

Features and Benefits Handheld Scanners

Inertial Guidance

**Reduction in Labor Costs** 

Increased Efficiency and Production

**Industry Group:** Automatic Guided Vehicle Systems (AGVS)

## Plastic Injection Molder Utilizes Automatic Guided Vehicle System



Theses vehicles use a side-fork transfer mechanism. All transfers are handled to the side of the AGV to facilitate increased material movement.

## AGV System Increases Productivity & Efficiency While Maintaining Safety

A highly successful plastic injection molder located in Hudsonville, Michigan, was looking for a versatile product to help with their manufacturing processes. The solution was through the use of Automatic Guided Vehicles (AGVs).

The system consists of six inertial guided, side-fork AGVs. The AGVs were designed to handle 2,000 pounds for both raw material distribution and finished goods.

At this facility, the manufacturing materials arrive by truck and are then unloaded using manual lift trucks. The lift trucks deliver the materials to various AGV pickup locations. Operators at various manufacturing lines request materials or a pickup of finished goods through a RF handheld call terminal otherwise referred to as a scanner.

Vehicles are automatically dispatched to the "scanned" location via the control system. The control system monitors AGV material movement throughout the facility. Communication between the AGV and the control system is achieved through a 2.4 GHz Radio Frequency network.

Once the AGV has its location it moves through the facility using an on-board computer containing a guidepath map. In addition to the map the vehicle detects magnets located throughout the facility to determine its exact position.



Egemin Automation Inc. 11818 James Street Holland, MI 49424 <u>sales@egeminusa.com</u> www.egeminusa.com