



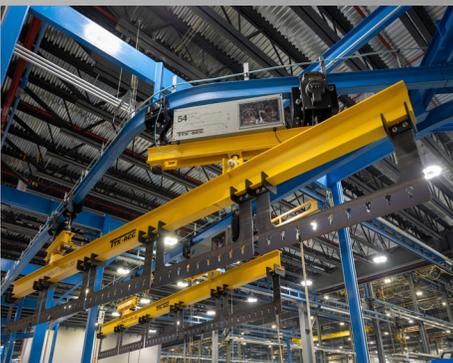
TTX AUTOMATED CONVEYOR CARRIER TECHNOLOGY IS:

- Green
- Safe
- Flexible
- Maintenance Friendly
- Designed with the future in mind



DESIGNED WITH GREEN STANDARDS IN MIND:

These vehicles travel above the ovens, pretreatment and paint processes while hooks or racks pass through a unique slot top design that minimizes heat loss. Mass flow in the ovens is greatly reduced in comparison to traditional Monorail and Power and Free systems. ACC®'s are battery-operated and take advantage of "opportunity charging" through-out the system.

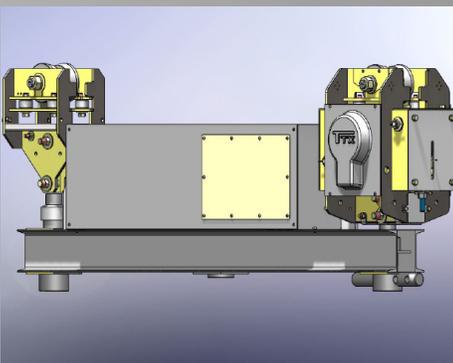


DESIGNED WITH SAFETY IN MIND:

The vehicles are substantially quieter than traditional conveyors. Each unit is equipped with audible alerts, signal lights and a collision avoidance system, allowing for easy situational awareness of each unit.

DESIGNED TO BE FLEXIBLE:

Overhead conveyance in a facility can be thought of as modular and scalable in concept, allowing for production volumes to be easily adapted for all scenarios. Expand your system as your company grows by implementing the right number of vehicles for each job. The autonomous nature of the vehicles enables demand-oriented process times instead of fixed-cycle times, even allowing different applications and quality requirements to be realized for different part profiles.



DESIGNED TO BE MAINTENANCE FRIENDLY:

ACC®'s utilize a standard overhead I-beam, with no wires or chain. There is virtually no downtime associated with the conveyance. Individual vehicles can be easily placed into or out of service for maintenance. Future modifications and maintenance of track is easily done. Troubleshooting and start-up of these units takes very little time as they are pre-programmed in-house prior to installation. Each unit is constructed using common parts that are readily available through TTX's customer service department.

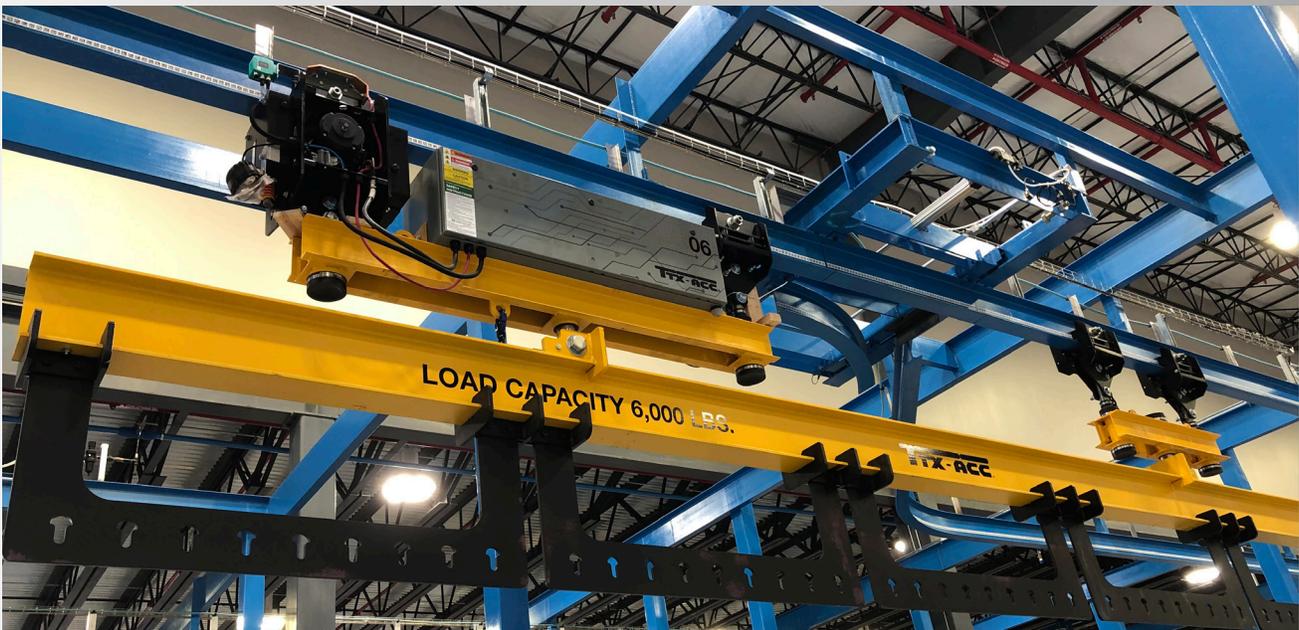
TTX-ACC[®]

WHAT IS A TTX ACC[®]?:

An overhead conveyance system consisting of carriers that provide reliable and consistent point-to-point movement of everything from small parts to heavy parts. They are battery powered, individually programmed vehicles that run wirelessly on a simple I-Beam without chain. This system incorporates a wireless ethernet network that will send instructions to each ACC[®] via access points. The carrier is mounted to an I-Beam in much the same way as a traditional overhead carrier. These carriers are propelled along the I-Beam using a spring-loaded traction drive wheel. The I-beam and carrier drive are sized accordingly by weight with capacities ranging from 10 lbs. to 12,000 lbs.

The vehicles are multi-directional and have individual acceleration and deceleration control, making it possible to automate batch processes and conserve on valuable floorspace by utilizing dead head turns. Individual carriers are equipped with torque control allowing for smooth and precise control.

The control system for the ACC[®]'s utilizes a closed Wi-Fi network that allows for communication between the ACC[®]'s and sensors at decision points along the ACC[®] route. All the details come back to a PLC. From the HMI you will be able to view information on all the vehicles in your system, check their diagnostics, see their current position and make system adjustments if needed.



THERMA-TRON-X, INC.
Phone: (920) 743-6568
Fax: (920) 743-5486
E-mail: sales@ttxinc.com
Website: www.ttxinc.com

