

5G O-RAN: Insights into Factory Pipelines Protect Labor Safety

Using 5G O-RAN Communication to Develop Digital Twin Maintenance and Inspection of Large Industrial Objects

Storage tanks are often used to store high pressure or corrosive substances, which can easily cause corrosion defects and result in labor safety accidents. Inspections are a demanding and time-consuming task due to labor shortages and difficult terrain conditions. However, multiple sensors and AMR inspections have been integrated using the multi-link capabilities of 5G to improve the quality of the environment and equipment safety management in factories.

Project Results

#Creating a Safe Factory Environment | Inspection AMRs have been equipped with FPV, obstacle avoidance LiDAR technology, and gas sensor modules to lower the risk of labor safety incidents and shorten the time of operations.

#Improved Operational Efficiency | Established centralized management of plant-wide and multi-plant equipment and environment through cloud management, and integrated information to increase inspection frequency and stability.

