

AGV Improvements

At Tekno, we are very excited about the ongoing development of our AGV's.

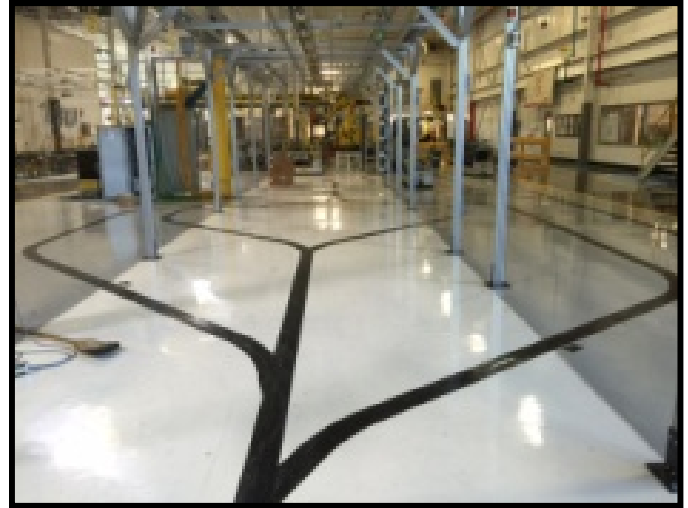
Laser Guidance System:

Tekno's original AGV's utilized an adhesive backed magnetic tape covered with an epoxy protective coating as the method of guidance for the carts.

A magnetic tape reader mounted to the cart detected the presence of tape and allowed the cart to follow the floor mounted path.

Stop positions, diverts and merges were possible through the use of RFID tags and magnetic tape markers. RFID tags buried into the floor were utilized for position monitoring of the AGV's with the supervisory system.

This method required a more extensive initial installation of the system and did not allow for ease of layout changes after initial installation.



Tekno's latest development utilizes the existing onboard safety scanners to digitally map the area and determine position and heading without the use of any floor mounted track.

Guidance and positioning are accomplished utilizing laser safety scanner + wheel encoders. Nominal accuracy is ± 1 cm in position and ± 1 degree in heading. However, that accuracy can be dialed in to ± 1 mm for precision location requirements.

User friendly mapping software - tool included. Mapping is performed by manually driving the AGV around within the area. No special mapping or laser survey is required.

Mapping of the area can be performed with one AGV. Each part of the track will need to be driven only once. In case of changes in the environment, only the affected area will need to be remapped.

Routes can be created in the office and a simulation of the entire fleet can be performed.

Adjustments to routes can be made within the PC and downloaded via wireless into all vehicles.

Traffic Management and control is still performed by the Supervisory PC. The supervisory PC knows and displays the precise location and heading of each AGV in the system at all times. The supervisory PC also monitors battery level and onboard I/O status at all times. AGV's can be re-directed via the Supervisory PC.

Call or e-mail us today at Sales@Tekno.com to see how we can implement AGV's in your facility utilizing this new guidance system. We will be glad to bring our demo unit onsite to show you the capabilities.

Leading The Industry With Modular Solutions

Tekno AGV's Continued

We are also working on other improvements to our AGV's. We will reveal more in future issues.

Some of these improvements include:

New Extrusion Profile - As you can see from the model created with our new 3-D printer, We are working on a new extrusion profile for the AGV frame which eliminates t-slots on the exterior surface.

Cast Corner Brackets - Corner attachment brackets will be cast which will include mounting arrangements for LED indicator lights.

Suspension and Drive Train Improvements - Our second generation AGV's included an independent suspension on each drive wheel to allow for floor irregularities. This is an important feature that we intent to keep in our future designs.

Stay tuned to future issues to follow the improvements to our AGV's.



Tekno Component Sales

We want to introduce to you the newest addition to the Tekno Sales Team. Dustin Mustread came onboard fulltime after graduating from Western Kentucky University in December. Dustin will be your contact for all components and spare parts quotes and orders.

Dustin's Contact Information:

Dustin Mustread

Office: (270) 773-4181 Extension 8009

Mobile: (270) 791-4911

E-mail: DustinMustread@Tekno.com



Dustin is an avid golfer and recently got married. He looks forward to working with you all.

Future Issues



Tekno Mexico

We'll be sharing the latest developments regarding our Mexico office expansion.

New Products and Product Improvements

We have several items in our R & D department that will be emerging soon.

Tekno Show Trailer

We are scheduling trips now. Be sure to contact us if you have an upcoming project. We'll be glad to stop in and show our products.