

Mine site health and safety

Optimize airflow and ventilation to ensure quality working conditions



Use automated ventilation control to provide a safe environment for the workforce inside your mine.

Know the real-time status of airflow and gas levels throughout your mine to proactively prevent hazards and emergency incidents. Use Howden Ventsim™ CONTROL to optimize your ventilation network and ensure compliance with ventilation standards.

Ensure the system is designed for safety

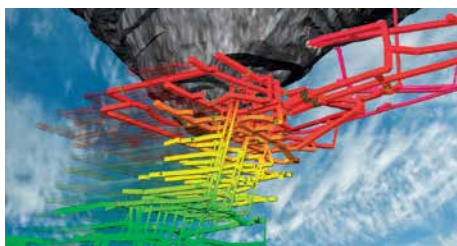
Howden mine ventilation engineers will ensure that the Ventsim Airflow and Ventilation System in your mine is designed for safety and regulatory compliance

Sensors, fans, and airflow regulators will be strategically located to provide optimal airflow and ventilation

Detect discrepancies that might otherwise go unnoticed

Monitor gases and airflow in real time throughout the mine, including actual toxic gas levels. For site-specific applications, over 20 different gases can be monitored according to your mines' needs.

Detect discrepancies due to air leakage from bulkheads or curtains rupturing from blasts, or if ventilation doors are left open



Dilute DPM and blast gases away from active areas

Clear blast gases more rapidly with pre-programmed blast ventilation protocols that leverage the air monitoring network

Confirm safe return-to-work conditions post-blast, and modulate the ventilation system to quickly dilute diesel particulate matter (DPM) by increasing airflow and directing more fresh air into the most active work areas

Proactively increase airflow as LHD and high horsepower vehicle activity increases, without requiring personnel to manually turn fans on in the area

Reduce mine congestion and improve data management

Reduce required workers in active areas by using remote monitoring and control to eliminate the need for people to manually take readings and turn fans on and off

Survey, monitor, and automatically log air quality remotely to comply with local mine health and safety regulations, without requiring personnel to take manual readings



For further information contact:

Howden
1a Booysens Road
Johannesburg
2091
South Africa

Tel: +27 11 240 4000
Email: mining@howden.co.za
Web: www.howden.com

Communicate essential information

Display important safety information throughout the site on electronic billboards

Show any information available, such as gas levels, air flow volume, number of people at the location, and diesel status

Instantly provide blast status updates and any emergency messages

Monitor people and vehicles

Know where everyone is by integrating Ventsim CONTROL with any tracking system or motion sensors to monitor the location of personnel and vehicles

Meet underground air quality requirements for personnel and equipment based on actual status and location



Trust the experts

Howden has installed ventilation equipment in the mines of every major mining company, in all of the most significant mining areas in the world. Our fans operate in permanently frozen sites north of the Arctic Circle, and in near-equatorial conditions in Africa and South America. We have supplied fans to some of the deepest mines on Earth. Howden engineering and technology has been tested and proven in the most demanding circumstances.

“Remote monitoring is much safer and more effective. The system will detect any discrepancies if there’s a leak, and reducing the number of people walking around makes a much safer environment.”

Charles Gagnon
Howden Mine Ventilation Engineer.

“With Ventsim CONTROL, we can program safe levels into the software and let the system ensure that airflow and ventilation are regulated to be compliant. Sensor readings show real-time levels, so there are no surprises.”

Hugo Dello Sbarba
Howden Mine Ventilation Engineer.

This service is part of TMVS – Total Mine Ventilation Solutions, the integrated suite of expertise, products and services that provides efficiency and safety across your mine operations.