Nuclear Zirconium Alloy Market

Analyzing the Future for Zircaloy

UxC, LLC (UxC), a global leader in the nuclear fuel markets, is pleased to present the seventh edition in its report series *Nuclear Zirconium Alloy Market*. The initial report, issued in 2008, was intended as a one-of-a-kind snapshot of the zirconium alloy industry. However, the highly favorable response to that report and subsequent editions convinced us that there is an ongoing need for current information on this unique market. The latest edition of this special report, issued in May 2019, updates all of the relevant information to reflect the post-Fukushima nuclear reactor market situation and shifts in the global zirconium minerals markets.

This report offers UxC’s latest analysis of the various sectors that comprise the nuclear-grade zirconium sponge, alloy, materials, and tubing markets. Using proprietary demand modeling, we identify the latest major trends in the nuclear-grade zirconium industry by analyzing the global and regional supply and demand balances for nuclear-grade zirconium alloy and tubing as well by reactor types.

Nuclear-grade zirconium alloys and products are used in the fabrication of fuel assemblies for the vast majority of current and future nuclear reactor designs around the world. Despite the effects of Fukushima, many aspects of the international nuclear fuel supply chain continue to be of interest. The supply of nuclear-grade zirconium – from zircon mineral sand through the cladding and components used in finished fuel assemblies – has also not escaped scrutiny. Therefore, the primary objective of this report is to factually and analytically approach the current and expected future direction of the nuclear-grade zirconium market to help formulate clear conclusions about how producers of fuel assemblies for nuclear reactors will obtain the zirconium needed to create their products.

What is Included in this Report?
Separate chapters are as follows:

**General Zirconium Overview** provides a broad summary of the zirconium mineral occurrence, resource base, and industrial applications, including the role of zirconium alloy production for the nuclear fuel industry. This helps put the specific nuclear zirconium market analysis in perspective.

**Manufacturing Processes for Nuclear Fuel Components** covers the overall “zirconium cycle” to produce the materials and components used in nuclear fuel assemblies.

**Nuclear Zirconium Alloy Materials & Product Suppliers** offers updated descriptions of each company involved in nuclear-grade zirconium alloy materials and product supply. This includes all firms in the world involved in zirconium sponge and alloy production and processing through manufacture of tube-reduced extrusions (TREX), as well as separate tubing manufacture.

**Nuclear Fuel Fabricators & Zircaloy Tubing Supply** provides a review of the nuclear fuel fabrication business and processes while indicating where fabricators acquire their zirconium fuel assembly components.

**Nuclear Zirconium Supply & Demand Analysis** offers UxC’s proprietary data and analysis of the global supply and demand balance for nuclear fuel-related zirconium alloy products. In addition, this chapter includes regional breakdowns as well as supply and demand analysis based on the different global reactor fuel types.

**Overall Conclusions & Market Analysis** completes our nuclear-grade zirconium market analysis with final thoughts on recent and emerging market trends along with a discussion on current prices and expectations for future price developments.

UxC’s 2019 *Nuclear Zirconium Alloy Market* report is now available for purchase. For information contact Jonathan Hinze at jonathan.hinze@uxc.com or +1-603-425-1185.

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