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Photo Available at: www.rasirc.com/news/downloads/photos/RASIRC_Steamer_501.jpg

New RASIRC Steamer 501 Produces Purified Steam Flows over 50 slm *Improves oxide growth, uniformity, and yield in the semiconductor and solar industries*

San Diego, Calif. – July 14, 2008 –[RASIRC](http://www.rasirc.com)[®], the steam purification company, introduces the RASIRC Steamer 501, a safe, compact, and economical system that can deliver a steam flow rate of over 50 slm, which exceeds the flow capacity of other technologies. The RASIRC Steamer 501 is the latest in a line of products that increase both oxide layer growth rate and uniformity on wafers used for solar cells and wet thermal oxidation. The new product addresses 300mm wafer fabrication, wafer cleaning, and other oxidation processes.

The RASIRC Steamer consists of two components: a steam generator that converts DI water into high flow, ultra high purity (UHP) water vapor, and a purifier assembly that purifies clean steam to UHP steam by selective removal of dissolved gases, metals, and particulates. Unlike torches, which generate steam through combustion of hydrogen and oxygen, the RASIRC Steamer does not use hydrogen or oxygen, increasing safety. The need for compressed air or chilled water for cooling the torch is eliminated, which significantly cuts energy costs. Storage tanks for the hydrogen and oxygen are no longer needed.

Recent tests in a 450mm furnace on 300mm wafers show that the RASIRC Steamer produced uniformity equal to or exceeding films grown by a torch. The test shows that on 1000 Angstrom film, there was only a 1% standard deviation across 22 points. Earlier tests on 6 inch wafers showed standard deviations under 1%.

Semiconductor, flat panel, solar, and optical devices all use oxide films as an essential feature. Uniformity of that oxide film is an important factor in determining device yield. When oxygen is part of the process recipe, the partial pressure within the furnace tube will not be uniform. By using the RASIRC Steamer, oxygen gas is eliminated. Studies done using the Steamer showed that water vapor pressure stays relatively constant, film uniformity improves across the furnace, and there is increased oxide growth rate due to the elimination of the oxygen carrier gas.

The RASIRC Steamer has been especially effective in oxide growth for solar cells. The most advanced silicon solar cells are now being relocated from side contacts of the wafer to the backside of the wafer. This requires an additional insulating layer, most typically silicon oxide. The high flow rate of steam produced by the RASIRC Steamer 501 can enable rapid and highly uniform oxide film deposition on solar wafers, improving film performance.

“The RASIRC Steamer is proven to increase oxide growth rate, chamber uniformity, film quality, and reduce operating cost when compared to all other steam technologies,” explained RASIRC president and founder Jeffrey Spiegelman. “This latest model supports applications that require high steam flow rates that most torches cannot achieve.”

About RASIRC

RASIRC products purify and deliver ultra pure liquids and gases. RASIRC technology is the first to generate ultra high purity (UHP) steam from de-ionized water. It reduces cost, improves yield, and improves safety. RASIRC dryers, humidifiers, and steam generators are of critical importance for many applications in the semiconductor, pharmaceutical, medical, biological, fuel cell, and power industries. Custom systems are available upon request. Call 858-259-1220, e-mail info@rasirc.com, or visit www.rasirc.com.

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