

# Vertical Screw Furnace System



*Spark the future.™*

This revolutionary system offers energy and space savings for those processing inorganic materials and advanced ceramics.

## About Harper International

Harper International is a global leader in complete thermal processing solutions and technical services essential for the production of advanced materials. From concept to commercialization, from research scale to full production line operations, Harper is perpetually on the cutting edge.

For additional information, visit [harperintl.com](http://harperintl.com) or email [info@harperintl.com](mailto:info@harperintl.com)

## Higher degrees of innovation.

The Harper Vertical Screw Furnace reduces energy consumption up to 30% over conventional furnace designs. Its continuous system delivers added savings over batch systems, with reduced material handling and labor costs, at operating temperatures up to 2800°C.

The increasing cost of energy is a major concern for companies processing inorganic materials and advanced ceramics. The thermal processing requires heating of the product to a specific temperature, created a reaction, and then cooling the material. The Harper Vertical Screw Furnace system preheats incoming material with the sensible heat available from the material exiting the hot reaction chamber. Energy savings double from the reduced energy consumption for both heating and cooling.

This system's design feature for handling off-gases is very important for materials containing volatile components. The furnace design is designed with flexibility to process materials with your special atmosphere requirements. Additionally, Harper always works to devise a complete thermal solution with

our range of offerings including gas treatment and handling and fully integrated control systems.

Because of the high temperatures associated with Harper furnaces, we are experts in ensuring our equipment is exceptionally energy efficient. We focus on incorporating materials and design features that result in the conservation of energy, cooling water, and protective atmospheres.

Contact us today to learn more at [info@harperintl.com](mailto:info@harperintl.com)

