

# Oizom monitoring harmful gases at Epson India's manufacturing operations

## *Our Client*

Our client, Epson India Pvt Ltd., is a renowned printer manufacturing company worldwide that serves the needs of homes, educational institutes, businesses, and commercial enterprises. Whether you need to print documents, photos, or large-scale designs, Epson India likely has a printer to suit everyone's needs. They are part of a bigger company called Epson, which is based in Japan. In today's competitive market, they have earned an enviable reputation for providing quality and value-added products and services. They also produce projectors, scanners, and label printers for various organizational purposes.



## *The Challenge*

The manufacturing process at Epson India involves the use of chemicals and materials that release harmful gases, such as SO<sub>2</sub>, CO<sub>2</sub>, NO<sub>2</sub>, and H<sub>2</sub>S, inside the industry. The presence of SO<sub>2</sub> has led to various issues, including equipment damage, particularly to electronic components through sulfation, and also harm to on-duty workers. Moreover, maintaining compliance with stringent air quality standards the World Health Organization (WHO) set was a critical concern for them.

To address these challenges, they were looking for a reliable air quality monitoring solution that could provide accurate real-time data on harmful gases, along with some meteorological parameters like temperature, humidity, and pressure. They required a device that could help them pinpoint sources and monitor all the essential parameters to take corrective actions and ensure efficiency in printer manufacturing processes.

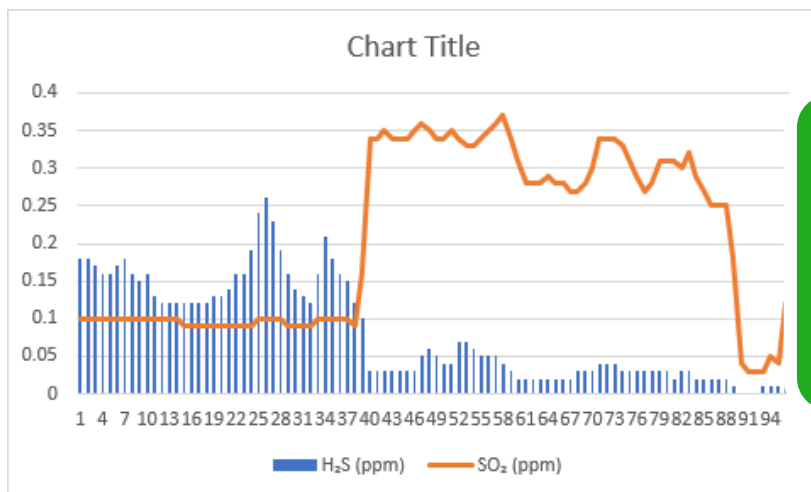
## The Solution

To address and solve the issues, they deployed Odosense Smart in their industry. Deploying this odor monitoring device allowed them to measure all the parameters in real-time accurately and to identify potential damage caused by harmful gases and sulfation on electronic cards. Oizom's patented e-breathing technology, inspired by the human lung, helped them to ensure exceptional accuracy in air quality measurements. To provide accurate air quality data, our devices undergo a rigorous three-step calibration process, including zero-gas calibration, spot calibration, and co-location calibration. Moreover, Oizom's suction-and-exhaust system isolates the air sample, increasing accuracy by 13%. They receive daily reports of device data from the Enviozom software, which helps them ensure their compliance with WHO regulations.

## The Result

By deploying Odosense Smart, they were able to reduce SO<sub>2</sub> concentrations to below the World Health Organization's (WHO) 24-hour limit of 40 micrograms per cubic meter (0.015 ppm). They successfully achieved compliance with WHO air quality standards for SO<sub>2</sub>, demonstrating their commitment to environmental responsibility and employee well-being. This achievement not only ensures a healthier work environment but also prevents costly equipment failures by identifying and addressing the toxic gas emissions from their printing machines.

With the data they are receiving from the device, they are able to determine how good the air quality is within their industries. They were also able to prevent costly equipment damage and optimize production efficiency. The daily reports generated by Envizom advanced environmental monitoring software provide valuable insights into air quality trends, enabling Epson India to implement targeted mitigation strategies and improve the overall environment.



### Installation Details

1 Unit of  
Odosense Smart

Oizom is a company specializing in environmental monitoring solutions. They offer products to monitor air quality, weather conditions, and other environmental factors. Utilizing advanced sensor technology and data analytics, Oizom aims to provide actionable insights for construction, industrial compliance, and community awareness. Their solutions can be applied in various sectors including government, industries, and community initiatives.