

# A-deck-tive Speed and Efficiency

**A**iro Industries Inc. has launched its second generation of loadlifting transfer deck (LTD), a tool the company says is the fastest, safest, and most efficient way to move material to and from buildings during construction.

The Fort Meyers, Florida, manufacturer's new Generation 2 LTDs feature a beefier frame, galvanized components, and 8,000-lb. capacity — about twice that of previous models. The moving platform, or deck, of the new model is built with I-beams for more strength and rigidity.

## Efficient Concept

The LTD is like a desk drawer that sits on the floor of a building and has a supporting frame that sticks out past the building's edge.

The deck rolls out onto the frame so construction materials can be set onto it, then rolls back into the building so workers can unload the materials and take them to where they are needed.

Part of the genius of Airo's system is a frame-mounted hoist that sits atop the building and lifts and lowers loads to and from the LTD platforms below it. The hoist eliminates the need for a crane to feed the platforms.

Each LTD stays retracted until the load has been raised higher than its deck. The deck is then extended so the load can be set onto it. After that, the deck is retracted into the building and unloaded.

One hoist can serve several decks on floors below it.

The moving deck Airo's new Generation 2 design is about 8'6" wide and 16'10" long.

Each LTD arrives at a job site fully assembled, so it takes just a couple of hours to install.



Airo's new Generation 2 transfer deck features beefier construction, galvanized components, and 8,000-lb. capacity.

PER LOAD COSTS	LTD®	Tower Crane	Rack & Pinion (Man & Material) Hoist	Mast Climber	Scaffold Hoist
Equipment Rental Pro-rated Per Avg. # Loads	\$3.22	\$172.73	\$38.33	\$45.55	\$36.50
Remove from Transport		\$17.50	\$17.50	\$17.50	\$17.50
Transport to Compound		\$17.50	\$17.50	\$17.50	\$17.50
Breakdown of Pallet to Smaller 2 Loads			\$17.50	\$17.50	\$17.50
Transport of Split Pallets to Load Position			\$17.50	\$17.50	\$17.50
Waiting Time		\$27.50	\$27.50	\$27.50	\$27.50
Load into Hoist or Climber			\$17.50	\$17.50	\$17.50
Tower Crane Time (Process)		\$52.00		\$29.05	\$29.05
Verticle Transit Time	\$1.66	\$3.32	\$3.32	\$4.98	\$4.98
Transport of Pallet to Work Position	\$4.75	\$10.50	\$10.50	\$10.50	\$10.50
<b>TOTAL COST INCLUDING EQUIPMENT RENTAL</b>	<b>\$9.63</b>	<b>\$301.05</b>	<b>\$167.15</b>	<b>\$205.08</b>	<b>\$196.03</b>

Airo calculates that its Loadlifting Transfer Deck (LTD) is the most cost-effective way to hoist material for building construction.

Depending on the job, the LTD lifts material up to 17.6 times as fast as a tower crane and does it at about 3.2% of the cost, according to Airo's calculations. (See chart.)

The LTD's speed and efficiency help reduce construction costs shortening the time workers wait for material, said Airo President and CEO Mark Pruskauer. He said some sites using LTDs have finished construction 33% sooner than they would have without them.

Another advantage is that the LTD requires a relatively small safety area cordoned off, since its hoist lifts straight up and down, added Pruskauer.

Pruskauer noted that the Airo LTD system with its own hoist can also help improve construction productivity and reduce cost by freeing a tower crane to handle larger loads.

"Freeing a tower crane to focus on handling loads that really need its capacity and reach helps a site's overall productivity and efficiency," he said.

## Vertical Carrier Racks for Pipe, Rebar, and Drywall

Airo is also launching two more innovative lifting solutions this spring.

Its Pipe & Rebar Vertical lifting rack and Drywall Vertical lifting rack are each designed to hold a load of specific material and hang vertically while being lifted, then lie flat and roll on wheels as workers easily deliver the load to where it's needed.

Either of the vertical lifting racks can be raised by a crane or hoist and then laid flat and taken into a building either with or without using an LTD.

Wheels on the back of the rack then let the loaded rack be brought into the building with no risk of tethering outside

the building edge.

Material can stay on the rack as workers roll it to the point of use.

The vertical lifting racks increase productivity, increase safety, and reduce material damage from multiple transfers, said Pruskauer. The result is more material moved more cost effectively. ■



A photo of two Generation 1 LTDs in place shows the concept of the transfer deck system.