

Process Digital Twin for Pharma

Solution overview

The solution* from Atos and Siemens provides pharmaceutical manufacturers with a digital twin of a process in order to analyze process performance and optimize operations and quality, bringing product to market faster.

Connectivity / Data integration (Non-invasive)

- Sensors / Analyzers / Process Analytical Technology (PAT)
- Enterprise systems: ERP, LIMS, ...

Analytics: Online Process and Control Model

- Simulation of the essential part of the production process
- Predictive and Preventive models recommending control actions

Digital Twin Frontend (Web Application)

- Monitor sensor values and process parameters in real time
- 2D/3D visualization of physical process

IoT / Analytics Platform

- Centralized data management, security, regulatory compliance

A virtual and connected model of the essential production process ...

Physical Process



Sensors
Analyzers



Actuators
PLC

Virtual Process



Continuous
+historical data



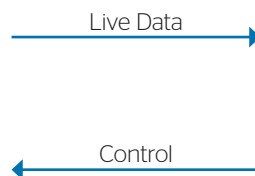
Machine
Learning



Process
Models



Simulation



... is created in an incremental approach for quick time-to-value.

* General availability H2 2020