FROM PROCUREMENT TO DELIVERY:

GROWING O2AFRICA AND BUILDING SOUTH AFRICA'S MEDICAL OXYGEN FUTURE LOCALLY

O2AFRICA
TURNKEY GAS SOLUTIONS



A business's growth becomes tangible when you can visit the sites, meet the people responsible for the equipment and see the systems at work. For O2Africa, five hospitals across the Western Cape now provide that evidence. At Beaufort West, Vredendal, Wesfleur, Brooklyn Chest and Ceres hospitals, a completed medical oxygen programme marks an important step in our development as a South African manufacturer.

Across these five facilities, O2Africa has supplied, installed, commissioned and handed over 10 Pressure Swing Adsorption (PSA) medical oxygen plants, with two plants at each hospital. Funded by the Global Fund, the project brings together the capabilities we have been working to build: local engineering, manufacturing, project delivery and ongoing technical support.

The installations tell a story about healthcare infrastructure. They also tell a story about a growing business taking on greater responsibility. For a relatively young manufacturer, completing a programme of this scope is a meaningful milestone. The next chapter is already under way, supporting the equipment through its working life.

FROM LOCAL AMBITION TO VISIBLE DELIVERY

O2Africa's growth over the past few years has been shaped by a clear belief: South Africa has the engineering skills and manufacturing capability to play a greater role in producing its own gas-generation systems. In September 2024, our article on advancing oxygen production described the role of locally supported PSA technology in addressing oxygen supply challenges. The Western Cape project gives that ambition a concrete expression, with completed installations across five public healthcare facilities. Read our September 2024 article.



Growth in this field means much more than adding another product to a catalogue. It means being able to translate a technical specification into manufactured equipment, coordinate delivery across several locations and remain responsible once the systems are running. Each stage places different demands on a business, from engineering and assembly to installation and maintenance.

These five hospital installations show that capability coming together. They form part of one programme, but each is a physical example of what O2Africa can deliver. Together, they demonstrate our ability to take a common PSA solution beyond the factory and into a wider network of working healthcare sites.

WHY THIS MEDICAL OXYGEN PROJECT MATTERS

The project sits within a wider conversation about South Africa's medical oxygen infrastructure. In July 2025, Gasworld examined the challenges surrounding the procurement of PSA oxygen plants following the collapse of an earlier national programme. The question raised was whether South Africa could move beyond procurement failures and deliver the oxygen infrastructure its hospitals needed.

For O2Africa, the completed Western Cape project provides a practical contribution to that answer. The Global Fund-supported programme followed different procurement routes. While the national programme was managed through the Development Bank of Southern Africa (DBSA), the Western Cape Government undertook a separate procurement process through the Institute of Health Programs & Systems (IHPS).

O2Africa was successful in the Western Cape tender, which called for 10 PSA medical oxygen plants across five hospitals. The specification covered demanding technical requirements and placed clear emphasis on ongoing local support. It recognised that the quality of an oxygen project depends on both the equipment installed and the organisation available to maintain it.



MEDICAL OXYGEN INFRASTRUCTURE STARTS WITH THE RIGHT SPECIFICATION

The Western Cape procurement required oil-free air compressors, specified filtration, defined oxygen flow rates and extensive additional system parameters. These requirements helped establish the technical basis for the equipment supplied. Just as significant was the attention given to local presence, technical expertise, spare parts and long-term maintenance.

A PSA system separates gases from compressed air using an adsorbent material. For oxygen generation, the process preferentially adsorbs nitrogen, leaving an oxygen-enriched gas stream. Air is the raw material, but a working medical oxygen installation depends on far more than the separation process alone. Air preparation, controls, monitoring and maintenance all have a role in the wider system.

That is why the procurement decision has consequences well beyond delivery day. A hospital needs equipment that meets its requirements and a support structure that can help keep it operating. The questions asked at tender stage should still matter five or ten years later, when components need attention and the original installation team has long since left the site.



Two locally manufactured O2Africa PSA medical oxygen plants installed and commissioned at Beaufort West Hospital.

BEAUFORT WEST HOSPITAL:
LOCAL MANUFACTURING REACHES THE SITE

At Beaufort West Hospital, O2Africa supplied, installed and commissioned two PSA medical oxygen plants as part of the Western Cape programme. The completed installation makes the connection between local manufacturing and public healthcare visible: systems engineered and manufactured in South Africa, delivered to a hospital and handed over for use.

For our business, a site such as Beaufort West is an important part of the growth story. The work must extend beyond producing equipment in a controlled factory environment. Delivery includes getting that equipment into place, completing commissioning and establishing an ongoing service relationship. The two plants now form part of the installed equipment base for which O2Africa provides support and maintenance.

VREDENDAL HOSPITAL:
TAKING A COMMON SOLUTION ACROSS MULTIPLE SITES

Vredendal Hospital also received two PSA medical oxygen plants. Alongside the other installations, the site demonstrates why a consistent equipment platform matters when a manufacturer moves from individual projects to a programme involving several facilities.

O2Africa used its standardised PSA solutions across all five hospitals. At Vredendal, as throughout the programme, that decision links the installation to a common approach to equipment, maintenance and technical support. For a growing manufacturer, consistency is valuable. It gives the business a repeatable basis for delivery while helping the service team work with familiar systems across different locations.



O2Africa's two PSA medical oxygen plants at Vredendal Hospital, delivered as part of the five-hospital Western Cape programme.

WESFLEUR HOSPITAL:
GROWING OUR DELIVERY FOOTPRINT IN ATLANTIS

At Wesfleur Hospital in Atlantis, a further two plants were supplied, installed, commissioned and handed over. This installation adds another completed site to O2Africa's medical oxygen project portfolio and another hospital to our ongoing support responsibilities.

The importance of that footprint is easy to miss in a simple equipment count. Each completed site represents a relationship that continues after handover. As the number of installations grows, so does the need to organise maintenance, manage access to components and retain knowledge of the equipment in service. Wesfleur forms part of that wider responsibility, linking a completed delivery milestone to the work that follows it.



Two O2Africa PSA medical oxygen plants at Wesfleur Hospital in Atlantis, now handed over and in the ongoing support phase.

BROOKLYN CHEST HOSPITAL:
ENGINEERING WITH A CONTINUING PURPOSE

Brooklyn Chest Hospital in Milnerton received two PSA medical oxygen plants under the same programme. The installation is another example of South African engineering and manufacturing being applied to the practical requirements of a public healthcare facility.

It also brings the purpose of the project into focus. The equipment is a means of supporting a hospital's oxygen supply, and its value depends on its continued performance. For O2Africa, the Brooklyn Chest installation sits alongside the other four sites as evidence of delivery and a commitment to ongoing service. The project does not become less important once it leaves the factory or passes commissioning. Its role in the hospital is only beginning.



O2Africa's locally manufactured PSA medical oxygen installation at Brooklyn Chest Hospital in Milnerton, comprising two plants.

CERES HOSPITAL:
PART OF A TEN-PLANT MILESTONE

Ceres Hospital is the fifth facility in the programme, with two PSA medical oxygen plants supplied, installed, commissioned and handed over by O2Africa. Together with Beaufort West, Vredendal, Wesfleur and Brooklyn Chest hospitals, it completes the five-site picture of this project.

Viewed together, these installations show a business capable of carrying a substantial medical oxygen contract through to completion. Ten plants required manufacturing and delivery across multiple sites, followed by a transition into ongoing support. Ceres is part of that shared achievement, giving the project another visible point of reference and reinforcing the link between local production and long-term service.



Two O2Africa PSA medical oxygen plants installed at Ceres Hospital as part of the completed Western Cape project.

SOUTH AFRICAN MANUFACTURING, SUPPORTED BY INTERNATIONAL EXPERTISE

One of the reasons O2Africa could compete for this project was our position as a South African manufacturer of PSA oxygen and nitrogen generation systems. Our equipment is engineered and manufactured locally, incorporating components and technologies from established international suppliers.

This combination is central to our approach. Specialist manufacturers around the world contribute compressors, valves, filtration, instrumentation and other critical components. O2Africa brings those technologies together through local engineering, manufacturing, assembly and technical support. International expertise and South African capability work together within the finished system.

The economic value therefore extends into local engineering work, fabrication, assembly, technical employment and service capability. For our business, this is an important measure of growth: the ability to undertake more of the work that turns individual components into a complete, supported installation. For the customer, it means dealing with a local manufacturer that understands the equipment and remains involved after delivery.

COMMISSIONING IS A MILESTONE, MAINTENANCE IS THE COMMITMENT

All 10 plants have now been delivered, installed, commissioned and handed over. O2Africa has moved into the ongoing support and maintenance phase, where the emphasis on local capability becomes a practical requirement.

Preventative maintenance, access to spares and technical expertise help sustain equipment performance. They also require planning and continuity. Hospitals need to know who to contact, and the organisation supporting a plant needs to understand its systems and service requirements. Those relationships are part of the infrastructure, even though they do not appear in photographs of the completed installation.



The concerns raised in the 2025 Gasworld feature remain relevant here. O2Africa co-founder David Kempe highlighted the consequences of procuring equipment without sufficient attention to maintenance, training, spare parts and local support. The lesson is straightforward: buying a plant is one step in building a dependable oxygen supply. Keeping it serviceable is a continuing responsibility.



A STRONGER FOUNDATION FOR O2AFRICA'S NEXT CHAPTER

The Western Cape project is a significant milestone in O2Africa's growth over the past few years. It brings our local manufacturing approach into view across five hospitals and demonstrates our ability to deliver a demanding public healthcare programme. It also expands the base of installed equipment that our team remains responsible for supporting.

There is a useful distinction between growth that is announced and growth that can be visited. At these five sites, the work is there to see. The photographs record completed installations, while the maintenance phase carries the story forward. Both matter to the kind of business we are building.

As South Africa considers further investment in medical oxygen infrastructure, procurement should look closely at who manufactures the equipment, where technical knowledge sits and how support will be provided over time. Purchase price is one part of that decision. Local access to engineering skills, spare parts and maintenance deserves attention too.

O2Africa looks forward to working with government and healthcare partners on further medical oxygen projects. Our contribution is grounded in the same approach demonstrated across the Western Cape: South African engineering and manufacturing, established international technology and a local team committed to ongoing support.

For hospitals, engineers and healthcare project teams planning on-site medical oxygen generation, contact O2Africa to discuss your technical requirements and long-term support needs. The next installation should begin with a clear plan for its working life.