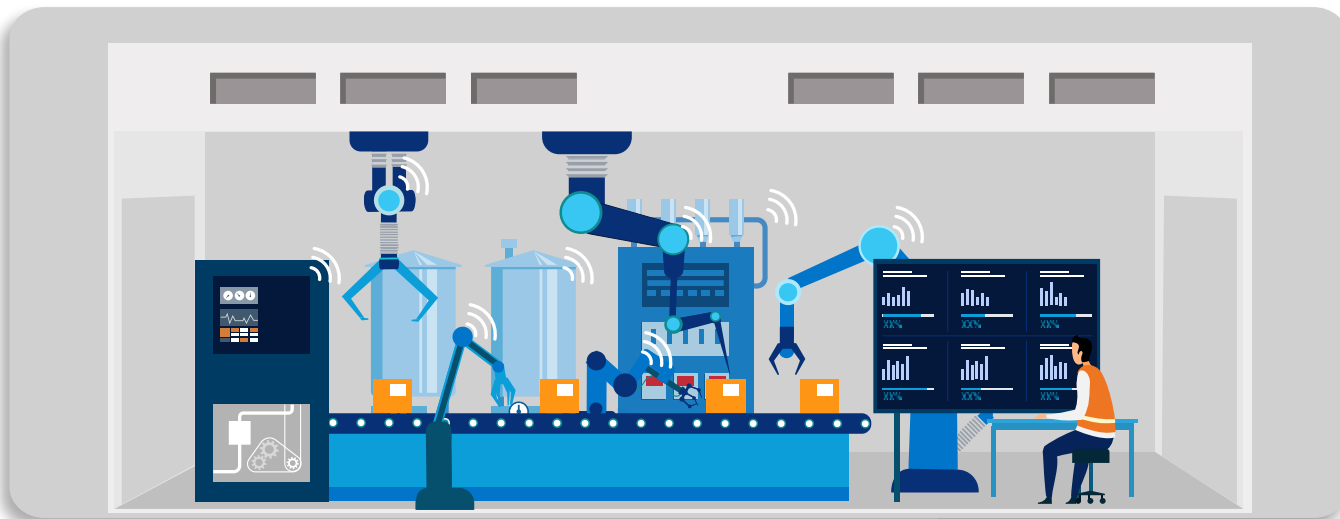


Edge-enabled **real-time process control**

Industry leaders leverage edge to monitor high-precision manufacturing processes and make automatic adjustments in real time, avoiding the significant yield loss and reduced product quality caused by aberrations in assembly.



How real-time process control works

- 1** Mechanical and electrical signals are continuously streamed from high-precision IoT sensors, process data, environmental data and other data sources
- 2** Data is sent to the edge solution to perform advanced analytics and keep the optimal value for different process control variables
- 3** Operational system receives optimized process control variables, adjusting parameters in real time to maximize yield and product quality
- 4** Sensor data and results of analyses are periodically transmitted to the public cloud and used to improve inference models

Potential benefits

Boosting yield by an average of

▶ **3-5%**¹

Improving product quality by

▶ **15-25%**¹

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¹McKinsey manufacturing expert interviews, January 2022

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