

AGVs AUTOMATED
GUIDED VEHICLES

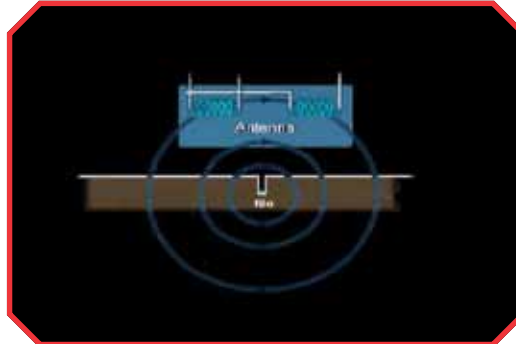
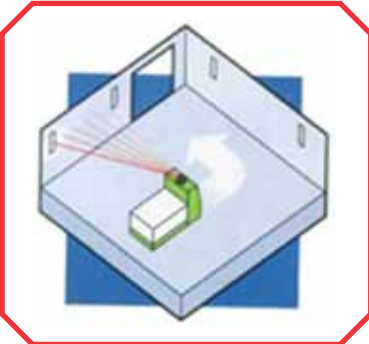


NAVIGATION SYSTEMS

The AGVs are available with different guidance systems such as:

- Laser Guide
- Induction Guide for data transmission and/or power transmission

According to the situation we evaluate together with the customer the best solution for its specific case.



Laser guide: The control system uses a rotating laser scan. The laser retransmits the distance from the reference point located in the path, from there the AGV position and the orientation are triangulated.

Induction guide: The control system guides the AGV vehicle according to reference points embedded in the floor. The reference points are made of electric cable conductors.

SAFETY
DEVICES

- Laser Scanner: two laser scanners for each vehicle facing in the driving direction in order to detect obstacles
- Emergency rope: protect the vehicle sides and, if touched, acts as an emergency button
- Acoustic and visual proximity alarms



AGVs AUTOMATED
GUIDED VEHICLES

CUSTOMER TAILORED SOLUTIONS



For assembled parts handling



AGV at the exit of the assembling halls carrying two stabilizers of an airplane



AGVIA BALLOTTI SISTEMI srl
Via Verdi, 15 - 41018 S. Cesario s/P (Modena) - Italia
Tel. (+39) 059. 930.270 - Fax (+39) 059. 930.059
e-mail: info@ballottisistemi.com
www.ballottisistemi.com

AGVIA is a trademark of DimaSimma Network
INTEGRATED LOGISTICS FOR ANY INDUSTRIAL FIELD

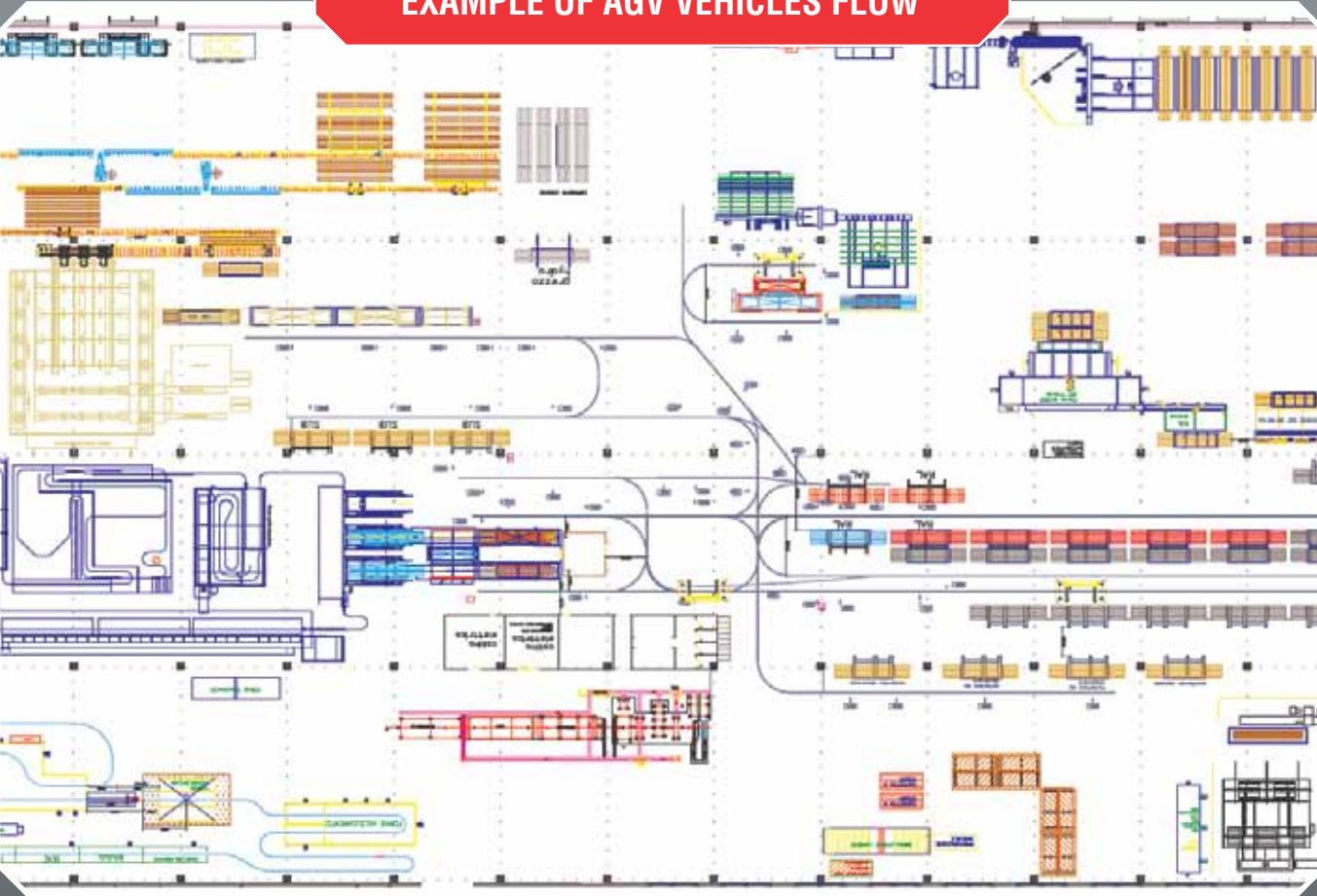


AGVs AUTOMATED GUIDED VEHICLES
& INTEGRATED LOGISTICS
FOR ANY INDUSTRIAL FIELD



AGVs AUTOMATED
GUIDED VEHICLES

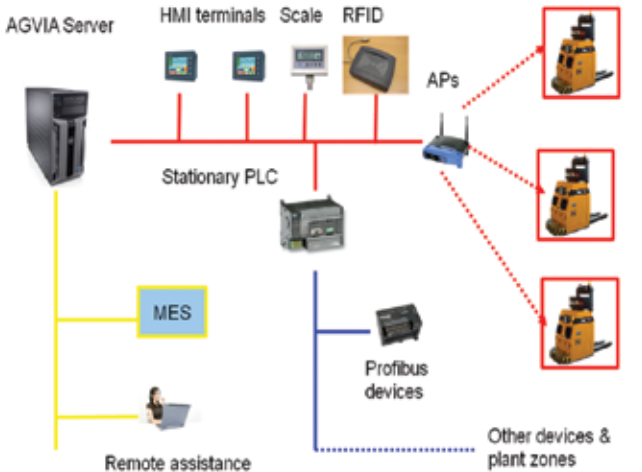
EXAMPLE OF AGV VEHICLES FLOW



The AGV vehicles work according to following data:

- 1) the paths,
- 2) the characteristics of the material to handle,
- 3) the material flow (i.e. the movements frequency).

According to the Customer data we will place along the paths the necessary 'REFERENCE POINTS' that interchange signals with the devices on board of the various vehicles, so as they can recognize the paths.



AGVIA is a trademark of DimaSimma Network
INTEGRATED LOGISTICS FOR ANY INDUSTRIAL FIELD

AGVIA is a trademark of DimaSimma Network
INTEGRATED LOGISTICS FOR ANY INDUSTRIAL FIELD

ADVANTAGES BROUGHT BY THE AGVs VEHICLES



The AGV vehicles are widely applied in many industrial fields as they substitute at all effect the traditional forklifts, but with some advantages:

- more efficiency,
- labour reduction, the AGV works 24 hours - seven days a week
- reduction of human errors,
- safety for the workers, machinery and materials,
- full traceability of the materials
- inventory optimization
- flexibility; the AGV can work indoor, outdoor, in the dark
- no pollution, neither with noise, nor with gas

Investment characteristics:

AGV is adaptable

- for any type of product
- for any manufacturing organization
- in any way and for any method of storage, fixed or automatic

Another important advantage is that AGVs are usually implemented in the existing warehouse environments, without modifying the site.

As a result, the investment results budget-friendly and quickly returned

Investment can be done gradually, integrating vehicles in gradual steps with the growing needs.



45 YEARS OF EXPERIENCE IN LOGISTICS



AGV with three-lateral forks

AGVS VEHICLES IN THE FOOD INDUSTRY



AGV interfaced with conveyors



AGV with cylindrical container for coffee

AGV vehicles for transportation, storage and stacking of pallets:

- highly valued in the food and beverage industry.
- Also available in stainless steel.



AGV entering in cold rooms



AGV for Drive-In shelving



INTEGRATION



Our target is integration at any level:

- AGV vehicles can interface with static shelving or with automated warehouses manufactured by our group or any other brand.

Integrating with processing machines, storage and AGV vehicles become a dynamic part of the production.

