Robotic Automation®

Mobile Robots
AMRs & AGVs

The Home of Intelligent Automation

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Mobile Robots

Mobile Robots 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 undesirable.

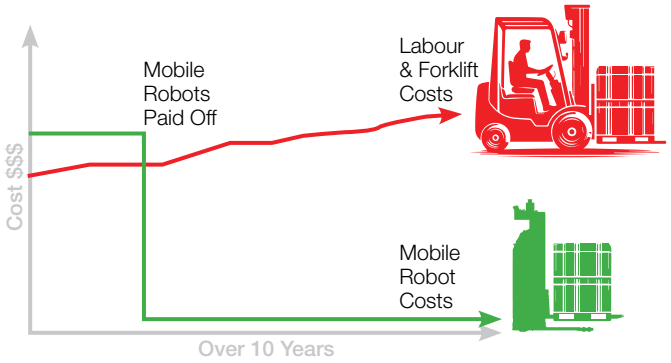
Fast ROI

With ever increasing labour shortages and costs, why would you use valuable staff to repetitively move material that can be moved autonomously?

There are many use case scenarios where repetitive movement of products and material can easily and more efficiently be completed by Mobile Robots.

The below graph demonstrates how quickly running costs can drop after the pay-off period is reached.

Mobile Robots Costs vs Labour & Forklift Costs



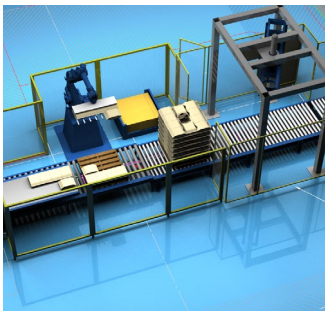
Intuitive Technology

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 strategically located inductive plates.

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.

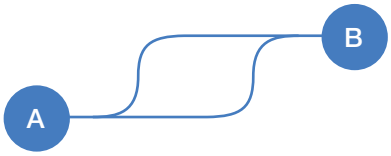


ROBOT INTEGRATION
With input from your supply schedule and building plans, we analyse the products, routes, likely traffic and vehicle speeds at your site to project the most efficient AGV fleet type and size to integrate with robotics to meet your needs.

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

AGV

Automatic Guided Vehicle



AGVs follow pre-programmed paths only.

The analogy of a train line is often used when referring to AGV operations. They are assigned specific paths to follow and will not deviate from these paths.

If the AGV's path is blocked, it will stop and notify the system of the anomaly until the path is cleared or another path is added using the smart, window-based software.

Whilst the AGV system is more disciplined negating the risk of blockages caused by the units themselves, it does require manual or online intervention if a path becomes blocked by a foreign, unscheduled object.

AMR

Autonomous Mobile Robot

AMRs self manage paths within a pre-programmed zone.

The AMR system uses SLAM technology to find its own way between pickup and drop-off locations.

If the AMR's path is blocked it will try to find a way around the obstacle to meet its objective.

When installed correctly, the AMR can bypass moving obstacles without manual intervention. However, If too many units are active in one area, they can create traffic jams by blocking each other. This can be resolved by implementing one way traffic zones.

Mobile Robots vs Conveyors

Using AGVs and AMRs instead of fixed conveyors offers several advantages, in industries where agility, modularity, and adaptability are essential; particularly in terms of flexibility, cost, and scalability.

- **Flexibility, Adaptability and Scalability**
- **Cost Efficiency**
- **Operational Efficiency**
- **Reduced Downtime**
  - Minimised Bottlenecks
  - Enhanced Safety
- **Maintenance and Longevity**
- **IoT and Industry 4.0 Integration**
- **Space Optimisation**
- **Business Resilience**

These diagrams demonstrate the same packing and palletising solution, however Diagram A utilises conveyors and forklift with traditional centralised palletiser and Diagram B utilises the many benefits of AMRs combined with end-of-line palletisers.

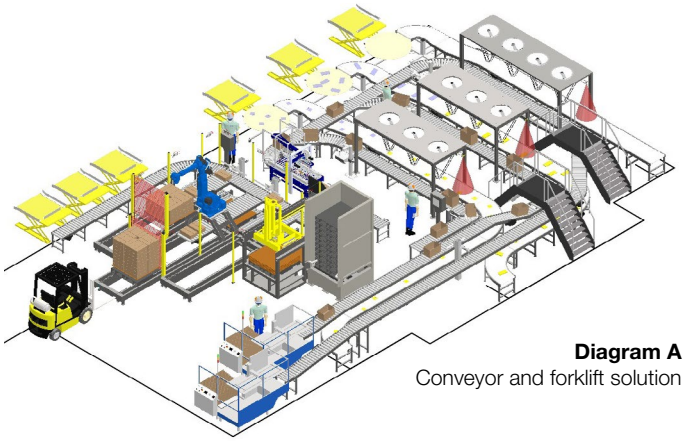


Diagram A
Conveyor and forklift solution

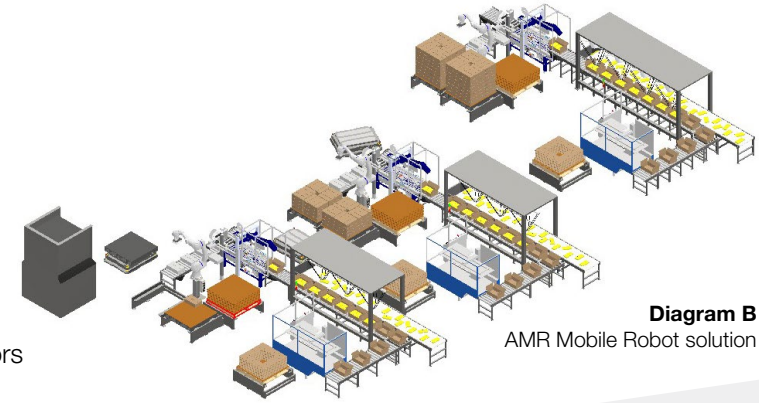


Diagram B
AMR Mobile Robot solution

Mobile Robots in your industry.

FOOD AND BEVERAGE

EMBEDDED AGVs AND ROBOTICS

CHEMICAL

MATERIAL HANDLING

SECURITY PATROL

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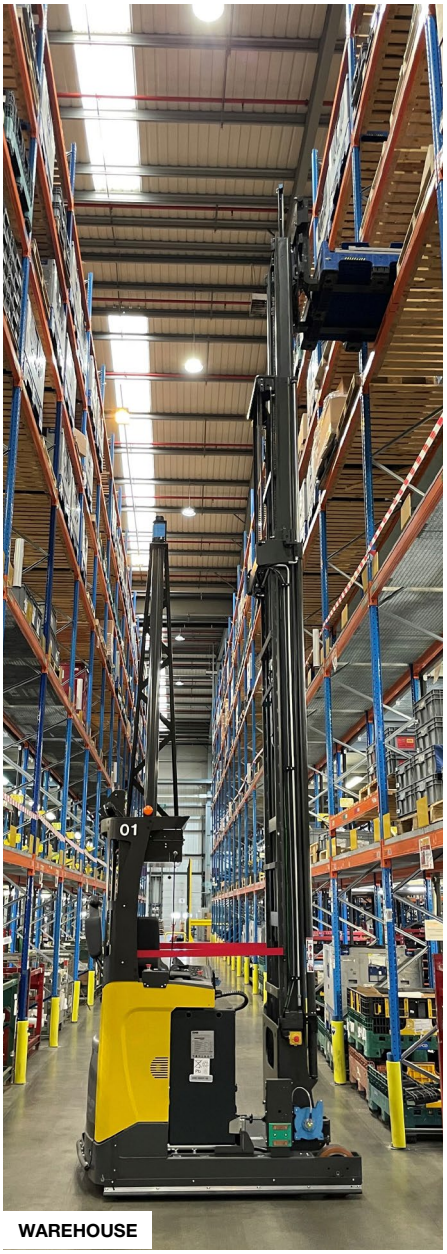

WAREHOUSE

INTRALOGISTICS

HEALTHCARE

MAX AGV
AUTOMATED TRANSPORTS

RA-GV

Forklift AGV Range

- Over 3000 AGVs distributed worldwide since 1987.
- Offering cost effective and flexible materials handling.
- Customisable with various navigation – including laser guided vehicles (LGV), contour/range-sensing, magnetic and optical – interfacing, and load handling technologies.
- Inbuilt, Windows based WMS Control System handles transport, warehousing, load tracking, buffering and order swapping, optimal dynamic route selection, location selection, charge control, priorities and dead lock prevention.
- Easy to configure and learn.
- Powerful inbuilt WMS package offers significant advantages to end users.

We've found the best in AGV solutions, so you don't have to!

FX04 *Low lifter for narrow spaces*

Dimensions L*W*H:	1650 x 800 x 2050mm
Drive capacity:	3 kW
Battery capacity:	Lithium 24V/105Ah
Lifting height:	210mm
Loading capacity:	1000kg

FX08 *Compact and narrow lifter*

Dimensions L*W*H:	1840 x 840 x 2090mm
Drive capacity:	1.2 kW
Battery capacity:	24V/150Ah
Lifting height:	2800mm
Loading capacity:	1000kg

FX10 *Versatile and compact lifter*

Dimensions L*W*H:	2250 x 880 x 2200mm
Drive capacity:	1.4 kW
Battery capacity:	48V/225Ah
Lifting height:	4500mm
Loading capacity:	1000kg

FX32R *Compact reach*

Dimensions L*W*H:	2477 x 1410 x 4725mm
Drive capacity:	6 kW
Battery capacity:	48V/545Ah
Lifting height:	11500mm
Loading capacity:	1500kg

FX15 *Multi-purpose lifter*

Dimensions L*W*H:	2575 x 930 x 2200mm
Drive capacity:	3 kW
Battery capacity:	48V/360Ah
Lifting height:	6000mm
Loading capacity:	2000kg

FX32V *Very narrow aisle*

Dimensions L*W*H:	4000 x 1600 x 5262mm
Drive capacity:	6 kW
Battery capacity:	48V/545Ah
Lifting height:	11500mm
Loading capacity:	1000kg

FX20C *Counterbalance for heavy loads*

Dimensions L*W*H:	2675 x 1160 x 2450mm
Drive capacity:	7 kW
Battery capacity:	48V/520Ah
Lifting height:	6000mm
Loading capacity:	2000kg

FX40 *Side loader*

Dimensions L*W*H:	2500 x 2070 x 3300mm
Drive capacity:	2 x 3 kW
Battery capacity:	48V/468Ah
Lifting height:	7000mm
Loading capacity:	4000kg

FX30 *Heavy loads on high altitude*

Dimensions L*W*H:	2900 x 1230 x 3160mm
Drive capacity:	6 kW
Battery capacity:	48V/545Ah
Lifting height:	8000mm
Loading capacity:	2000kg

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Carrier AGV Range

CXH — *Hospital trolley carrier*

Dimensions L*W*H:	1700 x 616 x 344mm
Drive capacity:	1.2 kW
Battery capacity:	24V/115Ah
Transfer height:	384mm
Loading capacity:	500kg

CX10 — *Twin tote carrier*

Dimensions L*W*H:	1500 x 780 x 2200mm
Drive capacity:	1.2 kW
Battery capacity:	24V/115Ah
Lifting height:	800mm
Loading capacity:	2x250kg

CX12 — *Compact, low passage carrier*

Dimensions L*W*H:	1650 x 800 x 250mm
Drive capacity:	1.2 kW
Battery capacity:	24V/115Ah
Transfer height:	310mm
Loading capacity:	1000kg

CX15 — *Industrial pallet carrier*

Dimensions L*W*H:	1600 x 1380 x 2350mm
Drive capacity:	1.5 kW
Battery capacity:	48V/240Ah
Lifting height:	900mm
Loading capacity:	1500kg

CX30 — *Multi-load carrier*

Dimensions L*W*H:	1650 x 800 x 2050mm
Drive capacity:	2 x 1.5 kW
Battery capacity:	48V/320Ah
Lifting height:	900mm
Loading capacity:	2x1500kg

CX100 — *Maxi carrier*

Dimensions L*W*H:	4966 x 3230 x 2350mm
Drive capacity:	2 x 1.5 kW
Battery capacity:	48V/420Ah
Lifting height:	1500mm
Loading capacity:	10,000kg

Forklift Conversions

Conversion — *Reach AGV*

Models	Lifting height	Max Load
UHD200	11,500mm	2000kg
URS150	10,350mm	1500kg
PSP160	5450mm	1600kg
PMR200	205mm	2000kg

Conversion — *VNA AGV*

Dimensions L*W*H:	3705 x 1500 x 4500mm
Drive capacity:	7 kW
Battery capacity:	80V/700Ah
Lifting height:	15,000mm
Loading capacity:	1500kg

Exclusive ANZ partnership with MAXAGV

Based in Gothenburg Sweden, MAXAGV is a global company that has been supplying automatic driverless systems for materials transport, worldwide since 1987.

During 2022, MAXAGV became a part of Latour Industries AB which further strengthens their market position.

Our exclusive partnership with MAXAGV means that you can take advantage of the benefit of technological leadership, single-source equipment supply and integration, and consistency in high level aftermarket support.

robotize

RA-MR

AMR Range

RA-MR250 *Compact Platform AMR*

Dimensions L*W*H:	960 x 660 x 295mm
Battery runtime*:	8-14hrs (20km)
Battery charge time:	45mins
Speed (max.)*:	2.2m/s (8km/h)
Passage width (min.):	760mm
Payload (max.):	250kg

RA-MR500 *Pallet AMR*

Dimensions L*W*H:	1400 x 1060 x 340mm
Battery runtime*:	6-14hrs (20km)
Battery charge time:	45mins
Speed (max.)*:	2.2m/s (8km/h)
Passage width (min.):	1400mm
Payload (max.):	500kg

RA-MR1200 *Pallet AMR*

Dimensions L*W*H:	1400 x 1060 x 340mm
Battery runtime*:	6-14hrs (20km)
Battery charge time:	45mins
Speed (max.)*:	2.2m/s (8km/h)
Passage width (min.):	1400mm
Payload (max.):	1200kg

**Depending on load conditions*

Robotic Automation™ prides itself on sourcing the highest quality European machinery to integrate seamlessly with our solutions.

Robotize is a leading manufacturer of collaborative mobile robot solutions based in Denmark.

They specialize in the design of AMRs (Autonomous Mobile Robots) specifically for material transport within factories and warehouses.

GoControl is a user friendly, web based Fleet Management System (FMS), which controls order queueing, system component status and real-time robot tracking

Standard Accessories

Passive Pallet Station

Charging Station

Conveyor Station (Max Payload: 1200kg)

Pallet Magazine (15 Pallet Capacity)

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RA-MR
powered by OTSAW

Modular Delivery AMR

RA-MR ***Modular Delivery Robot***

Dimensions L*W*H:	950 x 680 x 145mm
Weight:	105kg *(without module)*
Battery runtime*:	up to 8hrs
Battery charge time:	3hrs *(full charge)*
Speed (max.)*:	up to 5kph
Payload (max.):	50kg

The latest modular AMR can be used indoors and outdoors for intralogistics and perimeter security.

Centralized Fleet Management Control System software facilitates seamless collaboration and coordination in a robotic fleet, ensuring dynamic task allocation and real-time monitoring.

Intralogistic Transportation

Consumables Deliveries

Meal Deliveries

Waste Transportation

Perimeter Security Patrol

MAX AGV
AUTOMATED TRANSPORTS

MAXAGV Advanced Control System

The MAXAGV Control System 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

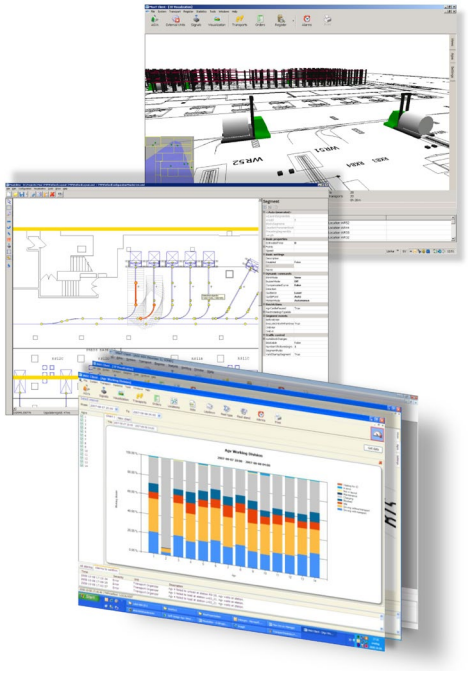
Standard External Interface
Graphical Configuration Editor
Layout Changes in MAX
Offline Test and Simulation
Fully Configurable

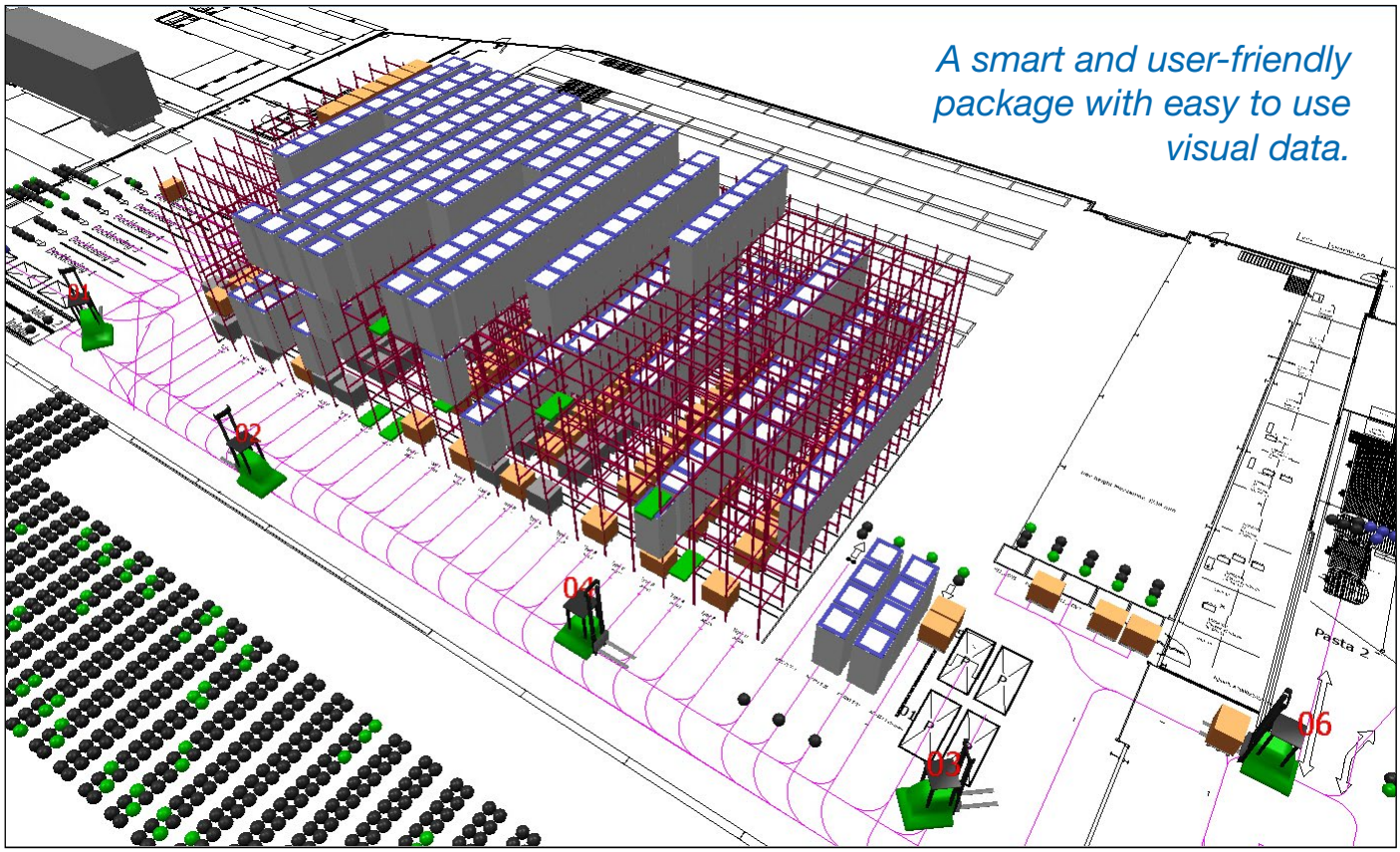
MAX CLIENT

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





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Our brand exclusivity 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.

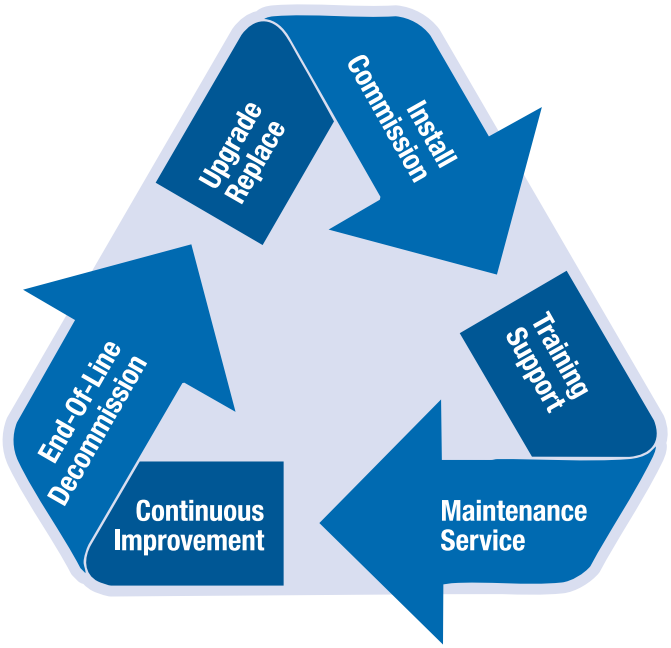
Service Capabilities

Operating in Australia and New Zealand since 1988 Robotic Automation™ 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. Robotic Automation™ 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.

Total Life Cycle Management



MULTI AWARD WINNER

RA Robotic Automation

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

Robotic Automation®

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Distribution and Logistics

Pharma and Healthcare

Shaping the future. Sustainably. Together