



*speedflo*<sup>TM</sup>

Perfect your reactive processes with Speedflo, an advanced reactive feedback control system delivering improvements to deposition rates, coating properties and process reliability.

#### KEY FEATURES

1. Improved deposition rates (2-3x compared to open loop)
2. Patented autotuner for optimum control parameters
3. Enhanced uniformity by multi-zone sensing and gas control
4. Wide range of sensor configurations
5. Advanced user interface and simulation software for controller training
6. Process tuning and design service available

# SPEEDFLO

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## APPLICATIONS

- Reactive sputtering



The reactive gas control market leader, Speedflo is designed around the demands of real processes and, with over 4,000 units delivered, has been proven on hundreds of different industrial plasma-based deposition machines – each with varying demands.

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.

All Speedflo units can be assembled with a combination of sensor options from a selection of available sensors including target voltage, PEM in-situ, PEM ex-situ (Penning) and Optix, or Lambda for O<sub>2</sub> only.

## SPEEDFLO AUTOTUNER

Speedflo features a patented, state-of-the-art automatic controller tuning procedure, providing 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 has been developed to meet the demands of actual processes.

## SPEEDFLO SIMULATOR

Replicate the Speedflo user interface with a dynamic tool that simulates the Speedflo system. The software models the effect of Speedflo features such as controller gains and calibration parameters, along with system characteristics such as gas delivery pipe length.

The simulator is a highly effective tool and can help to build a deeper understanding of feedback control, as well as the operation of the Speedflo system.

## SUPPORT

Gencoa offer remote or on-site support for process optimization, with trained staff and representatives across the world. Contact Gencoa or refer to the list of worldwide contacts at [www.gencoa.com](http://www.gencoa.com) for sales or technical support enquiries.

## FURTHER INFORMATION

Contact: [sales@gencoa.com](mailto:sales@gencoa.com) or visit [www.gencoa.com/speedflo](http://www.gencoa.com/speedflo)

