



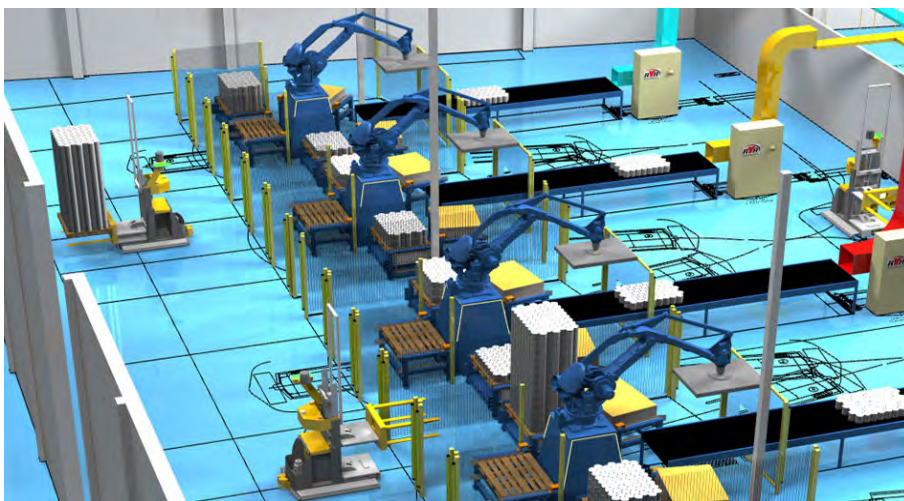
The Home of Intelligent Automation

Factory Floor

Automated Guided Vehicles (AGVs) come in many format types, and can be readily customised to suit specific applications.

Counter balance, carrier, cantilever, and/or tug AGVs are ever increasing in factory floor applications.

These can vary from single case handling, to multiple full pallet, or other handling applications, including access to temperature controlled or clean room environments where operator access is undesired.



Navigation Types

AGVs can employ various – and combinations of – types of navigation technologies:

- Laser Navigation
- Contour Navigation
- Ranging Navigation
- Magnetic Navigation
- Electromagnetic Navigation
- Magnetic Tape Navigation
- Multi-Type Navigation
(a combination of above)



We embedded an AGV dual fork solution that handles both empty and full pallets for the next gen, Motopal Smart Palletising Solution.

The Motopal system features 4 MAXAGVs and 9 robots, with empty pallet in-feed, full pallet exchange, and automatic AGV charging stations.

The use of smart, Windows based, MAXAGVs maximises the use of floor space in an extremely tight access location and provides high flexibility, whilst achieving required productivity rates.

Royal Adelaide Hospital

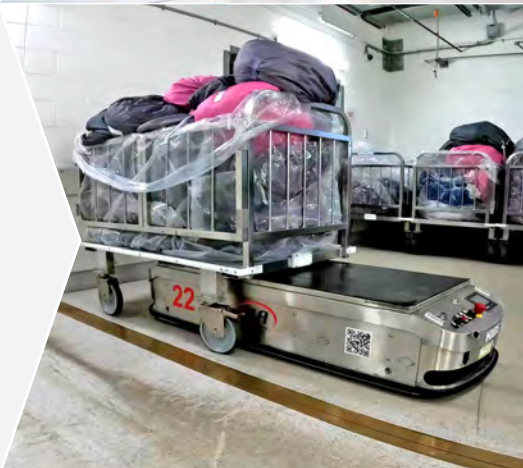
We delivered a complete upgrade to the 25-strong MAXAGV fleet at the Royal Adelaide Hospital (RAH). The upgrade was delivered over 4 weeks whilst the AGVs continued to support the 800 patients in the live hospital.

In a busy hospital setting, the AGVs really do come into their own, in the distribution of meals, linen, waste, pharmaceuticals, stores, etc., on a regular schedule.

At the RAH site, the MAXAGVs control 14 dedicated lifts over 9 floors, allowing them to perform thousands of missions, move hundreds of tonnes of material and travel more than 500 kms every day.



Application Examples:



MAX Advanced Control System

The MAXAGV Control System with inbuilt WMS is Windows based and a clear leader in its field. The system optimises logistics, handling everything from transport and warehousing, load tracking, buffering and order swapping to optimal dynamic route selection, location selection, charge control, priorities and dead lock prevention – all shown in real time 3D visualisation.

The control system runs on a Microsoft Windows environment, and features a user friendly interface that is easy to learn, configure and use, allowing customers to make changes 'on the fly' in real time application.

The MAXAGV Control System is operational via PC, tablet and smart phone.

Specifications

MAX CONFIGURATION

Standard External Interface
Graphical Configuration Editor
Layout Changes in MAX
Offline Test and Simulation
Fully Configurable

MAX CLIENT

Graphic Auto-Updating Screens
3D Visualisation
Remote AGV Diagnostics

OPERATING ENVIRONMENT

Windows 11
Windows 2019 / 2022 Server
C# on Microsoft .NET Platform
SQL server / Oracle Database
Unlimited Server Licences
Fully Integrated Windows Security



Technology



BATTERY OPTIONS

Depending on utilisation of units, and missions required between charge, there are several battery options, including Lithium, AGM or swap out as required.

Opportunity charging can be supplied via inductive plates at charging stations.



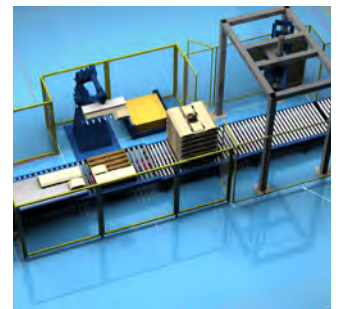
QUAD STEER

When tight turning radius, or precision multi-alignment is required QUAD steer options may be the answer. They are equipped with two or more steer/drive units and two or more supporting castor wheels to enhance movement options.



SELF TRACKING

A range of Vision techniques are available to help automate loading of products, including self aligning techniques for pallets amongst others.



ROBOT INTEGRATION

With input from your supply schedule and building plans, we analyse the products, routes, likely traffic and vehicle speeds at your site to project the most efficient AGV fleet type and size to integrate with robotics to meet your needs.

Take the next step to prove the solution virtually, with a full-motion, real-time video simulation in a detailed 3D model.



AUTOMATED TRANSPORTS

RA's brand exclusivity of MAXAGV gives our clients immediate access to the superior tech support, spare parts and experienced technicians that others cannot.



Proven reliability

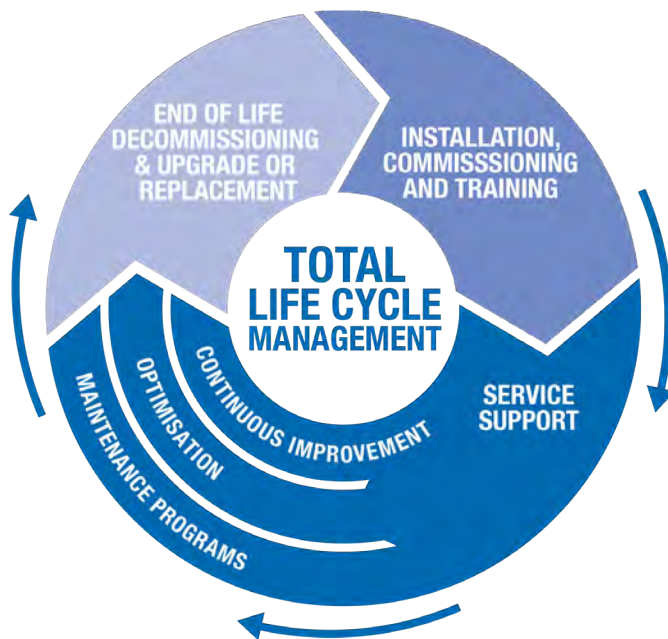
Example: Our recent upgrade of the AGV Control System has been completed in a live Hospital after the fleet has already travelled over one million kilometres.

Service Capabilities

Operating in Australia and New Zealand since 1988 RA have installed and continue to support over 3,600 installations across manufacturing, warehousing, welding, hospitals, testing laboratories and even banking processes.

Being an exclusive supplier of leading brands gives us the confidence to offer customised warranty packages and deliver fast and reliable service and support. RA Service has a local store of spare parts, plus a nationwide team of factory-trained service technicians.

We believe in offering total life cycle management to all commissioned systems to achieve the best optimisation and return on investment.



Multi-Award-Winning Design, Build, Test, Installation, Commissioning and Support Services.



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