



AMI CACE

Reduction of
Conductivity Analyzing Operation Cost

► Sembcorp Salalah CCPP
Sultanate of Oman



SWAN successfully completes the commissioning and performance testing of 10 new AMI CACE analyzers at Sembcorp Salalah CCPP in the Sultanate of Oman.

Expertise is readily available with SWAN's AMI CACE analyzer operating successfully at the Sembcorp Salalah Power Plant, Sultanate of Oman. The results using SWAN's new EDI based conductivity analyzer have proven that the AMI CACE consistently outperforms conventional cation conductivity techniques providing either same or better measurement reliability under variable conditions.

About the Salalah Independent Water and Power Plant in Oman

Sembcorp Salalah Power & Water Company (Sembcorp Salalah) developed, owns and operates the Salalah Independent Water and Power Plant for power generation and seawater desalination. It is located between Taqah and Mirbat, approximately 50 kilometres from Salalah, capital of the Dhofar Governorate.

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|---------------------------|---|
| Plant Type | <i>Gas-fired combined cycle power plant and reverse osmosis seawater desalination plant</i> |
| COD | <i>May 2012</i> |
| Capacity: | |
| - Power Generation | <i>489 MW</i> |
| - Water Production | <i>15 MiGD (69'000 m³/d)</i> |

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Innovative Solutions for Water Steam Cycle Monitoring



SWAN has proven to be a reliable partner for Sembcorp Salalah in its continuous efforts to increase efficiency and safety, reduce operation costs and protect the environment in all parts of the plant. Previous to this project, SWAN already demonstrated the performance and quality of its products with sodium analyzer installations in the demin water plant and the SWAS. This led to the opportunity to suggest and optimize the water steam cycle monitoring instrumentation. Project realization was carried out in cooperation between SWAN Analytische Instrumente AG, Switzerland, SWAN Analytical ME FZE, Dubai and its local distribution partner.

“Minimize to the Max” with the NEW AMI CACE (Conductivity After Cation Exchange)



Feedwater monitoring is of highest importance in water steam cycles, where availability and reliability of continuous online measurements is critical.

The use of the smart all-in-one analyzer AMI CACE provides highly accurate data on conductivity before and after cation exchange as well as calculated pH or alkalinizing reagent concentration. It allows Sembcorp Salalah to monitor its feedwater processes more accurately, with higher reliability and with lower operational costs. The previous instrumentation setup at Sembcorp consisted of 30 individual parameter analyzers, which could be reduced to 10 combined SWAN monitor analyzers.

The patented new EDI technology with integrated continuous resin regeneration significantly reduces OPEX of Cation Conductivity analyzers while providing various benefits:

- **Save unnecessary costs:**
No more resin exchange, no more resin regeneration, no more disposal and no more run-in time.
- **Significantly increased availability and data integrity of process monitoring, as analyzer downtime resulting from consumed resin is avoided completely**
- **Identical or better measurement reliability compared to conventional cation conductivity measurements reduces the risk of expensive breakages**

For further information on AMI CACE visit:

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