

# **WHITE PAPER: Achieving Temperature Uniformity in Gas Line Heating Systems for Semiconductor Manufacturing**

By: - February 11, 2022

## **Summary**

Semiconductor tools with gas lines, forelines and exhaust lines require precise heating and thermal process control. Traditional systems are complex and cumbersome and often fail to offer sufficient thermal data and heating control. Without optimal thermal performance, line shutdowns are inevitable and costly.

Watlow's STREAMLINE™ heating system with Adaptive Thermal Systems® (ATS™) technology creates a centralized thermal system with improved temperature uniformity, reduced footprint, extensive diagnostics and faster development times.

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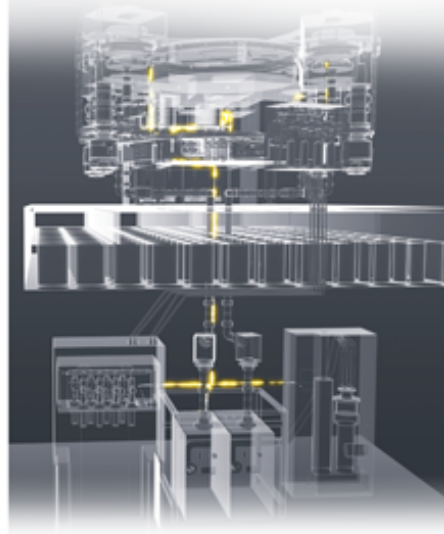
**industry:** semiconductor  
**author:** eric ellis, chief system designer



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## Achieving Temperature Uniformity in Gas Line Heating Systems for Semiconductor Manufacturing

Traditional gas line heating systems fail to offer sufficient thermal data and heating control. Watlow's **STREAMLINE™** thermal system with **ATS™** technology is an innovative solution.



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