

Air Products' 17025 laboratory accreditation

Ntombifuthi Taiwe and Thapelo Mogapi from Air Products have been instrumental in obtaining ISO/IEC 17025:2017 accreditation for the Kempton park laboratory, ensuring that Air Products' gases meet specifications and the laboratory is competently run.

Air Products is recognised for maintaining high safety and quality standards. The latest ISO/IEC 17025:2017 accreditation, obtained from the South African National Accreditation System (SANAS), is a testament to the company's commitment to ensuring compliance with the highest levels of testing and calibration in its laboratories. Although it is referred to as an accreditation, it is the minimum standard to which all Air Products' laboratories are expected to operate.

Air Products Laboratories

The company runs two central laboratories in South Africa, one in Vanderbijlpark, where the first liquid oxygen/liquid nitrogen plant was commissioned back in 1971, and a second in Kempton Park, where the company manufactures and supplies industrial gases, such as oxygen, nitrogen, argon and hydrogen, and specialty blends, such as those used for welding and cutting.

In addition, Air Products has smaller satellite laboratories at its distribution depots in Cape Town, Pinetown in KZN, and Gqeberha, which support the automotive, manufacturing, and diversified food industries of the Eastern Cape.

In terms of the services provided, these laboratories ensure that Air Products' gases meet the purity requirements and contamination limit specifications. All the gases and mixtures manufactured by the company must be analysed, which means all testing equipment must be routinely calibrated.

Air Products also offers a gas-blending service for any chemically viable gas mixtures, including speciality welding and cutting mixtures, as well as modified atmospheric packaging (MAP) gases for extending the shelf life of fresh food.

For this testing, these Air Products facilities are typically equipped with gas chromatographs featuring various detectors, gas analyser instruments for specific gases, moisture analysers, and other standard contamination sensors.

Laboratory Approvals

For the Kempton Park laboratory, ISO 17025 Accreditation has now been added to Air Products' extensive list of approvals,

accreditations and certifications, which include ISO 9001 (Quality), ISO 45001 (Health and Safety), ISO 14001 (Environment) and FSSC 22000 (Food Safety). The newly acquired Laboratory accreditation provides numerous benefits for the company's laboratories, including enhanced credibility, increased customer confidence, and improved operational efficiency. In essence, the accreditation's core focus is to establish and maintain a reliable and competent laboratory.

Developed by the International Organisation for Standardisation (ISO), the ISO 17025 accreditation for Laboratories is a globally recognised standard for testing and calibration laboratories. It provides a framework for laboratories to demonstrate their competence, impartiality and consistent operation, ensuring the accuracy and reliability of their results.

According to Thapelo Mogapi, Specialty Gas Manager at Air Products, preparation for the accreditation application process began in 2016. The project formally started in October 2018, following extensive planning, and was completed in early 2025.

He explains the process in further detail: "The application started with training to understand the standard. A process followed this to ensure the technical competency of all our laboratory personnel, the accuracy of calibration for the equipment, and the traceability of measurements, including validation test methods.

"The accreditation is essentially the implementation of a quality management system to ensure that specific technical requirements are met. It is valid for a period of five years, with periodic audits conducted by an accredited body," says Mogapi.

Mogapi concludes that producing reliable, accurate results is essential to building trust with customers and regulatory bodies. "This 17025 accreditation,



Ntombifuthi Taiwe and Thapelo Mogapi from Air Products played a crucial role in obtaining the ISO/IEC 17025:2017 accreditation.



Thapelo Mogapi, Specialty Gas Manager at Air Products' laboratory in Kempton Park.

combined with Air Products' high levels of customer service, will certainly play a crucial role in further enhancing the company's competitiveness and position as a market leader," he says.

Air Products positively impacts consumers' lives every day, serving customers across a wide range of industries, including food and beverage, mining, petrochemicals, primary metal and steel manufacturers, welding and cutting, and laboratory applications.

Founded in 1969, Air Products South Africa has established a reputation for its innovative culture, operational excellence, and commitment to safety, quality, and the environment. In addition, the company aims to continue its growth and market position in the Southern African region.

www.airproducts.co.za