

Siemens and EPF: a concentrate of technology at the service of industrial automation

Artificial intelligence and industrial metaverse anticipate what is not there

Location: Carrù (CN), Italy

Highlights:

- AI: guides the robot in finding the grip of the object
- Industrial metaverse: simulation in a photorealistic environment to obtain data to analyze and train AI
- Monitoring of machine performance thanks to a Siemens Industrial Edge



EPF

Founded in 1961, EPF is an Italian company that deals with the development of robotics and industrial automation solutions. The core business is the creation of customized systems for customers in the automotive, food, toys, gadget sectors e pharmaceutical, with a mission to provide flexible and innovative solutions.

Solution/Portfolio

Supata is a robotic island designed to adapt to the most varied plant configurations in different industrial product sectors. Together with EPF, Siemens has developed a software solution that, by integrating into ad hoc hardware, enables the deployment of Artificial Intelligence models. Integration with AI also offers the possibility of inserting new parts into production without reprogramming the machine, which processes them autonomously and sets up automatically. EPF's customers are demanding increasing flexibility. Thanks to simulation in a photorealistic environment, within an industrial metaverse, it is possible to obtain synthetic data and train artificial intelligence, even before the new part exists. The use of AI models means that their integrity must be verified over time. For this reason, it was necessary to implement Siemens' Industrial Edge platform to monitor the performance of the Supata machine, through an industrial app.

Benefits

Today, AI guides the robot in its search for the object's grip, through an optimized process in which algorithms plan the fewest vibrations needed. Creating a simulation in a photorealistic environment, within an industrial metaverse, thanks to the integration with NVIDIA's Omniverse simulation platform, allows the customer to better understand how to solve any problems or improve some production cycles.

"Siemens is no longer just a manufacturer and supplier of components with which to equip our machines, but a valid partner e competent in the development and implementation of innovative solutions»

Franco Filippi, CEO EPF



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