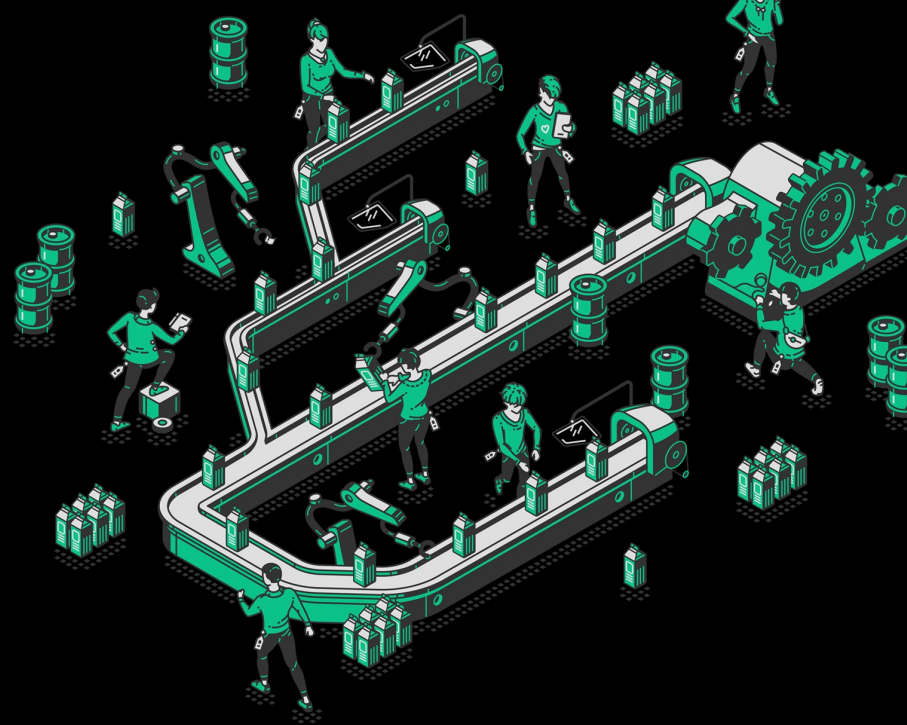


Meet the first **Production Copilot®**



Client Story

Quindi for Food Manufacturing

Dairy production made better, quickly.

YEAR

2023

CLIENT

Italian Market Leader

INDUSTRY

Food, Dairy Products

PRODUCTION LAYOUT

Portioning & Packaging Line

TAGS

SENSE

JUMPSTART



YEAR

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CLIENT

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SENSE

JUMPSTART



The Challenge

Compute OEE and detail its composition.
Hence, understand where and how to intervene to improve it.

Quindi Solved

#SENSE

Deployed Quindi JumpStart - the demo package of Quindi Sense functionalities.

In a few days, the Client received full visibility on machine activity for all nodes of the target production line.

Data analytics helped understand how to improve the line performance, acting on OEE determinants.

With Tangible Results

ON THEIR ECONOMICS

- Quindi JumpStart identified two improvement projects, resulting in overall **+20% OEE**.
- Availability improved by **8,3%** thanks to the reduction of microstops.
- Quality improved by **11,7%** as better line parametrization limited processing waste.

ON THEIR PEOPLE

- Quindi UX/UI reminded operators to declare the causes for machine stops & prioritized most frequent causes for them, reducing errors & stress.
- Anomalies & other key production events were notified in real time, for optimal reactivity.



“

Quindi made it very convenient for us to sort out a doubt:

Are we actually producing as efficiently as we believe?

Our answer was: **“Yes.”**

Their take was: **“Let’s see, it’s quick!”**

Thankfully, we listened to them. Our OEE improved by almost 20%.

Firm’s Production Manager

”

The Client

- Italian dairy products market leader, producing over 65.000 kg/day of dairy food.
- Quindi is deployed inside their 22.000 m² plant in Veneto, where almost 300 people are employed.
- The company is characterized by line production, allowing them to produce a vast and increasing variety of dairy products within the stringent standards of food manufacturing.



The challenge Quindi solved with tangible results

Compute OEE and detail its composition.

Hence, understand where and how to intervene to improve it.

- Some of the Client's portioning & packaging lines were not monitored before our intervention. The Client had no visibility on their performance over time.
- At first, the management was convinced that they had already achieved satisfactory efficiency on these lines and there was no point in detailing it.
- However, the modularity and quickness of Quindi JumpStart made it convenient for them to launch it on a target line and truly find out.



The challenge **Quindi** solved with tangible results

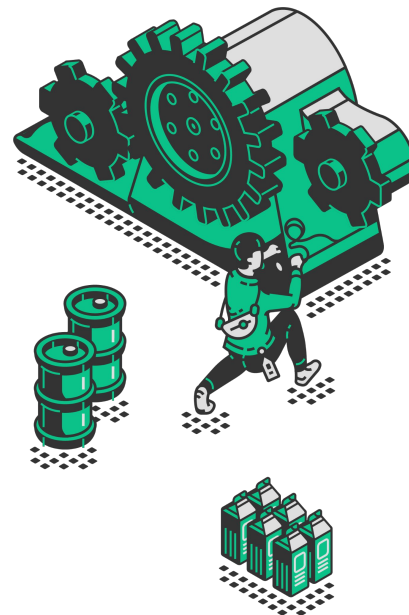
SENSE

We deployed **Quindi JumpStart** on the target line.

→ *What is Quindi JumpStart?*

Quindi JumpStart is the demo package of Quindi Sense functionalities.

In a few days, you achieve real-time insights & analyses on your machines activity, such as the OEE. So you can take data-informed decisions to make your production more efficient.





Deploying Quindi JumpStart

WHERE IS JUMPSTART DEPLOYED?

On max 3 machines or 1 line, either:

- with PLC Fanuc, Modbus, OPCUA, Siemens S7;
- with no native connectivity, hence we deploy an IoT box.

FOR HOW LONG IS JUMPSTART DEPLOYED?

2 weeks. Right after, you will receive:

- a report with the useful evidence JumpStart highlighted;
- an offer for full Quindi deployment.

HOW IS JUMPSTART DEPLOYED?



1. Complete your production assessment in our Quindi Collect app



2. Get a Quindi JumpStart Offer, tailored on the most suitable selection of your machines



3. Head back to Quindi Collect & input the information needed to connect your machines



4. Deploy our touch device & start improving your production

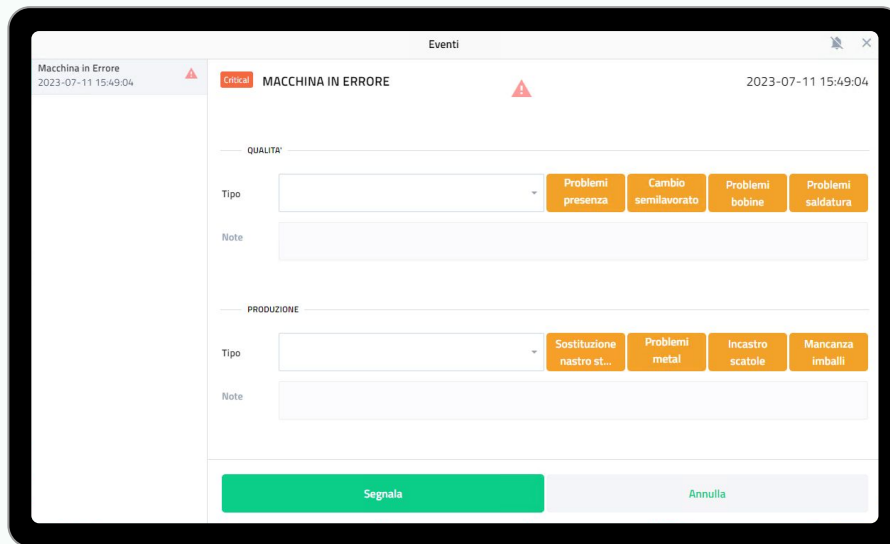
Why Quindi JumpStart

Proactive Data Input Interface

An interface to input information on stop causes that autonomously pops-up when the machine stops. This way, the operator never forgets to declare the required information.

UI Prioritization

The most frequently selected stop causes are automatically presented to the worker as quick options. This way, the time required to input data is minimized and standardization is preserved.



You'll receive our 15,6" touch device.

To be placed alongside machines. Operators use it to consult live data & declare the reasons for machine stoppage.

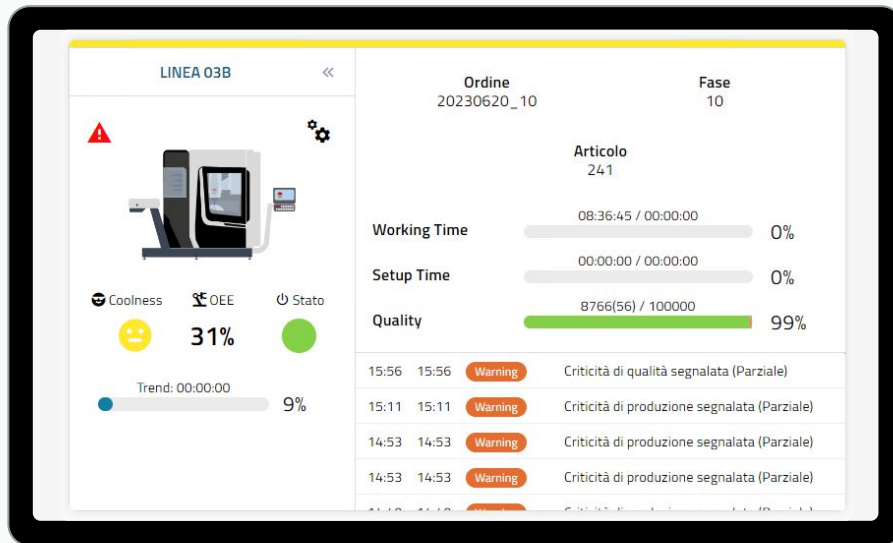
Why Quindi JumpStart

Real-Time Machine Data Analytics

Know in real time whether your machine is on, off, working, idling, producing good or scrap pieces, or in stop (plus any other machine-specific parameter). Access updated analytics on these data, such as the OEE.

Key Event Notifications

The supervisor is notified in real time (via email, mobile, our platform) about key production events, such as machine stops. Also, custom events & notifications can be designed with our no-code event manager.



Why Quindi JumpStart

Deep Machine Analytics

Management & production supervisors benefit from a suite of analytics to understand how to improve:

- The **availability** of the machine, understanding the impact of set-ups, maintenance and other stop causes.
- The production **cycle time** of the machine, with granular detail on any slowdown.
- The **quality management** of the machine, knowing how many product units were discarded over total during any production shift.



How much for Quindi JumpStart

JumpStart is FREE

if you follow on with full Quindi Deployment.

Otherwise, one-time expense, starting at €1.500

**Scale up to the
full offer as SaaS**

starting at

€49

node/month

SaaS (Software-as-a-Service):

- Always get the most updated version of Quindi, with automatic updates for every major and minor release.
- Price varies depending on the number of activated modules.
- Minimum license duration: 1 year

Transparent, easy pricing

- No training costs
- no deployment costs

The challenge Quindi solved with tangible results

On their economics

The analysis of the data collected quickly led to the identification of two improvement projects, whose rollout resulted in an overall **+20% OEE improvement**.

→ **Machine Availability: +8,3%**

Data analysis showed that the line was down 33% of the time due to microstops (<5 min stops).

By training the front line worker on changing her routines, the Client could increase the throughput rate.

→ **Quality: +11,7%**

Data evidenced that the line was producing a huge amount of processing waste.

Further investigation into this allowed to find a better line parametrization, leading to consistent waste reduction.

On their people

Alongside economics, Quindi impacted positively on all people at the firm. Quindi helps operators in the execution of their job, with reminders, feedback and streamlined interactions.

- Workers were reminded to input data & were facilitated when doing so with proactive UI features, lowering their stress levels while increasing data reliability.
- Operators & supervisors were notified about machine anomalies in real time, so they could contribute to a quick reaction to the problem.



Progetto: **Piattaforma di Intelligenza Artificiale per processi manifatturieri più sostenibili ed inclusivi**



Soggetto Attuatore:

QUINDI S.R.L.

CARRETTA S.R.L.

CP SOFTWARE NORD-EST S.R.L.

INTERVENTO REALIZZATO AVVALENDOSI DEL FINANZIAMENTO
PIANO SVILUPPO E COESIONE VENETO - SEZIONE SPECIALE

