Zircoa Inc: The Crucible Manufacturer that Investment Casters use to Improve Casting Quality, Operational Efficiency, and Sustainability

Zircoa, Inc is a leader in the development, engineering, and manufacturing of high-performance ceramic materials that are used in a wide range of industrial applications. The company is driven by its mission statement: "Deliver What Matters." This statement is at the core of Zircoa's operations and guides its efforts to create business value that enables, optimizes, and supports industry and customer objectives.

Company History

In 1952, in the fires of a box kiln, within what was once an old Cleveland Police Department horse barn, a new refractory was created. A combination of raw materials, engineering, chemistry, research and finance were successfully combined and transformed to answer the special needs of a customer. In the process, a new company was also created — Zirconium Corporation of America, which was later to become Zircoa, Inc.

Zircoa relocated to Solon, Ohio in 1953, and remains there today. Company ownership changed several times throughout its history. In 2010 Zircoa became a privately owned corporation. They are committed to keeping manufacturing companies and jobs in Northeast Ohio, with leadership in material technology and manufacturing practices that are globally competitive.

Why Zirconia?

One of the most critical pieces of equipment in the investment casting process is the crucible. Zirconia crucibles offer superior performance and durability for many alloy types compared to alternative materials such as clay graphite, silicon carbide, or alumina.

AFFILIATE MEMBER

ZIRCOA INC.

www.zircoa.com

Zircoa strives to "Deliver What Matters" through our commitment to materials innovation, application engineering, operational excellence, and outstanding customer service providing our customers with the highest Quality Zirconia Products for the precision casting and precious metals industries.

Superior Thermal Shock Resistance

Zirconia crucibles can withstand extended heating and cooling cycles without cracking, ensuring a longer lifespan and reducing the need for frequent replacements.

Excellent Chemical Stability

The chemical inertness of zirconia crucibles can be tailored to minimize or eliminate contamination of the casting material during the casting process, resulting in higher quality, more consistent castings.

Sustainability Benefits

Typically designed for long-term use, zirconia crucibles reduce the need for frequent replacements, and reduce inventory and waste. Zircoa's manufacturing processes prioritize sustainability and minimize environmental impact through operational excellence.

Why Zircoa?

Zircoa Inc. is a leading manufacturer and supplier of zirconia crucibles, and its products are trusted by investment casting companies serving aerospace, power generation, medical, precious metals, and dental markets worldwide.

A long-standing commitment to materials, process, and application engineering has led to the development and market reliance on material options and guidance from Zircoa:

Composition 3001 is a magnesia-stabilized zirconia which exhibits superior resistance to thermal shock and erosion. This is the company's workhorse for customer's casting super alloys and platinum-group metals.

Composition 1651 is a calcia-stabilized zirconia which provides remarkable resistance to erosion and temperature. Recommended where high purity is required because of corrosive alloys, it is an excellent substitute for Composition 3001.

Composition 2290 is an yttria-stabilized zirconia, generally used for high purity specialized applications. This material works well in extremely high temperature applications, up to 2300°C.

Composition 6105 is Zircoa's alumina crucibles made available in response to customer preference of Zircoa quality and service for all things crucible.

Refractory Backup materials are offered to further extend furnace life and maintain vessel temperature.

Zircoa remains actively committed to its fundamental role in enabling and improving the exciting future of investment casting materials, process, and technologies.