

# **USE CASE**

Industry: Pharmaceutical Technology: WaaS Machine: Reactor Benefits:



😡 Increased asset lifetime



Increased meantime between failures



Improved quality and safety

## Introduction

In 2021, a pharmaceutical customer implemented periodic vibration analysis routes as part of their maintenance strategy. The **monitoring system** aimed to identify any anomalies in the production line machinery promptly.

One such anomaly was detected in a reactor of a continuous production line, a critical component requiring immediate attention.

### Situation

An anomaly was first identified by AI tools on the **I-see platform**, which was later confirmed by an I-care engineer during the daily monitoring. The initial deviation signaled a potential issue within the reactor. The following days, vibrations from the reactor increased, indicating a critical failure looming.

The early detection of this anomaly was due to monitoring and review of data. Recognizing the urgency, the team communicated the issue before it escalated further.



#### Solution

Upon confirming the anomaly, the I-care experts engaged with the maintenance team to assess spare parts availability. It was imperative to ensure that all necessary components were on hand for a prompt resolution. In April, based on the data collected and analyzed, the I-care experts recommended replacing the defective part at the conclusion of the production batch.

This proactive recommendation prompted the maintenance team to schedule an equipment shutdown and intervention. By synchronizing the intervention with the production schedule, downtime was minimized, and operational disruptions were mitigated.

#### Results

At the end, the vibration levels returned to normal, avoiding a potential catastrophic failure in the production line. The timely repair safeguarded the machinery and prevented any adverse impact on product quality and production schedules.

By addressing this issue, the investment in maintenance was considerably lower than the potential costs associated with downtime, repairs, and production losses.