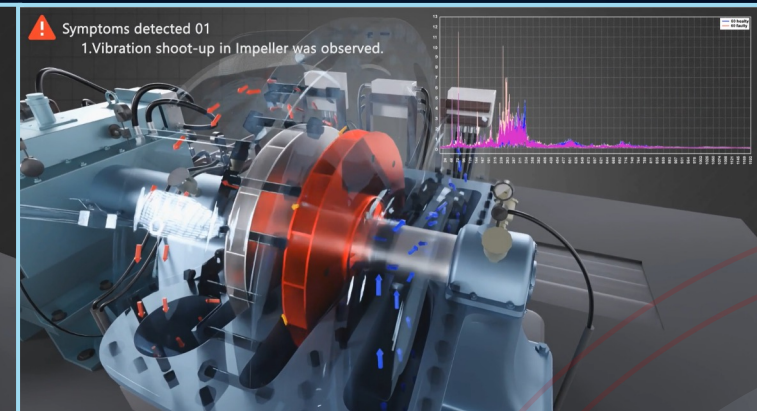
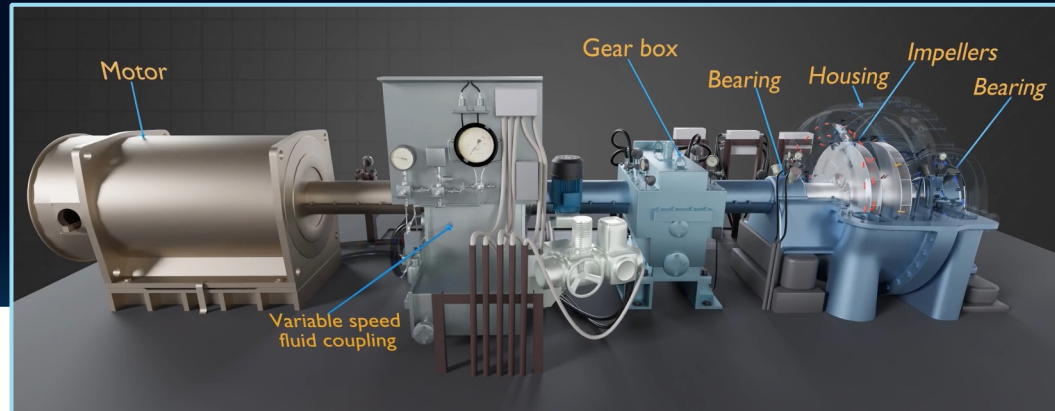


# Optimizing gas exhauster efficiency in coke ovens: A steel manufacturing case study



## Challenges

Our client was grappling with various manufacturing issues that are impacting its operational efficiency and productivity.

- Impeller imbalance through tar deposition on it
- Blower clogging leading to failure and unplanned downtime
- Energy imbalance in the integrated steel plant scenario
- Wastage of high-energy density gas



## Solution

Bosch stepped in to evaluate the client's manufacturing environment.

- We leveraged Bosch's IAPM-led Asset Performance Management (APM) framework, based on ML algorithms, to predict blower clogging, motor looseness, and bearing damages.



## Business outcomes

Our IAPM solution stack was implemented to deliver the following benefits:

- Based on IAPM insights, the root cause was identified and eliminated to understand the cause-and-effect scenario.
- Unplanned downtimes were reduced to result in substantially improved overall equipment effectiveness (OEE).
- Harvesting one innovation for multiple deployments, templated solutions were adopted for easy scaling.