

Optimizing intralogistics workflows.

The **TECNOFERRARI** revolution



The field of intralogistics is experiencing a deep transformation. This is accompanied by the involvement of such traditional sectors as glass

- a lead player today in the process of technological innovation which, accompanied by Industry 5.0, represents a significant evolution in the production landscape.

Such developments are introducing a more harmonious interaction between automation, artificial intelligence and human operators. The new paradigm goes beyond

In the era of Industry 5.0, artificial intelligence is revolutionising intralogistics, transforming it from a support function to a strategic lever for efficiency and competitiveness. Intelligent AGVs and LGVs not only optimize internal flows and reduce errors, but also adapt in real time to production environments - ensuring safety, flexibility and operational continuity. TecnoFerrari solutions integrate these technologies to enable truly smart logistics, serving people and new industrial models.

mere Industry 4.0 digitisation - aiming to create intelligent, safe and sustainable work environments. Indeed more and more companies in the sector recognise the strategic value of automation in optimising internal flows - improving process quality and responding agilely to new market demands. The adoption of advanced intralogistics solutions not only increases safety while reducing errors. It also ensures more precise control and efficient warehouse management. In a delicate sector such as glass, where handling requires particular attention, automation offers concrete advantages in terms of traceability, operational efficiency and competitiveness.

VALUE PROPOSITION

Within the evolving Industry 5.0 context, where technological innovation is combined with a more human and sustainable vision of the production process, intralogistics plays a central role in the transformation of industrial models. Active since 1966, TecnoFerrari fits perfectly into this vision - offering advanced intralogistics solutions that combine technology, reliability and customisation. Among its most innovative offerings are TGV automatic vehicles (TMR, PALLET, BOX), laser-guided, magnetic or satellite-guided

shuttles powered by lithium batteries, which are capable of operating autonomously in indoor and outdoor industrial environments. Thanks to their versatility, these vehicles can be easily adapted to specific logistics requirements, with load capacities of 15,000 kg.

AGV and LGV systems have made a technological leap forward thanks to advanced technologies such as:

- LiDAR sensors for three-dimensional mapping of the environment;
- Artificial vision that recognises objects, people and signals;
- AI and machine learning,

which allow vehicles to learn and optimise routes in real time;

- IoT and cloud integration, to communicate with business systems - all while intelligently managing logistics flows.

Equipped with the most advanced active and passive safety systems, these vehicles not only optimize material flow. They also ensure a high level of protection for operators. The integration of artificial intelligence allows them to adapt dynamically to the environment, improving operational flexibility and reducing handling times. In addition,





the automatic battery change system ensures operational continuity and maximum efficiency. In the glass industry, where handling requires particular precision and delicacy, intelligent automation becomes a strategic ally in improving batch traceability, reducing

errors and ensuring ever-higher quality standards. In this scenario, TecnoFerrari solutions represent a concrete and competitive response to new market challenges, contributing to the construction of a more resilient, sustainable and people-oriented industry.

PUTTING THE CUSTOMER FIRST

With its considerable experience, the TecnoFerrari team supports the customer in the drafting of a project, acting as a partner to finalise the best technical solution. In addition, it guarantees 24/7 assistance. With a portfolio of over 180 patents, the company offers cutting-edge solutions while ensuring high standards of safety and quality. Each system installed is equipped with a specific control and supervision system, which ensures constant monitoring and complete traceability of goods flows. ■



TECNOFERRARI

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