



RHETECH INC.

A Semitool Company

N₂ Purge Saver

for New Semitool and Rhetechnology Gold Series SRDs

Product Description

Cut N₂ Consumption!

Reduce your N₂ usage in Semitool and Rhetechnology Gold Series SRDs.

The N₂ Purge Saver option allows users to restrict the flow of N₂ while the SRD is not in use.

Background

Even when idle, an SRD will continuously run N₂ through the Low Pressure Purge, the Anti-Static Cell Purge, and the Rear Bowl Seal Purge. The 35psi flow of N₂ into the tool can require as much as 23 liters of N₂ per minute.

N₂ Purge Saver Operation

The N₂ Purge Saver replaces the standard N₂ Valve Assembly with one configured to shut down certain purges when power is removed from the SRD controller. (See table, next page, for a detailed functional description.) Operation is automatic - once the controller is shut-off, the Purge Saver shuts down non-essential purges while maintaining N₂ pressure to valves that keep DI water from entering the process chamber. *As all purges are shut-down, the flow of N₂ drops to zero.*

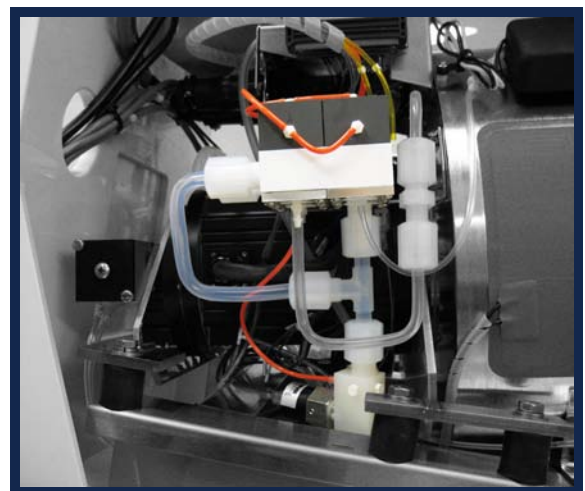
Installation Options

Your trained maintenance and repair technician can install the N₂ Purge Saver in less than two hours using our easy to follow instructions.

Or, contact Rhetechnology for a quotation for installation by a Rhetechnology Field Service Engineer



**N₂ Purge Saver
Valve Assembly**



**N₂ Purge Saver
Valve Assembly Installed**



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Detailed Functional Description

Low Pressure Purge	
Standard N ₂ Flow	N ₂ Purge Saver Flow
flow	restricted
When the tool is at idle, and the controller is turned off, N ₂ flows through the low pressure purge and out into the atmosphere. The N ₂ Purge Saver stops the N ₂ from flowing through the low pressure purge.	
Anti-Stat Purge	
Standard N ₂ Flow	N ₂ Purge Saver Flow
flow	restricted
When the tool is at idle, and the controller is turned off, N ₂ flows through the anti-stat purge and out into the atmosphere. The N ₂ Purge Saver stops the N ₂ from flowing through the anti-stat purge.	
Rear Bowl Seal Purge	
Standard N ₂ Flow	N ₂ Purge Saver Flow
flow	restricted
When the tool is at idle, and the controller is turned off, N ₂ flows through the rear bowl seal purge and out into the atmosphere. The N ₂ Purge Saver stops the N ₂ from flowing through the rear bowl seal purge.	
DI Water	
Standard N ₂ Flow	N ₂ Purge Saver Flow
flow	flow
When the tool is at idle, and the controller is turned off, N ₂ flows through the tool and blocks the DI water from entering the SRD bowl. The N ₂ Purge Saver still allows the N ₂ to block the flow of DI water into the bowl.	

