

Building the Brilliant Factory with iVEDiX

We recently published a [blog post](#) about Industry 4.0, detailing the role that sensors and analytics play in building a smart factory. But, Smart Factories aren't enough. Why not be brilliant? Let's go a little deeper in Industry 4.0 and where we can help manufacturers streamline operations to build the Brilliant Factory.

Algorithms and Analytics Drive Operations in A Smart Factory

A smart factory requires a network of connected devices, sensor-enabled equipment, and systems that are connected. Algorithms and analytics drive nearly every operation. It's all in place to allow manufacturers to track factory variables such as location, status, contaminants, vibration, energy consumption, and conductivity. Manufacturers can install active [RFID tags](#) which can contain sensors to monitor environmental conditions such as temperature, humidity, and motion – all in real time.

Industry 4.0 Design Principles

The number of companies implementing Industry 4.0 design principles is increasing exponentially. These design principles can help manufacturers enact and measure safety objectives, prevent lines from shutting down, improve supply chain management, and streamline other aspects of

manufacturing operations. Here are a few companies that have utilized Industry 4.0 principles to create the brilliant factory.

Harley Davidson

The Harley Davidson company upgraded its assembly line operation with sensors that collect data from the factory floor – every asset is connected, and every step in the production process is tracked in real time. This data is used to pinpoint any bottlenecks, and the company has [sped up](#) product cycles by 10-20%.

Nobilia

Kitchen manufacturer Nobilia has implemented IoT automation and real-time tracking systems in its two factories in Germany. Each custom kitchen product is given a barcode label containing information such as the kitchen components, machine processing steps, and logistical details. Thanks to the company's high-tech tracking system, Nobilia knows exactly where each part is in the production process at all times. It then automatically reroutes parts to another line if one of the lines shuts down. The system allows Nobilia's two plants to produce [approximately](#) 600,000 kitchens per year.

(Note that these are not iVEDiX customers. We are simply highlighting companies we admire who are putting these principles into action.)

iVEDiX Can Help Streamline Manufacturing Operations

Thanks to partnerships with [Litum IoT](#) and [Omni-ID](#), iVEDiX provides a full suite of sub-meter accurate, real-time locating system (RTLS) applications. These applications help companies in a variety of manufacturing roles to optimize operational efficiency and safety. With iVEDiX RTLS solutions,

manufacturers can monitor machine conditions in real time, automate manufacturing processes, and manage multiple factories with a single application. They can turn a Smart Factory into a Brilliant Factory.

The front-end application ([iVEDiX Glass](#)) provides dashboards with interactive visualizations generated from aggregated data. These visualizations are powered by cognitive analytics which applies machine-learning rules and artificial intelligence to detect actionable patterns in data. Cognitive analytics can help manufacturers detect if a machine is down in real time or even predict that a machine will go down in the near future. Traditional analytics simply can't provide the real-time deep insights needed to run today's brilliant factories.

[Reach out](#) today to learn more about how iVEDiX can help manufacturers streamline operations.