

# Monitoring real-time dust emission at Seco Tools India Pvt. Ltd. with Dustroid.

## *Our Client*

Seco Tools India Private Limited is a renowned manufacturer and supplier of cutting tools based in Pune, India. As a subsidiary of the global Seco Tools Group Sweden, they offer a wide range of products and solutions to cater to the diverse needs of the metalworking industry. Seco specializes in producing high-quality carbide cutting tools, including inserts, drills, and milling cutters. They offer a comprehensive range of tool holders designed to ensure precise and efficient machining operations. Their team of experts provides application engineering support to help customers select the right tools and optimize their machining processes. Seco maintains strict quality control measures to ensure its products meet the highest standards. The company actively supports the United Nations' Sustainable Development Goals (SDGs), working diligently to reduce waste, improve process efficiency, and create a safe and inclusive workplace for its global workforce.



## *The Challenge*

Seco Tools faced significant challenges in maintaining air quality compliance, especially given the high levels of dust generated during manufacturing processes. Ensuring adherence to the guidelines set by the regulatory bodies was crucial to avoid penalties and safeguard the health of their workers. Their specific needs included a solution that could monitor various dust particle sizes such as PM1, PM2.5, PM10, and PM100 (TSP), along with parameters like temperature, humidity, pressure, and noise levels. They needed an accurate, lightweight, and durable system capable of real-time monitoring and providing air quality reports whenever they needed.

### *The Solution*

Our partner StrataEnviro Pvt. Ltd. installed Dustroid Smart, a highly accurate dust monitoring device, at Seco Tools' manufacturing facility to address these challenges. The Dustroid is an MCERTS-certified dust monitoring device, ensuring that the data provides accurate real-time data, which helps industries adhere to stringent quality standards. It is lightweight, compact, and housed in an IP66-rated enclosure, making it ideal for enduring harsh weather conditions. The device provides real-time monitoring of dust particles like PM1, PM2.5, PM10, and PM100 (TSP), as well as ambient noise levels, temperature, and humidity.

The calibration of the Dustroid system follows the guidelines set by the United States Environmental Protection Agency (USEPA), ensuring accuracy and reliability. This includes co-location with reference stations (housing BAM-1020 for PM (-  $\beta$ -ray Attenuation) calibration and calibration data verification by ATIRA, building trust in the data provided. Additionally, the Dustroid Smart Custom solution is integrated with Oizom's software platform, Envizom, which delivers real-time data updates every 5 minutes, ensuring that Seco Tools always has access to the latest air quality information.



### *The Result*

The installation of Oizom's Dustroid Smart Custom substantially improved air quality within Seco Tools' facility. With accurate and continuous monitoring, they are now complying with the air quality guidelines set by the Pune Municipal Corporation, helping them avoid potential fines and long-term costs. Monitoring air quality at the facility helps them maintain optimal air quality at the manufacturing site, reducing exposure to harmful dust levels to keep workers secure and healthy.

Seco Tools benefits from real-time data availability, with updates every 5 minutes through the Envizom platform. This enables timely decision-making and proactive responses to air quality issues. The ability to easily download reports through Envizom for specified time intervals allows them to analyze environmental data trends and manage their processes accordingly. By choosing Oizom's Dustroid Smart Custom, Seco Tools India has achieved compliance and created a safer, healthier work environment. The company continues to focus on its mission of sustainable manufacturing while leveraging innovative air quality monitoring technology to maintain high worker safety standards and environmental responsibility.

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.