

AGVs bring utopian dream to industry



Safety First – AGVs eliminate forklift accidents

You're invited to come see the AGVs in action

99% uptime guaranteed!

Simplot switches to NDC

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Wouldn't it be nice to have your business run on its own while you sleep?

Wouldn't it be nicer still, having the piece of mind knowing that no employees will be hurting themselves, no goods will be damaged while logistics will be handled exactly the way you want them?

A fast growing number of companies are living this utopian dream thanks to automated guided vehicles (AGVs).

AGVs replace traditional forklifts which are expensive to operate and maintain.

The laser-sensored AGVs are pre-programmed to move, stack and even package goods exactly as intended.

NDC is the only Australian manufacturer of AGVs.

Since 1986, we have customised AGVs to help even the largest of companies such as Fairfax, Bega and Masterfoods to achieve maximum efficiency on their warehouse floors.

This edition of "NDC News" features stories from our customers as well as articles that will help you understand how AGVs are built to ensure safety and a strong return on investment.

So welcome to Edition 15. We trust you'll find it of interest.

Tommy Eklof
Managing Director

NDC Technology in world AGVs
PAGE 4

Safety First - AGVs eliminate forklift accidents

Accidents caused by forklifts are well documented. They are not only costly to the injured but also costly to the companies who must pay for the damages.

Studies by Monash University found that accidents caused by forklifts incur average lost times of well over 60 days while financial losses amount of over \$11,000 per incident.

The most common type of forklift injuries are those stemming from people being hit by the vehicles. These are usually caused to the lower extremities (legs, knees, feet), meaning a considerable time off from work.

Other equally serious injuries include falls from the forklifts, caused by incorrect loading, climbing into the vehicles and even collisions.

Tragically, there has even been deaths resulting from forklift accidents- just over a year ago, a young boy in Melbourne was killed when a forklift tipped over onto him at the premises of a tennis racquet strings manufacturer.

These tragedies can be avoided by replacing forklifts with AGVs.

NDC's AGVs are renowned for their safety features. The vehicles have sensors to detect humans within proximity. When the AGV senses human presence from a distance, the vehicle automatically slows down and comes to a complete stop if a person is detected within the vehicle's red safety zone.

NDC invests heavily in these safety features. On average, the company spends \$15,000 on safety equipment installed in their AGVs.

If you're concerned about safety in your warehouse contact us for further information on the many features offered by AGVs.



Demand for automation will increase

Demand for automation technology is on the rise and will be among the largest requirements of industry this century, according to American AGV manufacturer, Transbotics.

Transbotics, a user of NDC's navigation and controls system has done a series of studies on industry development.

It strongly believes that increasing labour costs and a growing shortage of the traditional labour force due to an increasingly aged population will force industry to increase its usage of automation.

Did you know?

- AGV technology is used to steer individual watercrafts at a Japanese amusement park?
- AGVs can load up to 3-4 tonnes worth of goods?
- Some AGVs can lift pallets almost 10m high?
- AGVs can be programmed not just to lift and move but to package goods as well?
- Many AGVs including those by NDC are guided by lasers?
- Modern AGV technology was invented by NDC Sweden in 1962?
- In 1972, car manufacturer, Volvo, was the first to use AGVs (supplied by NDC Sweden)?

Seeing is believing! You're invited to come see the AGVs in action

Australian companies, in their “Australian-ness” have typically been wary of robotics and automated systems.

But the reality is that automated guided vehicles have been around for several decades now.

AGVs are being used around the world to increase efficiencies on factory floors, especially in the automotive, paper, manufacturing and chemical industries where they're relied upon for their around-the-clock efficiencies and safety features.

Companies such as BMW, Caterpillar and Canon have enjoyed strong return on investment by using them in their daily operations.

The best thing for those who are sceptical is to see them in action especially those made in Australia by NDC Technology Australia.

We are not distributors of foreign-made AGVs. We build our AGVs here in Sydney with local engineers dedicated to this specialised craft.

We work with our Australian customers face-to-face, cutting out both the middlemen and the agent fees that would otherwise be passed onto the customer.

We've been building AGVs in Australia since 1986, supplying about 80% of our output to the domestic market.

If you'd like to see our AGVs live in action and to put questions to the engineers, we'd be delighted to demonstrate them within our premises and explain how the technology is being successfully implemented at our client sites.

Come see for yourself, contact us for a live demonstration.



99% uptime guaranteed!



How'd you like a machine with a 99% uptime guarantee?

That's the deal with an NDC AGV thanks to the fact that these machines require almost no maintenance .

How can they be free of maintenance?

It's a fact.

Large companies such as Fairfax move tonnes of pallets every day, thanks to NDC Technology Australia's AGVs.

These automated vehicles move and arrange pallets on the warehouse floor endlessly without the need for manual operators.

Because NDC's AGVs are all computer-based, operated by onboard computers, they have very low maintenance needs which means very low operating costs. Fairfax has been using the same AGVs for 11 years without a glitch.

Their amazing reliability giving an “uptime guarantee” of 99% means they can be relied upon to slave away all through the night if need be; they can work on their own over holiday periods and through consecutive shifts, requiring no human attention.

NDC Technology in world AGVs

We're pleased to report that leading European and American Agv Manufacturers use NDC technology in their products.

It is often said that getting to the top is not nearly as tough as staying there. This is true not just in sports but also in the world of AGVs.

While NDC Technology Australia holds more than 80% of the domestic market share in AGVs we've been able to maintain this top pole position despite competition from overseas manufacturers.

Our success is largely attributed to our client-accessibility. The quality of vehicles

Simplot switches to NDC

Simplot Australia is the country's leader in frozen vegetables, canned vegetables, frozen potatoes, frozen seafood and tomato paste. On average, one Simplot product is consumed daily by every Australian.

You might be more familiar with the brand names because the company owns such famous household brands as Bird's Eye, Leggo's and John West.

Managing such fast moving and popular goods requires a highly sophisticated operation, able to work around the clock if necessary.

Simplot had the right idea a few years ago when it engaged a company to automate its stock management. The company purchased a number of AGVs from overseas.

These AGVs not only failed to work but it involved the installation of physical wires on the factory floor, causing complications and delays.

Simplot was about to discard their AGVs when it approached us with their problem.

We subsequently refurbished these machines and installed laser guided technology to make them function more smartly and accurately. This also eliminated the cumbersome on the floors.

Simplot has been using the NDC converted AGVs since 2002 and as a result has saved money and improved efficiencies.

provided by our world leading AGV specialist engineers is another key contributor.

But how do we ensure we're always ahead of our competitors? What do we do to keep our fingers on the pulse?

NDC's approach to innovation and market leadership is simple. We share our knowledge with only the world's best and the synergies we gain from our partners can only benefit our local market.

NDC Technology Australia has developed strong partnerships with leading manufacturers in Europe and America.. Both continental leaders use NDC navigation and controls.

Finnish company, Rocla Robotruck (Rocla) prides itself on having the leading position in Europe based on their mastery of automated truck systems while in the U.S.A. Transbotics leads the way with their innovative approach.



An adaptive attitude and a proactive approach to the development and application of automation technologies are key synergies we share with our global partners.

Masterfoods retains its Australian operations

Faced with increasing production costs, one of the toughest decisions Masterfoods had to face was whether or not to move its operations to cheaper offshore facilities.

Whilst cheaper warehousing and production would result in better profit margins, the company had concerns about the impact this would have on the quality of their products.

Quality monitoring and assurance standards vary between countries and Masterfoods needs to ensure the quality of its products are never compromised.

Aside from quality concerns, the company also has an intrinsic loyalty to Australia. Founded in Australia in 1926, the brand has been a local icon renowned for its popular condiments, spices, sauces and marinades.

NDC Technology Australia was able to save Masterfoods from moving offshore by installing AGVs to run their warehouse.

We worked with Masterfoods to produce AGVs able to handle the company's warehousing needs.



The vehicles were customised specifically for Masterfoods and are programmed not only to move and arrange goods but also to shrink wrap entire pallets.

As a result of improved efficiencies Masterfoods has reduced its costs and maintains its longstanding tradition as an Australian-operated company.

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