



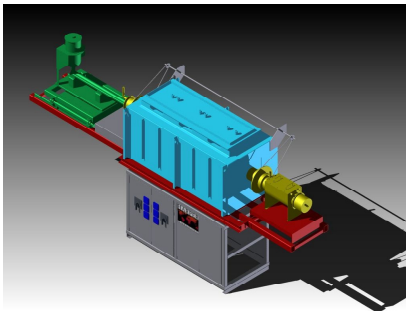
HARPER INTERNATIONAL CORPORATION

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NEW PRODUCT—HARPER INTERNATIONAL

Revolution in the Purification of Micro Powders

LANCASTER, NY



Harper International adds another first in the thermal processing of advanced materials. An advanced Rotary reactor system has recently been installed and commissioned for the purification of fine oxide based powders with hot Chlorine gas or synthesis of metallic chloride gases. This highly engineered rotary system operates at 1250°C and incorporates Harper's patented sealing technology, allowing the use of 100% chlorine gas at these elevated temperatures.

The entire system - from the controlled feeding through complete processing—is fabricated from high purity quartz to maintain material purity.

The ultra-high purity oxides and metallic chloride gases have several applications in the renewable energy market, where purity of materials impacts operating performance.

Harper's team of engineers and scientists focused to create this new rotary system with integrated computer software and controls to achieve rigorous control over safety concerns. The entire system is continuously monitored and equipped with emergency purging systems. Initial design tests were conducted at the Harper Technology Center. Harper has crafted several systems that operate in corrosive environments, including chlorine. However, this is the first rotary system that allows for the continuous processing and purification of particulate materials.

About Harper International Corp.

Harper International is a global provider of specialized continuous thermal processing systems and technical services essential for the production of carbon fiber, micron sized (oxide, carbide, nitride, and metallic) powders, silicon materials for solar applications, nano-materials, and high performance ceramics. Harper's principal thermal processing systems are rotary calciners, pusher, dilute and packed bed vertical reactors, slot type carbonization and related equipment. Harper has operations in Lancaster, NY USA with sales and service in the USA, Asia and Europe.

For additional information about Harper, please visit www.harperintl.com or e-mail us at info@harperintl.com.