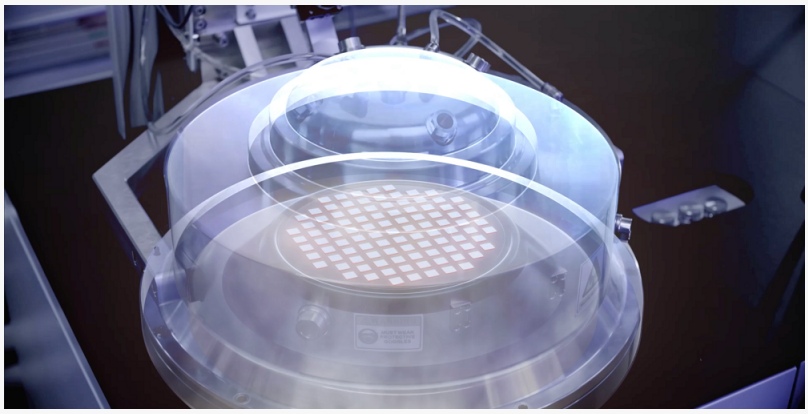
Glory Zenith Group's Sustainable Approach: Shaping the Future of CVD Diamonds



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NEW YORK, NY, UNITED STATES, October 25, 2024 /EINPresswire.com/ -- Glory Zenith Group, a pioneering global innovator headquartered in the United States, is committed to advancing the application of diamond-based products across a multitude of sectors. Leveraging robust research capabilities and an integrated production chain, the company consistently drives technological advancements and product enhancements, spanning the entire value chain from raw material production to the design and manufacturing of multi-industry applications, as well as both online and offline retail brands.

Located in the Zhengzhou Xinzheng Comprehensive Bonded Zone in Henan Province, China, the group's large-scale production base is designed to meet the extensive potential demands of the diamond industry. The establishment of this production base by Glory Zenith Group underscores its strategic focus on growing demand and technological innovation in the CVD diamond sector. Covering an area of approximately 40,000 square meters, the facility will be equipped with over 1,000 units of CVD reactors in various types (MPCVD, HFCVD, MOCVD), with an expected annual production capacity of 2 million carats of CVD diamonds. This production scale reaches the highest levels in the CVD diamond industry, enabling Glory Zenith Group's diverse diamond products to achieve strong global competitiveness.

In recent years, diamonds, as high-performance materials, have been increasingly utilized in

multiple fields. Beyond their common application in jewelry, they have expanded into semiconductors, precision tools, heat spreader, optical instruments, and even quantum computing. Through continuous exploration of the material properties of diamonds, Glory Zenith Group is poised to become a key force driving upgrades in national pillar industries such as medicine, manufacturing, defense, and aerospace, serving as a powerful engine to help companies reduce costs, increase efficiency, and break through technological bottlenecks.

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Furthermore, Glory Zenith Group operates with a firm commitment to Environmental, Social, and Governance (ESG) principles, which are deeply embedded in every aspect of the new production base. The rooftop is covered with large-scale solar photovoltaic (PV) panels, allowing the production process to utilize renewable energy to the fullest extent, significantly reducing dependence on fossil fuels and lowering the carbon footprint. Alongside the installation of solar panels, energy storage systems ensure stable power supply even during periods of insufficient sunlight. These initiatives not only set a benchmark for other manufacturers but also pave the way for a greener future, where advanced technology complements environmental protection.

From the initial design stage of the production base in Henan, China, Glory Zenith Group had already established long-term goals aimed at market expansion and product development. By leveraging cutting-edge technologies, continuously improving production capacity and product quality, integrating smart sensors and AI models to enhance automatic control systems, and implementing real-time data collection, automatic temperature control, wafer loading, and automated quality inspection, the goal is to create the first lighthouse factory in the ultra-hard materials industry.

Facing the challenges brought by global climate change, Glory Zenith Group remains committed to contributing to the protection of the Earth's environment through technological innovation,

effectively reducing the extraction and consumption of natural resources, thereby alleviating the pressure on ecological environments caused by economic development. The launch of the new production base demonstrates the group's determination to shape a green future in the CVD diamond sector. As stakeholders participate in Glory Zenith Group's journey towards sustainability, they will also witness an era of transformative innovation in the CVD diamond industry.

"In this globalized and digitalized age, innovation remains the key driver of industry transformation. In our new factory, we have adopted advanced production processes and technological means to significantly reduce energy consumption and emissions, achieving efficient energy utilization," said Dr. Troy Jonathan Baker, Senior Vice President of Glory Zenith Group, who studied under Professor Shuji Nakamura, the 2014 Nobel Prize laureate in Physics, during the inauguration ceremony.
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