

Swing-DUO™ Software

When used with our exclusive Swing Cathode™, Swing-DUO™ (Dynamic Uniformity Optimization) software simulates the combined cathode array uniformity to produce individually optimized magnetic bar motion profiles.*

User friendly with a web-based interface, the software quickly designs coater configurations for optimal deposition uniformity.

Swing-DUO™ makes uniformity compensation for systemic issues in the form of motion profile changes.

The software prevents uniformity drift over the life of the target by creating multiple CAM tables for different target diameters


- Dwell-based simulation finds the key deposition angles and calculates the amount of time required at each angle.
- Optimizes uniformity for constant power or variable power
- Refines uniformity optimization using actual measured uniformity results
- Outputs a CAM table in angle and time format for simplified servo programming
- Indicates the amount of wasted material not deposited on the substrate as a function of the motion profiles

The software opens from the Sputtering Components website for registered users.

Visit the Sputtering Components website for a demonstration video.

**Used for setup only. Final adjustments are process specific.*

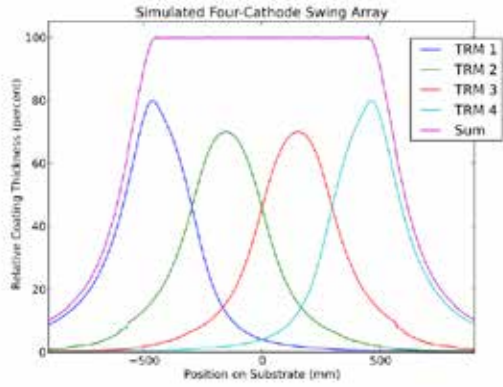
Simulated Four Cathode Swing Array



[Home](#) | [About Us](#) | [Products](#) | [Applications](#) | [News & Events](#)

Swing-DUO™ Software
Dynamic
Uniformity
Optimization

Optimization Results



Simulated Four-Cathode Swing Array

Legend: TRM 1 (blue), TRM 2 (green), TRM 3 (red), TRM 4 (cyan), Sum (magenta)

±0.11% uniformity across the center region


3.74% of output deposited on neighbors

31.72% of output beyond the edge of the substrate

35.46% of output not deposited on the substrate

[Cathode Configuration](#)

[Simulation Output](#)



Magnet Bar Type	[dropdown]	Target to Substrate Distance (TTD) (mm)	[input: 100.0] ?
Number of Angles	[input: 90] ?	Substrate Width (mm)	[input: 500.0] ?
Number of Cathodes	[input: 4]	Cathode Spacing (mm)	[input: 200.0] ?
Target Material OD (mm)	[input: 100.0] ?	Run Simulation	