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FOR IMMEDIATE RELEASE

CoorsTek Introduces Ultra-Flat Ceramic Vacuum Wafer Chucks

New material and process using semiconductor-grade, ultra-pure ceramics yields extremely flat and highly corrosion-resistant vacuum wafer chucks.

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February 7, 2006 – Golden, Colorado – Today CoorsTek formally introduced their latest capability for the advanced semiconductor manufacturing market – ultra-flat, high-purity ceramic vacuum chucks. These components offer significant performance advantages over traditional wafer chucks.

Specifically, CoorsTek ceramic vacuum chucks are three to five times stiffer than glass or metal alternatives, which, coupled with advanced technical ceramic manufacturing, drives chuck flatness to new standards. Available in several of the CoorsTek signature materials including UltraSiC™ Silicon Carbide, PureSiC® CVD Silicon Carbide, PlasmaPure™ Alumina, and StatSafe™ ESD Alumina, these chucks feature all the commonly known benefits of high-purity ceramic including exceptional corrosion resistance, low thermal expansion, and high thermal conductivity.

CoorsTek now offers several capabilities within the product range and produces an array of surface profiles designed to meet specific customer requirements. Chief among them is their ability to create specialized micro-bumps – especially useful when attempting to minimize backside surface contact area with the wafer.

As part of the development effort, CoorsTek created a sophisticated 3-D method for mapping surface flatness, shown effective for extremely large components.

Using this technology, CoorsTek is capable of verifying the controlled depth standard to new levels of precision metrology.

"We've had some extremely enthusiastic customer feedback about this new development," stated CoorsTek product manager, Steve Williams. "Both tests and real-world usage have proven the effectiveness of extremely flat, high-purity ceramic chucks in wafer processing," Williams continued.

"I think we're on the cusp of a significant technology shift away from glasses and metals in this particular application," noted Dr. Frank Anderson, head of CoorsTek research and development.

For more information about ceramic vacuum wafer chucks, please contact Bob Slattery at bslattery@coorstek.com or visit our product-specific website at http://www.coorstek.com/products/ceramic_chucks.asp.

More about CoorsTek

CoorsTek is the largest technical ceramics manufacturer in North America and has facilities in Europe and Asia. CoorsTek supplies critical components and assemblies for medical, automotive, semiconductor, aerospace, electronic, power generation, telecommunication, and other high-technology applications. Utilizing advanced material technologies, the company's engineered solutions enable its customers' products to overcome technological barriers and improve performance. For more information about CoorsTek, please visit the Company's website at www.coorstek.com.

For high-resolution images associated with this release, please use the following links to download images from the CoorsTek website (please credit CoorsTek).

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(969 KB – Ceramic Vacuum Wafer Chuck 1)

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