

THE HUMAN FACTOR AND WAREHOUSE SAFETY

Apart from cost efficiency, an important warehouse management issue is safety. The human factor often causes risks and accidents that are hard to foresee. These can be limited effectively through Elettric 80's custom-made end-of-line automation solutions.

The systems can automate parts, or the whole, of the end-of-line process for clients within the fast-moving consumer-goods sectors, from palletising of finished product, to stretchwrapping of pallets and storage/retrieval in the warehouse. Compared to work environments with manual, diesel-powered fork lift trucks, Freeway environments are noticeably safer due to reliable technology, calmer and free from exhaust fumes. Also, after the first years have passed, and the return on investment is realised, these improvements still remain.

The transports within the warehouse are carried out by Laser Guided Vehicles, LGVs, equipped with advanced safety technology such as PLS (Proximity Laser Scanning) which continuously scans the immediate surrounding area, dividing it into two safety zones. When an obstacle is detected in the outer zone, the LGV slows down. If the obstacle remains and enters the inner zone, the vehicle stops completely, until the obstacle is removed.

Sensors in the vehicles' forks and around the vehicles will furthermore control their exact position when cargo is picked up and unloaded. In addition to the safety provided by this technology, a LGV is never tired or distracted and never speaks on a mobile phone or radio while driving.

In the Freeway[®] Systems, robots palletise the goods in a stable pattern which the robotic stretch wrappers secure, in turn providing very stable pallets. The risk of goods collapsing on the pallet due to internal instability is thereby reduced to a minimum, and such pallets resist even block storage in a safe way, especially when performed by LGVs.

While palletising and wrapping, the robots are well closed behind protective partitions. It is virtually impossible to get too close to their moving parts unintentionally.

In a warehouse with a Freeway System there is little reason to worry about walking through the block storage area, as the LGVs will sense your presence and the perfectly stable pallets will be stacked with a precision of a few centimetres; something that the average fork lift truck driver may not always be able to do.

The system furthermore secures an even material flow. Housekeeping and prestaging in the shipping area, which makes the next day's work smooth and rational, can also be done during the night by the LGVs. This flattens out peaks that cause stress and minimises the required pallet movements in the warehouse during the day, both good factors when it comes to risk reduction.

The Elettric 80 systems can be found worldwide, mainly in three industry sectors; Tissue, Beverage and Food. Among the clients are Carlsberg in Sweden, Heinz in Canada, Ferrero in Italy and Garcia Carrion in Spain.

Details, explanatory films and animations can be found at www.elettric80.com. A complete operational end-of-line chain will be shown at Drinktec in Munich, Sep 14-19, 2009, Hall A6 Stand 321.

For further information, please contact:

Linda Brånell

+46 31 708 60 36

Branell.l@elettric80.it