

Shutdown success – a delicate mix of planning, expertise and teamwork

Air Products' general manager for Operations, Dumisa Gina, and Area Production manager, Chris Schoeman, talk about a recent successful shutdown performed on air separation units used by Sasol in the midst of the COVID-19 pandemic.

Conducting shutdowns while placing a strong focus on safety during the process has become an integral part of Air Products' service offering. Plant shutdowns involve critical work that needs to be performed at specific intervals to ensure optimal use of equipment, operational efficiency and, most importantly, to secure a safe working environment for Air Products staff and the employees of its customers.

As a market leader, Air Products is familiar with the planning and execution required for a successful shutdown. During COVID-19, however, an added responsibility has emerged to ensure safe work practices with another dimension: implementing infection control requirements in an already extremely complex and time sensitive environment.

Air Products recently completed a major shutdown at the Sasol Facility in Sasolburg and is extremely proud of achieving on-time, zero-incident and successful execution. In addition, the company reported zero COVID-19 infections despite having a team of more than 270 individuals involved.

This success at Sasol, part of one of the company's biggest maintenance shutdowns, is largely as a result of strategic planning and the quality of the local team's skills and expertise.

As customers are reliant on Air Products' gases to keep their operations going, it is important to ensure that they agree with the process and are constantly updated on the project status. According to general manager for Operations, Dumisa Gina, most of the Air Products' plants are directly linked to customer operations, and for that reason a process has been developed over years that mainly focuses on customers' operational imperatives.

"When we do a shutdown, communication with the customer is crucial and our team ensure that all parties agree on the timelines and have their planning in place to properly manage delivery during the shutdown period. In this situation the customer becomes the most critical player on our team," says Gina.

Area production manager, Chris Schoeman, explains that each shutdown is unique based on the size of the specific

plant, the products manufactured and the challenges associated with each. However, the basic elements in the shutdown process, such as safety, planning, costs and quality remain the same and form the basis of any shutdown. "As long as these elements are all aligned, the project will succeed," he says.

This year, with the current COVID-19 pandemic, another important element was added – a contingency plan had to be developed to make provisions for COVID-19 infections. In effect, this meant that regular safety protocols as well as Air Products' and the customer's COVID-19 protocols had to be followed to create a safe working environment for all.

"Shutdown planning can take up to two years and a 20-day execution is conducted by experienced engineers and a maintenance team with the skills required to complete all the aspects of a shutdown. It is important for the management team to ensure that the execution plan is clearly understood and followed by all parties involved, within the set timeline and by following all the necessary safety protocols," says Schoeman.

"In essence, it is a collaboration of efforts and skills from the maintenance, operations and projects teams that ensure a successful shutdown. During a project of this nature, it is crucial that there is good communication, understanding and interaction between the teams to ensure each party's role is performed in accordance with the project plan," he adds.

"Although Air Products has highly experienced personnel, we often need more hands when it comes to specific skill sets and utilising the expertise of contractors definitely adds to the overall strength of a shutdown team. Having said that, it also requires a special focus, as they also need to understand the project at hand and have the same commitment as the rest of the other team members," continues Gina.

More importantly, contractors need to be familiar with all the general safety standards and protocols as well as the additional protocols that are needed to be maintained to prevent the spread of COVID-19 infections.

"I am really humbled by our Sasol project team. A shutdown is always a challenge, but everyone worked like true professionals and went the extra mile to adhere to the additional COVID-19 protocols," adds Schoeman.

Dumisa Gina concludes: "We have some very important new learnings from our last shutdown – using and having proven processes in place, we had a solid base to work from and were able to absorb additional challenges such as how to keep everyone safe during a pandemic."

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Dumisa Gina, general manager for operations at Air Products.



Chris Schoeman, Area Production Manager at Air Products.



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