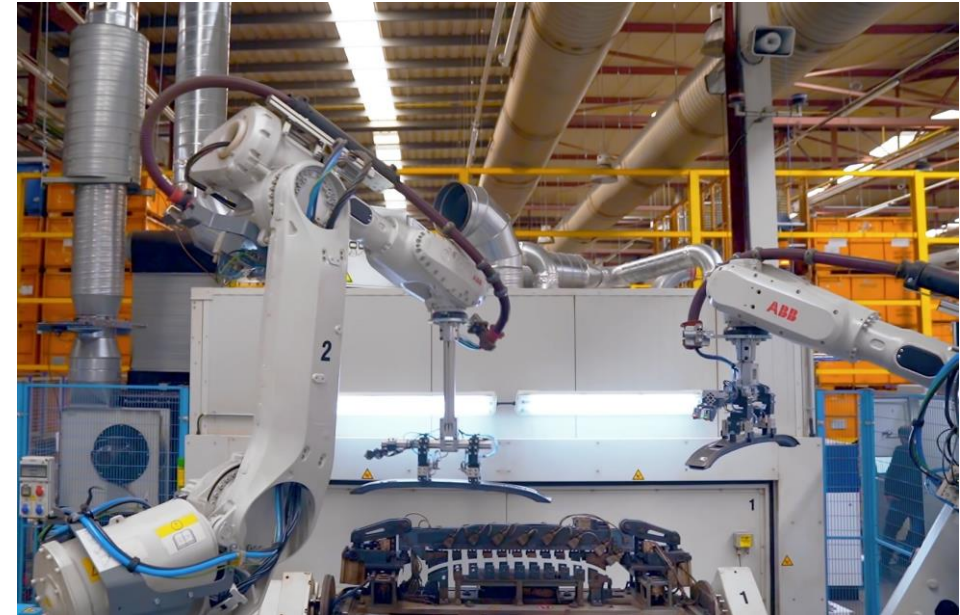# 5G Connected Factory

Objective: to implement the concept of "connected factory" with specific use cases and advance in the "Industry 4.0" paradigm, one of the keys to the development of 5G and Edge Computing.

Description: Telefónica and Gestamp have installed a 5G connected factory use case in one of Gestamp's factories in Barcelona. The project is the first factory digitised with 5G in Spain for industrial processes and consists of virtualising a complete factory and connecting it with 5G to improve the decision-making process. Specifically, Telefónica has connected the physical elements of the plant, such as the robotic welding cells, via 5G to capture and process in real time the data produced by this industrial equipment during its operation, through the near computing, made possible by means of Edge Computing. In this way, the data collected from the different industrial devices are processed closer than if they were processed in the cloud, allowing them to be analysed in real time, in ordet to to make the smart factory concept a reality.

The whole process is completed by connecting the physical elements with a digital twin, a virtual model of the factory's processes, that is fed by the data received via 5G. That makes possible to carry out simulations, optimise the decision-making process and orchestrate the factory's operation.

5G   Uplink Capacity   Edge Computing   Low Latency

Additional reference

Video report

Press release

Telefónica   Gestamp