



- ? Sturdy construction for industrial conditions
- ? Programmable product loading and unloading operations
- ? Range of several guidance systems
- ? Compact size and adaptability to existing work space
- ? Design dimensions adaptable to various types of loads
- ? Reliability and easy maintenance thanks to technical simplicity
- ? Designed from the start as an automatically guided vehicle



MECHANICS

The vehicle's frame is extremely sturdy and adapts to particularly demanding applications. The design's flexibility makes modifying the machine's dimensions for use with various types of loads easy.

DRIVE, WHEELS, AND LIFTING

The vehicle has three load-bearing wheels, two fixed and one steering, included in an integrated unit with one drive motor and one steering motor. Hydraulic lifting guarantees high capacities. Special encoders accurately measure lifting and transfer movements.

ELECTRICAL SYSTEM

The vehicle runs on a 48-volt battery. The battery's capacity can reach up to 600 AH to guarantee AGV operation for 48 hours before changing or recharging the battery. The AGV can also be provided with an automatic recharging system.

SAFETY DEVICES

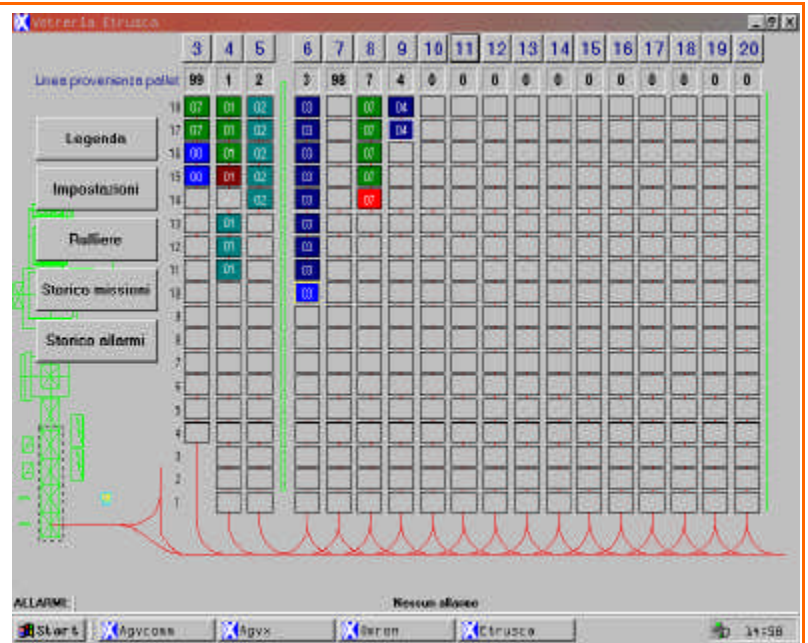
The AGV is equipped with obstacle detection sensors that instantly interrupt operations. They are positioned on all sides of the AGV in order to protect the safety of personnel working in the vehicle's operation area. The AGV is also equipped with buttons for emergency stopping and lights and sirens for signaling its movements.

CONTROL DEVICES

The AGV's control devices are designed to be reliable, easily programmable, and integrable with AGV systems of all types of complexity. The onboard computer is based on a microprocessor. Various guidance technologies may be implemented: Induction, laser, magnet/gyroscope. The AGV is equipped with a terminal that has a 2x16 character display and a keyboard for diagnostic operations, as well as a control unit for manual operations.

STATIONARY CONTROL SYSTEM

The AGV can operate autonomously since the work trajectories are programmed and saved on the control card of the vehicle itself. Nevertheless, maximum automation and integration is achieved through management of the system by the stationary control system. This becomes necessary when systems are created with several vehicles: For managing AGV traffic, intersections, and right of way. The stationary control system also adds features useful to the entire system, including complete automatic management without operator action, and saving of all orders carried out by vehicles and alarms signaled by the system. The vehicles and the stationary system communicate through radio frequency transmission devices.



TECHNICAL SPECIFICATIONS

- ? **Drive** Electric, integrated in the motorwheel unit
- ? **Steering** Electric, integrated in the motorwheel unit
- ? **Brake** Electromagnetic, integrated in the motorwheel unit
- ? **Wheels** Guidance ? 305 mm
..... rear ? 250 mm
- ? **Speed** 1 m/s forward
..... 0.5 m/s reverse
- ? **Controls** Microprocessor control card
..... manual control unit
..... 16x2 character display with keyboard
- ? **Guidance** Inductive, with possibility of wireless movement
..... Laser navigation
..... Magnet/gyroscope navigation
- ? **Load capacity** up to 3,000 Kg
- ? **Lifting** Hydraulic
- ? **Lifting speed** 0.4 m/s
- ? **Color** According to customer specifications
- ? **Battery** Lead, 300 to 500 AH
- ? **Safety devices** Class 3