

CILTSA conference to explore future of robots in the warehouse, safe racking

At the upcoming warehouse automation hybrid conference hosted by the Chartered Institute of Logistics and Transport: South Africa (CILTSA), Andy Cooper from European Conveyors and Components will discuss the impact of Autonomous Mobile Robots (AMRs) on the warehousing industry. The use of this innovative technology has set new benchmarks in terms of expectations and results globally and is already yielding significant benefits for companies in South Africa. The conference, to be held on 23 May at The Garden Venue in North Riding, Johannesburg, and online, will shed light on this exciting development in materials handling and technology.



Source: aleksandarlittlewolf via Freepik

In digital technology company Zebra's most recent global Warehouse Vision Study published in 2022, 99 per cent of warehouse operators expected to deploy some form of AMRs in the next five years, even though only 27% say they are using AMRs in their warehouses today.

According to Cooper, AMRs encompass exciting new technologies, bringing about real Return on Investment (ROI) – hence the quick adoption from the industry. AMRs employ a system that has an Artificial Intelligence algorithm; they are constantly learning and can plan journeys independently. Says Cooper: "AMRs use Simultaneous Localisation and Mapping (SLAM), which enables you to build a map and localise your vehicle in that map at the same time. SLAM algorithms allow the vehicle to map out unknown environments."

Numerous benefits

Cooper outlines just some of the benefits of including AMRs in warehouses: increased efficiency; rapid ROI (one to three years), quick deployment (AMRs can go live within three to four months); better utilisation of storage space (by up to 30%), increased picking accuracy (up to 99.9%); and, safer operations.

Contrary to popular belief, automation does not automatically take the place of people and so need not result in job losses. "Many warehouse companies are seeing that AMRs are making warehouse jobs less stressful, as operators' jobs require less walking and a reduced amount of handling and picking," says Cooper. "Indeed, warehouse workers have reported increased productivity and a reduction in the mistakes they make. AMRs have enabled them to advance to new roles and opportunities."

Cooper, who recently travelled to several European countries to explore this new technology, concludes: "Technology is a huge enabler and problem-solver."

Racking inspection and safe racking

Storage and racking systems can pose potential dangers in a warehouse. Even a properly stationed pallet rack does not guarantee that products will not fall from the shelves. Material Handling Equipment (MHE) are one of the most common causes of accidents in warehouses. Leader Nkala, SHERQ Director at leading local racking and shelving company Acrow, will be sharing practical safety tools and tips at the CILTSA warehouse conference on this important topic.

Nkala will share the company's 10 Racking Health and Safety Commandments, highlight the compliance requirements of the Occupational Health and Safety Act (OHSA), and stress the importance of ongoing training.

"Racking and shelving are important assets in any warehouse - helping you make the most of your storage space and optimising the organisation of your products. However, when these are damaged or incorrectly loaded or installed, they can become dangerous," he explains.

The full conference programme includes talks on:

- Warehouse automation: The risks and benefits by Martin Bailey FCILT –Industrial Logistic Systems
- Robots in the warehouse by Andy Cooper managing director: European Conveyors and Components
- How to optimise digital transformation in the warehouse by Munya Husvu CEO: ISB Optimus
- The current challenges we are facing in warehousing preventing automation and how to overcome them by Gerhard van Zyl group operations director: AsimoTech
- Safety and technology in the logistics environment by Annah Ngxeketo CEO: Mamoja Trading and Projects
- Warehouse safety awareness and inspection by Leader Nkala SHERQ director: Acrow

CILTSA's conference is being hosted in collaboration with the Transport Forum. To sign up, register <u>here</u>, or attend online, by clicking <u>here</u>