

# THINK VISUALIZATION

N3N MAKING NEWS



Learn how N3N helped  
transform a pharmaceutical companies  
manufacturing plant into a Smart Factory.



# SMART PHARMA MANUFACTURING



## THE HUNT for IoT

Hugel, a leading pharmaceutical company which develops and manufactures and markets Botulinum Toxin products, has been growing rapidly year by year as it expands its markets globally.

With its remarkable business growth, Hugel previously ran its entire production, process and management with a good old fashion spreadsheet which could only be accessed in a highly secure area inside the manufacturing facility. This resulted in delayed decision making and massive slow downs in production.

In response to these problems Hugel searched for a solution to improve the companies business operations and manufacturing efficiencies. One of the strategies included applying IoT capabilities to its manufacturing process and factory operations.

Hugel embarked on turning its factory into a IoT Smart Factory which enabled the CIO and domain experts access to all data from the manufacturing process and factory operations in real-time, from anywhere. This provides decision makers direct insights and an easy way to take quick action on issues right away.



# THE N3N SOLUTION

## N3N Pharma Solution

With N3N, Hugel is now able to intelligently monitor systems across its entire manufacturing process by integrating IoT from production to business operations via an intelligent monitoring system in real-time.

Today employees experience direct insights via a holistic view of its production process and are able to access industrial and ERP data, including sensors and real-time video feeds from a **Single-Pane-of-Glass**.

**Now executives and decision makers can make quick, intelligent decisions based on real-time data.**



# N3N DELIVERS GMP



## GMP (Good Manufacturing Practice)

For Hugel N3N significantly reduced costs and improved efficiencies by visualizing the holistic view of Hugel's business value that determines the best quality process of GMP from production to end user.

## GMP DEVIATION MANAGEMENT

After the introduction of N3N Hugel experienced major improvements in GMP deviation management which resulted in massive energy reduction which was achieved through real-time data analysis.

## BENEFITS OF RUNNING N3N

The following are benefits Hugel experienced after installing N3N.

### 1. Innovative faulty LOT reduction by real-time deviation management

- Active prevention by collecting and controlling the fundamental data - such as temperature, humidity, differential pressure for deviation management
- Real-time insights into to issues lead to real-time collaboration amongst key decision makers
- In KRW - \$1.2 Million in the cost reduction effect

### 2. Energy use reduction through practical use of GMP Data

- Fast pinpointing of accurate energy use reduction points
- Actionable insights for making Action Plan of energy reduction by the data

### 3. Exact and fast decision making

- Simple for figuring issues out by accurate real-time data of all field/process
- Understanding the cause of issues through speed and accuracy in reporting system
- Showing integrated data of scattered BMS, CMS, MES, CCTV on a Single-Pane-of-Glass lead to fast and accurate decision making.



# IoT FOR THE PHARMA INDUSTRY



## N3N DELIVERS

The World's #1 IoT Visualization Solution

## HUGEL PHARMACEUTICAL

"Now, we can see the things we haven't seen before with N3N and expect to reduce the Lot Tolerance Percent Defective (LPTD) significantly. We will try to achieve the lots with zero defects with proactive and prompt action planning with N3N."

**Kwon, Soonwoo**  
Executive VP of Hugel

## N3N FOR PHARMA

With N3N for Pharma - pharmaceutical companies are now able to accelerate the introduction of IoT into their Smart Factory environments which leads to better production efficiencies and lowers the cost of production.

N3N for Pharma provides a holistic view of your entire manufacturing and business operations from a Single-Pane-of-Glass which enables decision makers an easy way to make intelligent business decisions.

