. (shown left).

### **ENTRANCE MOUNTS/RAMPS**

Thomas Conveyor offers mounting ramps including:

- Pit mounted, which allows flush level access to the VRC carriage at the ground floor;
- Floor mounted, surface mounted with various ramp options;
- Winged, which allows convenient front or side access:
- Custom low profile, for specialty application requirements.



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### STAIRS • PLATFORMS • LADDERS CROSSOVER UNITS • RAMPS

Mezzanine stairs, ladders, landings, crossovers and ramps provide personnel with safe access to mezzanine levels or bypass oversized machinery, conveyor systems and other operations obstacles.

All of our access solutions are designed and manufactured with the utmost protection in mind, and conform to IBC and/or OSHA standards.

Our engineers employ code-compliant solutions to customize your application including stairway or landing elevations, stairway lengths, and occupancy loads. Our ramps can assist with ADA compliant situations or just provide an easy segway for hand trucks and forklifts.

Our custom configurations are built to be maintenance free, long lasting and easy to install. Simple nut and bolt connections and factory welded components provide easy and quick installation. Security treads are made with galvanized anti-slip surfaces providing greater security for safe and efficient access.

Whether your mezzanine is for storage, manufacturing, or public use, we can provide the optimal staircase for your application.





### ELEVATED ACCESS PRODUCTS Welded Steel Stairs



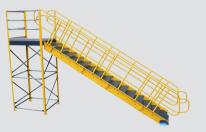
We provide the best welded stair structures where strength and rigidity is key. The standard stair width is 36", with custom widths available. Stair components have bar grate and diamond plate treads, with open or closed risers. We also offer topof-stair and intermediate platforms to meet specific stair system requirements.

### KNOCKDOWN STAIRS

Knockdown stairs are stairs where the treads and stringers are field assembled. Treads must be bolted to the stringers and a guard rail/handrail assembly is required. This application is used when lifting a one piece stair is not practical. Knockdown stairs can be a cost effective alternative to welded stair systems. We offer IBC and OSHA compliant stair systems.



### **MODULAR STEEL STAIRS**



A modular stair system provides a quality stair system with a fast delivery and setup. Its exclusive product packaging fits all the components on a standard pallet for budget friendly freight and shipping. Modular stair systems can be installed nearly anywhere; whether you need access to mezzanine platforms, catwalks, safety platforms, racking or shelving. Modular stair systems can be designed or adjusted to meet your needs.

### **STAIR LANDINGS & PLATFORMS**

Stair landings come in three typical configurations; straight, L-shaped and U-shaped. They can provide an area for machine inspection, repair or be used as an observation deck.

Platforms are available at "walk out" elevation. Stair towers are designed to meet your specific height and space requirements (as allowed by code.)





### CONVEYOR CROSSOVER UNITS

### **STEP OVER**



Step over conveyor crossovers allow personnel a way to safely step over single or double conveyor configurations. Vertical Climb step overs are best used when space is at a premium, while Stair style step overs provide a designated area to easily traverse over a facility's conveyor system.

### VERTICAL CLIMB CROSSOVER

When space or area is limited, a vertical climb conveyor crossover will allow personnel to safely pass over ground level hazards or obstructions. Designed to minimize square footage, they are sturdy and durable. They can also be customized to accommodate vertical clearance requirements.

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### **CROSSOVER STAIRS**

Standard crossovers are an economical way to provide staff with safe egress over interior and exterior obstacles.

The product's 45° angle of climb with 9" rises and runs makes for an easy climb. Additionally, the crossover's 1½" diameter tubular steel frame provides an unparalleled level of sturdiness and durability. OSHA and Cal-OSHA compliant, standard conveyor crossover products are designed to help employees maneuver their work site safely.

### U, Z OR REVERSE Z SHAPED CROSSOVERS

TCE's team of engineers are qualified to design a crossover ladder product that meets your specifications.

Available in U, Z and Reverse Z configurations, our custom crossover ladder products create safe and convenient working conditions for your personnel. All of TCE's conveyor crossover products are designed in compliance with OSHA and Cal-OSHA regulations.



### **HEAVY DUTY CROSSOVERS**



When your application requires the greatest level of strength and durability, Thomas Conveyor can design a custom heavy duty crossover to meet your specific demands.

Heavy Duty Crossovers can provide an area for access, inspection, maintenance or observation.

### **MODULAR CROSSOVERS**

Thomas Conveyor has partnered with Wildeck to provide the Ladderlink<sup>™</sup> modular access system.

Ladderlink™ has five steel components to choose from and allows for an endless combination of work platforms, crossovers and stair configurations to be assembled to provide unequaled ingress.





### **PLATFORM DESIGN & FABRICATION**

Certain industries require a custom fit for their applications. Our Automation Engineers have the experience to custom configure access platforms to help provide you with safe access. Some custom fabrications include, but are not limited to: ladder stands, ladder stairs, access ladders, marine ladders, ships ladders and rolling ladders





### **CUSTOM ACCESS RAMPS**

In warehouses, factories, or other production facilities, a ramp can expand the effectiveness of a buildings' accessibility without permanent construction. If a company changes locations, a modular ramp can be moved with them or relocated to another area should the field configuration change.

Thomas Conveyor & Equipment offers custom work platform and mezzanine access ramps. Each product is tailor-made to your specific site and needs. Standard features include all-steel construction with serrated grating for traction and smooth aprons for minimal transitions.



### **VERTICAL ACCESS LADDERS**

When application heights exceed 20 feet, fall protection is required. Safety cage fixed ladders provide the level of safety needed to meet OSHA safety standards.

Ergonomically designed to provide safety and user comfort, you can rely on the construction of our safety caged fixed ladders to protect you and your workers in a hazardous climbing condition.







# PROTECTIVE BARRIERS • GUARD RAIL

### THREE LEVELS OF PROTECTION - BASED ON YOUR NEEDS

Guard Rail protects employees around the workplace from injuries and accidents caused by moving vehicles.

Designed to absorb the impact of a forklift, sweeper, other inplant vehicles, guard rails protect your assets and staff. Wilgard™ Guard Rail systems can be ordered in single, double or triple rail designs.





Guard rail systems provide an effective, easy to see barrier that contributes to a safer and more efficient working environment.

Thomas Conveyor offers a wide range of guarding products to protect your specialty equipment, shield work areas, and help define traffic patterns for your most important asset - your staff!

Choose between bolted (standard) or lift-out rail types.









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