

Industrial Machine Learning

"Intelecy is used to navigate in a jungle of data and is pointing us in the right direction.

We use Intelecy to put the data in context and identify correlations. This allow us to improve production-quality."

*-Kjetil Holstad, Production Manager
TINE Dairy Jæren*



Cleaner

- Reduce CO2 emissions
- Reduce resource wastage
- Reduce energy consumption

Reduce greenhouse gas emissions by 40%

Safer

- Early warning detection
- Safer workplace
- Protect critical information

Avoid downtime and accidents

More Efficient

- Reduce downtime
- Increase production efficiency
- Improve quality

Increase production efficiency by 25%

- Empowers the industry workers and engineers
- Provides insight into complex production processes
- Provides easy and fast access to production data
- Automates the building of machine learning algorithms
- Using SCADA data to automatically build an asset model
- Detects anomalies in near real-time
- Enables fast and efficient root-cause analysis
- Integrates easily with your existing industrial control systems and historians.

Why Intelecy?

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You could buy a generic data science platform and hire expensive consultants to build your own custom machine learning algorithms.

Or you can get started immediately by using Intelecy to continuously improve your production and keep and strengthen the experience and production insight in your company.



Cleaner

Compliance and environmental

Many industrial companies have ambitious goals to have more sustainable production. In order to actually meet these goals informed decisions need to be made and changes need to be implemented.

What if you could identify and predict waste of energy or raw material?
What if you could predict leakages, emissions or accidents?

An Intelec customer built a model to **predict the temperature of the wastewater 60 minutes into the future**. This model helped the customer reduce the impact on the local wastewater system and to produce in compliance with national regulations. Next step is to use the predictions to automatically adjust the production to avoid peaks in temperature.



Safer

Clogged filter

Filters are often used to keep larger objects away from a product or a pump. They are often simple in design and requires regular maintenance.

A common mode of operation is to keep steady flow by regulating how much a valve is open. In this customer case there is a filter all the liquids must pass through. When the filter gets clogged the valve will respond by opening more than usual and an anomaly warning gets triggered. **This early warning is triggered a week before it's critical** and corrective actions can be made before an unwanted shutdown.



More efficient

Quality related anomaly detection

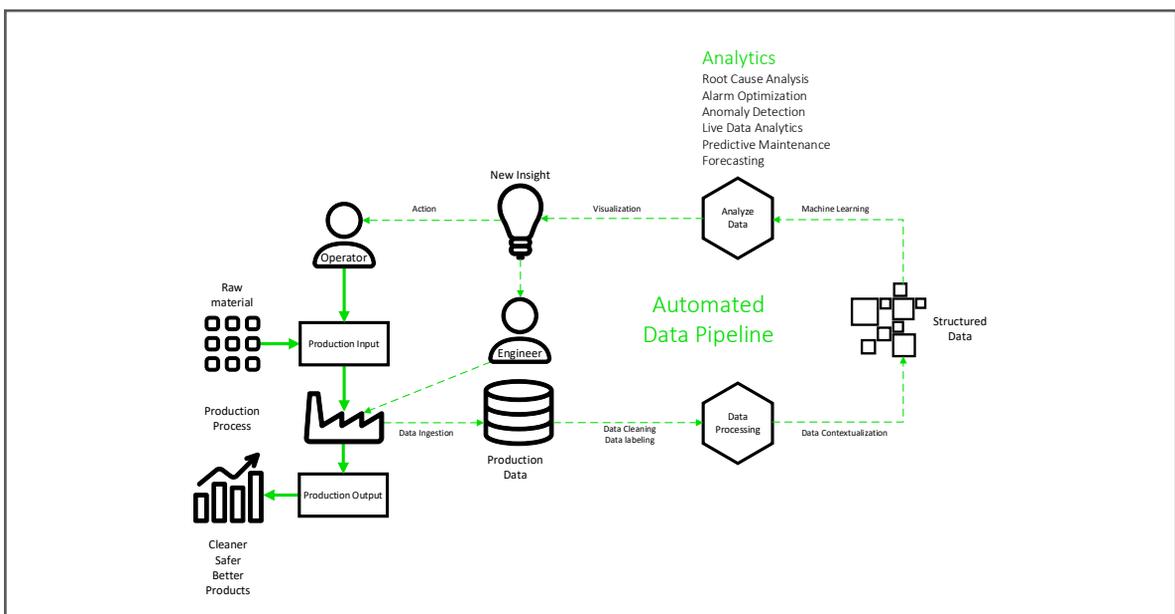
In almost all production sites quality of the produced materials matter a lot. However it's very often the most complex use-cases to solve because it involves several production steps and/or subprocesses, but what if you could monitor each of the subprocess in real-time and get warnings whenever any of these operate out of the "normal" modes of operation!

Using Intelec the customer wanted to identify when the crucial phase of cooling down a liquid is not going as expected, as this may lead to quality issues with the product. Traditional alarm limits will not detect this behavior as all values are within normal operating ranges. The value gained is to adjust in time, or potentially stop the production so they **don't waste energy and time on products that will not meet their quality standards** at an early phase and well before it reach their customers.



Advanced manufacturing through data analytics and intelligent insights

Innovation and advances in technology can help to increase productivity at factories. The advent of Industry 4.0 is visible on the factory floor where sensors have been installed to collect production data. The question now is what to do with all this information. With Intelecy as a tool you will allow the modern factory to integrate existing data acquisition systems and identify bottlenecks in the production process.



Everyone can use AI – no coding or prior AI knowledge is required

Intelecy is making Artificial Intelligence (AI) easy to use and valuable for the process and manufacturing industry.

Fast onboarding of new Customer

New customers onboarded in 1-2 weeks, from on-prem to cloud.

Deep Integration with Industrial Control Systems

- SCADA integration
- MES integration
- DCS integration
- OPC integration

