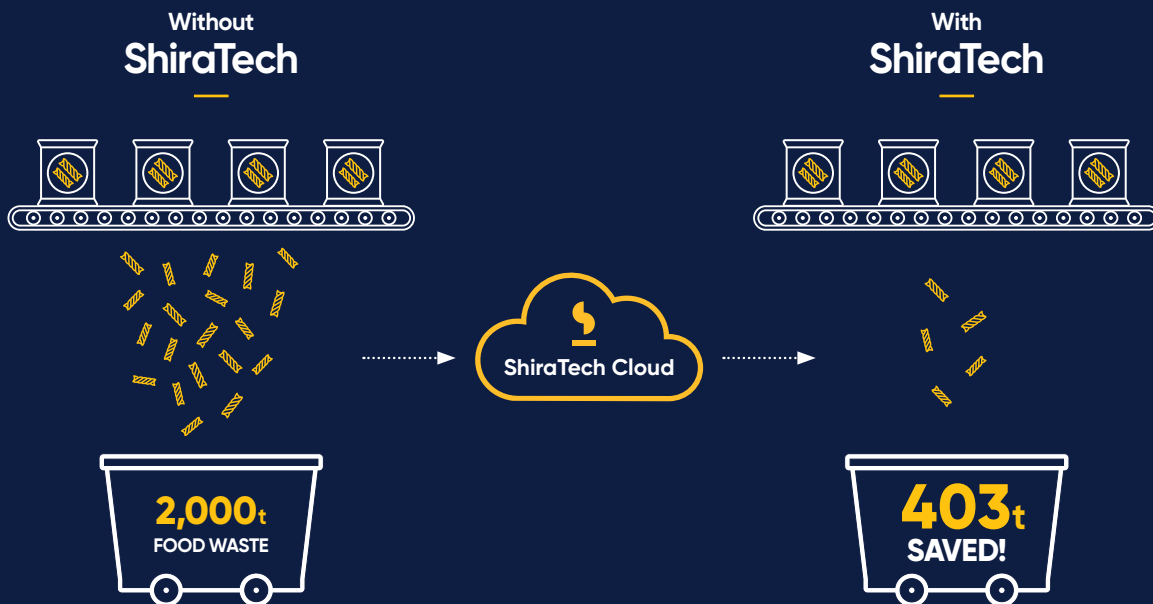# SHIRATECH KNOWTION

Reduce Food Waste and See CO2 Emissions Fall

ShiraTech specializes in AI-based predictive maintenance and condition monitoring technologies. We combine extensive sensor-driven data monitoring with multi-layered artificial intelligence to ensure your equipment operates continuously with maximum efficiency and minimal cost.

Pasta - A Staple For Some, Problem to Others

A global pasta manufacturing company is experiencing an overall downtime of **150 hours**. Downtime costs the company approximately **€4.1M** and **2,000 tons** of wasted food per year.

ShiraTech's mission is to learn from downtime data to reduce unproductive factory time, food waste and CO_2 emissions.

Without ShiraTech

With ShiraTech

ShiraTech Cloud

2,000ₜ FOOD WASTE

403ₜ SAVED!

Food Waste Today

2.3% 2,000 ton per year

=

800,000 Pasta packages

Unplanned **downtime costs** approximately **€4.1M** per year

Food Can Do Good

At ShiraTech, we support our clients to discover ways to reach their goals and objectives. Therefore, if a global pasta manufacturer wants to **positively affect the environment, reduce food waste, and become CO₂ neutral,** ShiraTech has systems in place to deliver results.

The Pasta Pain Points

- Maintain the target screw speed and backflow
- Pasta makers must maintain proper extrusion screw speed
- Ensure the quality of the product stays consistent

AI for the Food and Beverage Industry

The ShiraTech AI model gives us data to turn the negative stats around. Implementing this model into your production line will help you detect your equipment's screw speed, pressure, and temperatures. Not only can we estimate the lifespan of the screw, but we can also calculate the condition of the cutting knife section of the extruder.

How Do We Measure Success?

ShiraTech aims to reduce waste by **20%**
This allows us to minimize the rejects to **1.84%** of the overall production

The Results

Reduced food waste by
403t

Saved CO₂
500t CO₂

CO₂ reduced by
0.46%

With a 25€ fee per ton of CO₂, a total of
€12.500
is saved in the CO₂ fee

Savings of
€932,000