

Use Case Examples

How Factories Have Implemented and
Benefited from Condition Monitoring



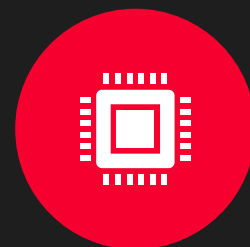
FMCG



Food & Beverage



Steel



Semiconductor



FMCG & Chemical Industry:

Production Line - Motor Pumps



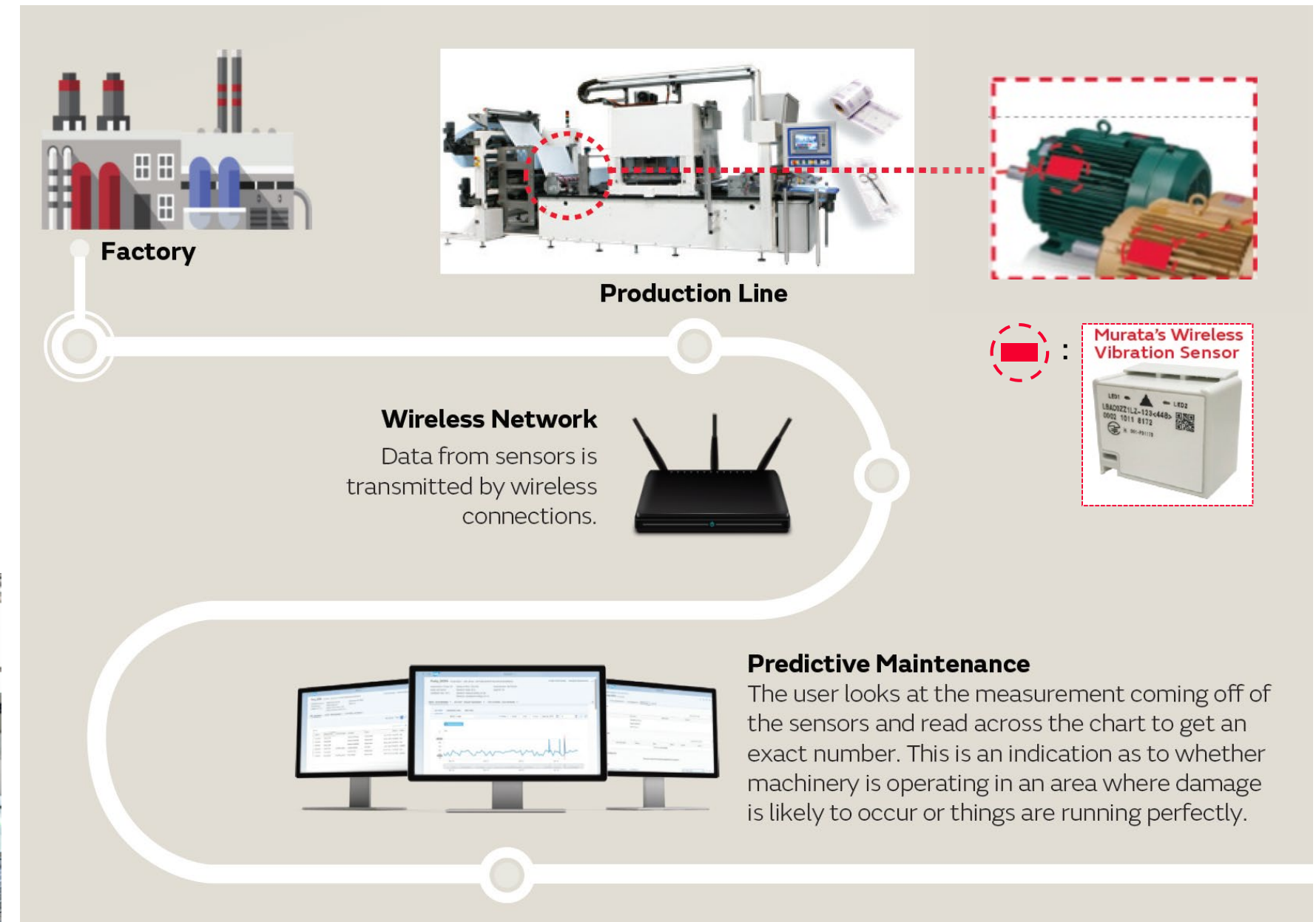
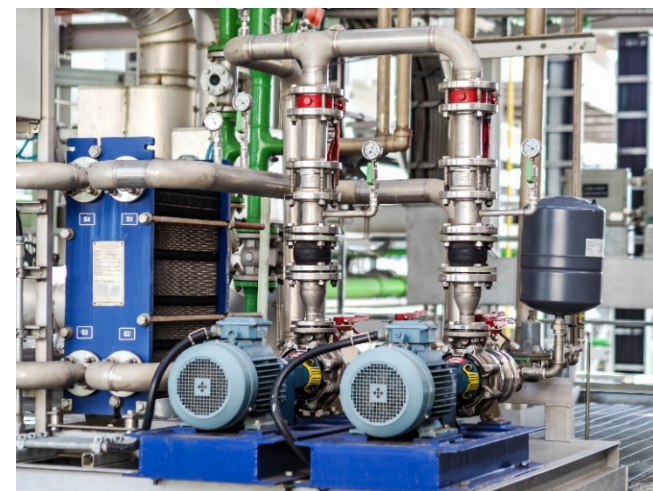
Problem

- When the rotating flow is interrupted, **excessive noise and shaking signals** a problem or deterioration in the machinery
- Issues such as unbalance, misalignment, sleeve-bearing problems, resonance issues, and over-heating, etc. could **cause motor failure**



Solution

Wireless vibration sensor nodes can monitor the motors and bearings remotely, reduce time on on-site visit check, filling, organizing and searching for paper documents.



**To arrange maintenance schedule in advance,
increase production stability, productivity and cost saving.**

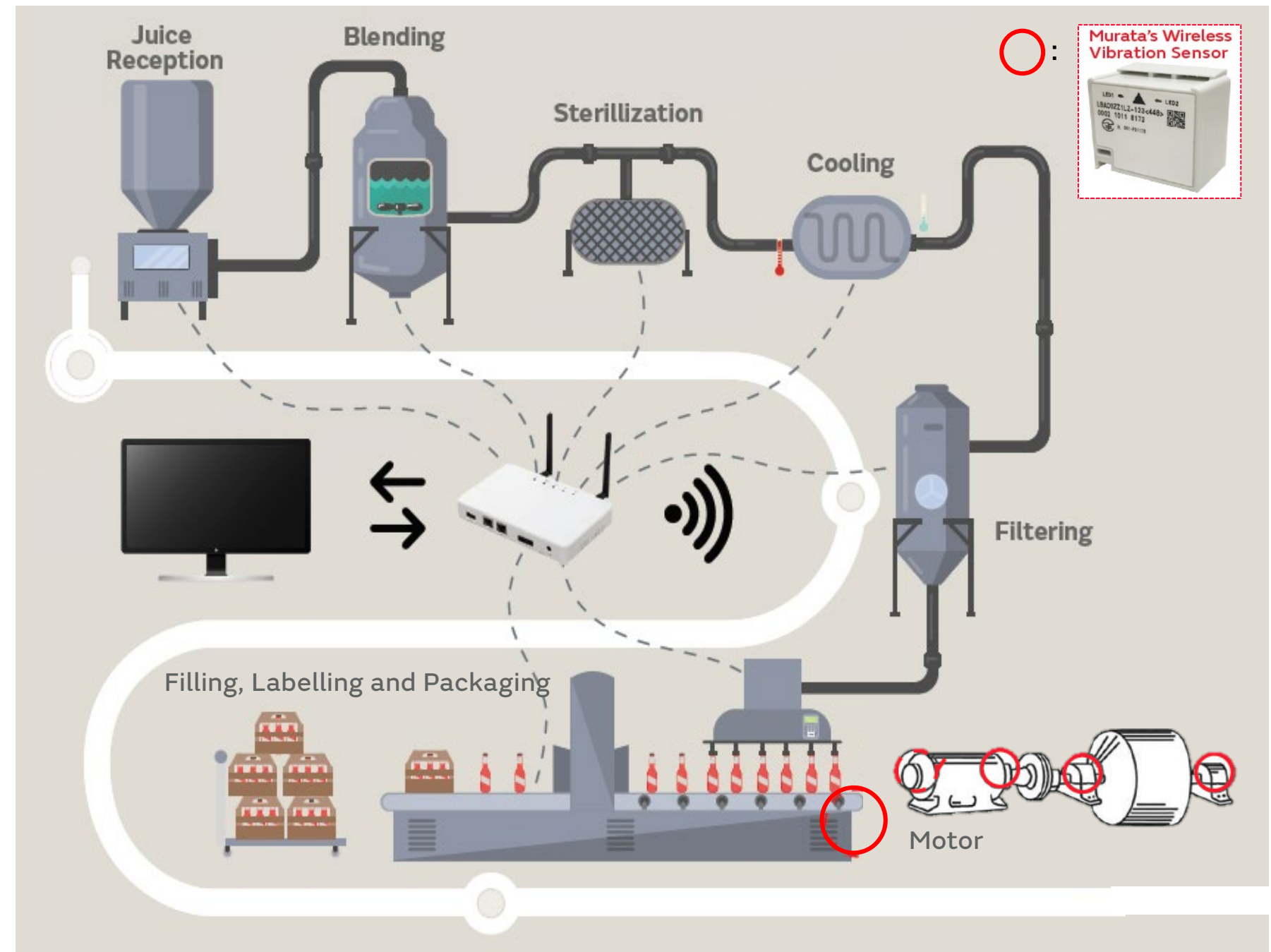
Beverage Company: Bottle Filling/ Labelling/ Packaging Machine

Problem

- When the **machines overheat**, it will automatically shutdown and require replacement of new motors
- Operations of the entire production line will be affected and **cause productivity loss and increasing maintenance cost**

Solution

Wireless vibration sensor nodes and current sensors are installed to monitor the motor and bearing of machines.



To arrange maintenance schedule plan in advance,
improve machine efficiency, increase productivity, cost and energy saving.

Steel Manufacturing Industry: Hot Rolling Mill Process



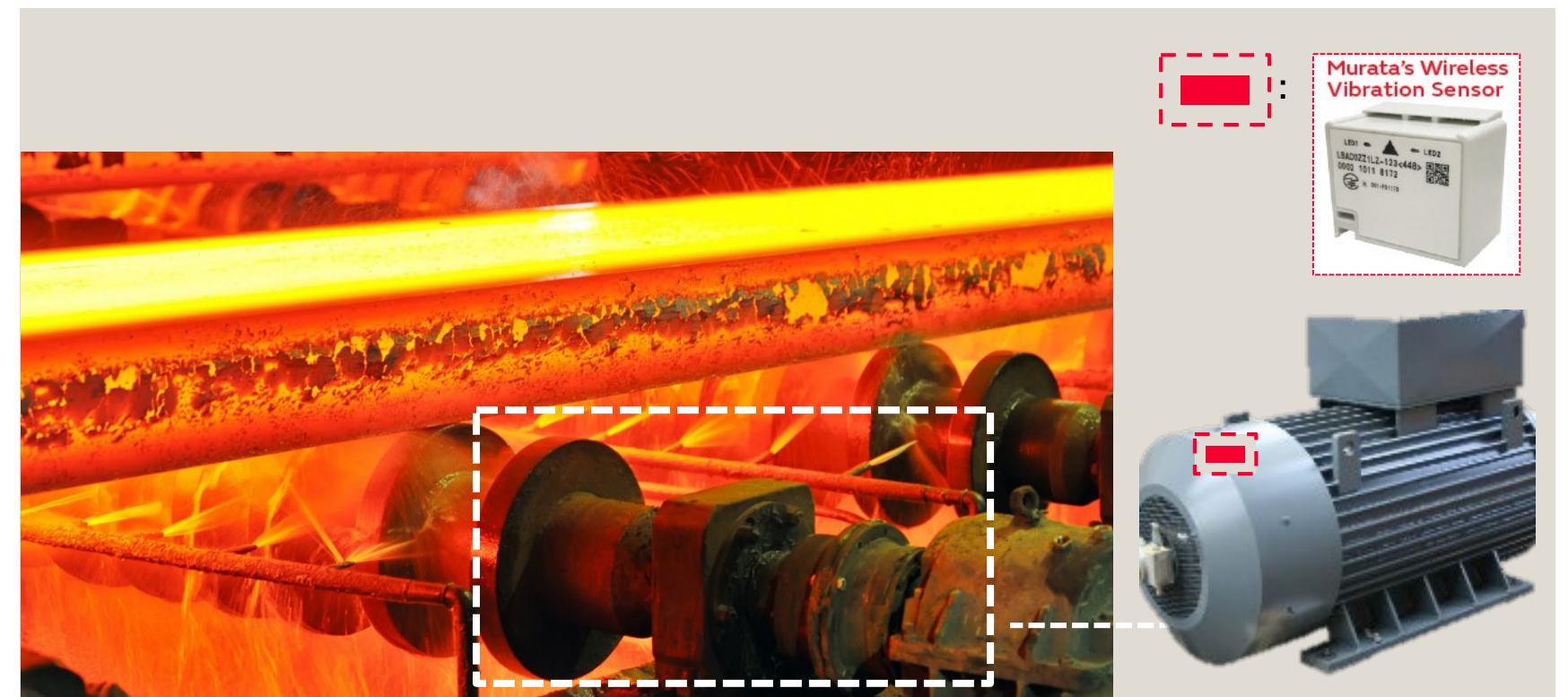
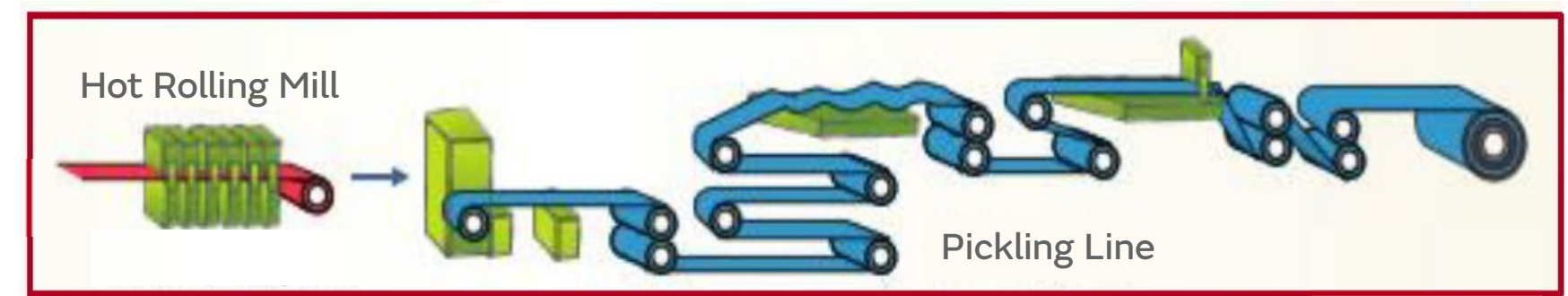
Problem

- **Aging machines breakdown** resulted to the rise in maintenance cost
- Concerned on **workers safety** to access dangerous site especially the hot mill coil process



Solution

Wireless vibration sensor nodes can monitor the motors of the rotating machines in hot and cold rolling mill remotely.



To improve maintenance efficiency, reduce loss and increase worker's safety.

Semiconductor Factory:

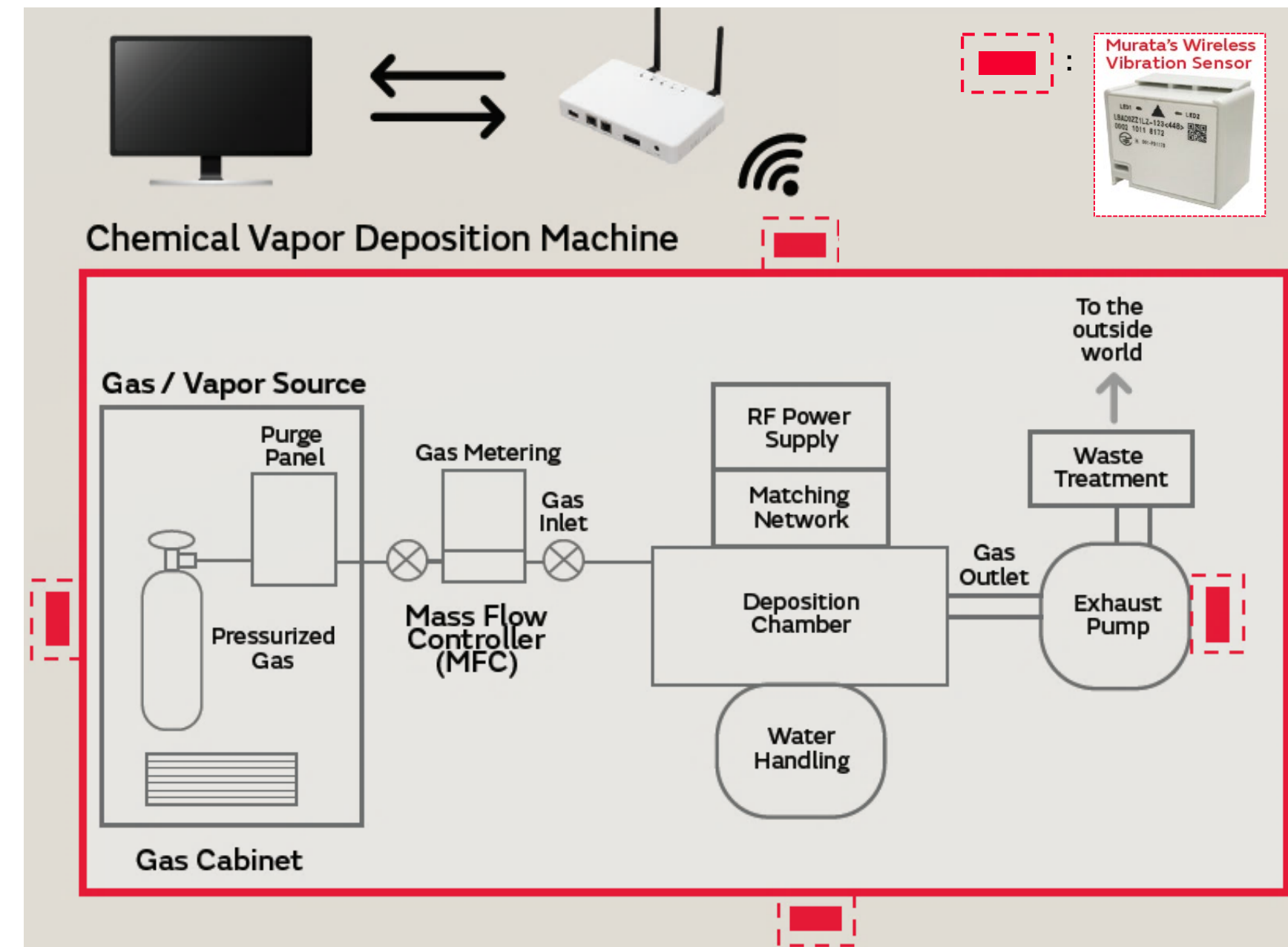
Chemical Vapor Deposition (CVD) Process

Problem

- **Abnormal noises** detected in the process line
- Mix of new and old machines have resulted in the **inconsistency of the quality of products** produced

Solution

Wireless vibration sensor nodes are mounted on the machine to monitor acceleration and surface temperature.



To arrange maintenance schedule plan in advance,
improve machine efficiency and more stable production quality.