



# Speedflo

Fine tune your reactive gas processes with Genco Speedflo.

Perfect your reactive processes with Speedflo, an advanced reactive feedback control system delivering improvements to deposition rates, coating properties and process reliability. Speedflo is designed around the demands of real processes and has been proven on hundreds of different industrial plasma-based deposition machines – each with varying demands.



## Perfect your process.

With two options available – offering a choice of 8 channels for Speedflo, or 3 channels for Speedflo Mini – Speedflo has the flexibility to benefit a wide range of reactive processes, from magnetron sputtering to PECVD and electron beam deposition.

## Speedflo auto-tune

Achieving high performance control of your system is a quick and easy process using Speedflo. A patented, state-of-the-art automatic controller tuning procedure provides optimum controller parameters for your process at the click of a button. The auto-tuning procedure is fast and effective – and works within any system or sensor configuration.

After performing an integrated system calibration and identification procedure, the auto-tuner instantly generates the optimum controller parameters for your process by using advanced inverse dynamics algorithms to analyse the collected data.

The whole procedure takes a couple of minutes and is perfectly suited to the demands of actual processes.

## Support & Technology

Gencoia can provide remote or on-site assistance to help optimize your processes, with local support available in USA, China and Taiwan. The level of support and process know-how complements Gencoia's complete reactive gas and process control set-up that includes magnetrons, gas bars, and controllers.

## Sensors

Speedflo and Speedflo Mini can each be configured with a combination of sensor options from a selection of available sensors:

- Target voltage
- PEM in-situ
- PEM ex-situ (Penning) and Optix
- Lambda for O<sub>2</sub> only

## Speedflo Simulator

Replicate the Speedflo user interface using a tool that provides a dynamic simulation of the Speedflo system. Benefitting from Gencoia's in-depth understanding of process control, the software simulates the effect of Speedflo features such as controller gains and calibration parameters, in addition to system characteristics such as gas delivery pipe length.

The simulator is a highly effective tool and can improve the system user's understanding of feedback control, as well as the operation of the Speedflo system.

