

Changing Work Practices & Behaviors at Africa's Largest Industrial Site

Company: SASOL Synfuels | **Sector:** Oil & Gas |

Location: Secunda, South Africa |

Services Provided: Work Management |

Client Testimonial: "The business can't change, people change and SAMI focuses on people to make sure that people change" - Lionel Prinsloo, Departmental Manager |



SITE:

Sasol Synthetic Fuels (SSF) operates the world's only coal-based synfuels manufacturing facility located in Secunda, South Africa. The company produces synthesis gas from low-grade coal and uses unique Sasol high-temperature Fischer-Tropsch technology to convert this into a large range of petrochemicals. These products include gasoline, diesel, liquefied petroleum gas and other synthetic liquid fuels, as well as industrial pipeline gas and chemical feedstocks. SSF produces most of South Africa's chemical and polymer building blocks, including ethylene, propylene, ammonia, phenolics, alcohols and ketones. The operation is the largest manufacturing facility in the Southern Hemisphere and produces approximately 750 million tons of products annually.

CHALLENGE:

The Synfuels Operations Group had attempted to correct deficiencies in equipment reliability, excessive lost production, and spiraling maintenance costs over the previous years with modest success. The vastness of the facility additionally contributed to highly diverse approaches and processes applied to maintenance and reliability. Synfuels was spending in excess of R1.20 billion (\$200 Million) annually on maintenance.

HOW WE HELPED:

We completed an assessment of the full operation's maintenance processes focusing on work management and found it to be variable and incomplete. The assessment team, comprised 70% of Sasol multilevel personnel, provided these gaps to our strategic planning process from which a multi-year Operating Strategic Plan took life. Our SAMI/Sasol Design Team validated a new work management process then developed the training, documentation and timetable for implementation across the facility. We constructed a three wave system for implementation to minimize the impact and cost to this huge facility.

Collaboratively, SAMI and SASOL consultants and coaches from the Design Team plus other trained and motivated individuals from various business units first implemented the new processes then began a "sustaining" phase to firmly embed the new ways of working and thinking about work management in each unit. The teams tracked the progress of each unit weekly. If a unit appeared to slip off the pace set

for progress, we remobilized our troops to provide additional assistance in that area.

At the completion of the sustaining period, each business unit was thoroughly audited for compliance to the new ways of doing business and for the proper behaviors that predict the sustainability of the initiative. All business units achieved SAMI Stage 1 certification level prior to the end of the set schedule for the project.

RESULTS:

The project netted a significant reduction in maintenance expense, nearly R175 Million (nearly \$30 Million) for a substantial multiple return on their investment. The true significance of the initiative was that we pulled six widely divergent business units into an aligned method and common processes for maintaining the reliability of the operation. Emergency work is now only 20% of the initial reading, crew efficiency has nearly doubled and maintenance work schedule compliance on a weekly basis approaches 90% on a consistent basis.

CLIENT TESTIMONIALS:

"I respect the methodologies that SAMI uses in engaging a company and getting some deep ingrained cultural changes to an organization. "

- Charl Buys, General Manager Operations

"The business can't change, people change and SAMI focuses on people to make sure that people change"

- Lionel Prinsloo, Departmental Manager

"This is the first and the only company that I have come across that actually has this bottom up and it plugs in very well or integrates very well with any business process or any design process that you get from your normal business improvement projects."

- Marinus Sieberhagen, Managing Director