

## Continuous evaluation and optimization of fabric filters

The SCA system can control all equipment related to the filter by combining various software controllers in one box – including the master controller, valve controller, hopper controller, the burst bag detection system and fresh air damper controller. It means Simatek can customize a system to match the specific needs of your plant.

It evaluates the specific filter operating conditions by analyzing the rate of change of differential pressure across the filter. As the operating conditions vary within the plant, the SCA readjusts the filter cleaning parameters to enable optimal cleaning. This ensures that only the minimal required cleaning is done at any point in time, resulting in operational cost optimization.

The parameters that determine SCA operation need to be entered just once at commissioning enabling simple installation. These parameters are based on specific plant process requirements. All subsequent continuous optimization is automated by the SCA.

### Benefits

- Simple installation
- Cost competitive
- Reduces fan and compressed air consumption
- Extended filter bag life
- Enables remote filter monitoring
- Provides advanced analytics of the filter operation
- Savings reported in real time



### Patented, state-of-the-art microprocessor technology

The SCA is available for new filter installations as well as existing filters. It gives continuous analysis of filter operating conditions, enabling reduced compressed air usage, and extending the lifetime of your filter bags. The SCA's microprocessor technology provides faster and more efficient detection and monitoring than PLC-based systems. This minimizes down-time and encourages continuous production.

## Bag and valve diagnostics

A failed filter bag can lead to dust passing through, emission penalties and production shutdown. The SCA has a burst bag detection feature designed to eliminate these risks through rapid and precise failure detection.

In the event of a failed bag, the SCA will test the area detected repeatedly to positively identify the exact row that contains the failed bag. Once identified, this row will then be removed from the cleaning cycle until repairs can be carried out.

This allows maintenance to quickly pinpoint the damaged bag, isolate the problem and resolve the issue in a matter of hours. Quick identification ensures the emission does not exceed emission limits and allows the filter system and plant to remain online, enabling continuous production. Once the bag is changed, the SCA will then reintroduce the row into the normal cleaning cycle.



## Proven, tested, dependable

Before leaving the factory, every SCA unit is tested in a suitable environment for 12 hours. Each unit is custom-configured for your specific plant requirements. Test equipment in our factory replicates your plant specifications and allows us to test all possible conditions to ensure smooth installation and performance.

## Specialist supervision

Simatek specialists offer installation supervision as well as ongoing monitoring. Online monitoring allows the plant operator to receive specific preventive maintenance suggestions and plan for filter maintenance to reduce unplanned downtime.

