

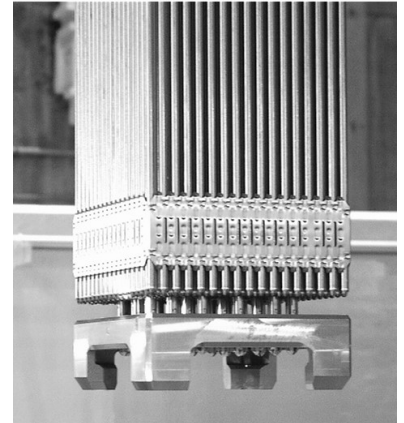
Nuclear Grade Zirconium Alloy Market

Analyzing the Future for Zircaloy



UxC, LLC (UxC), a global leader in the nuclear fuel markets, is pleased to present the ninth edition of its *Nuclear Zirconium Alloy Market* report. Since 2008, UxC has been closely tracking and analyzing the nuclear zirconium alloy industry. Ever since our first edition, we have been convinced that there is an ongoing need for current information on this unique market. The latest edition of this special report, issued in November 2023, updates all of the relevant information and analysis to reflect the shifts in the global zirconium minerals market, developments in the nuclear zirconium supply chain, and the most current nuclear reactor market situation.

This report offers UxC's latest research on the many different suppliers that operate in 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.



Source: NEI

Nuclear-grade zirconium alloys and products are used in the fabrication of fuel assemblies for the vast majority of current and future nuclear reactors around the world. While the nuclear markets experienced a "lost decade" after Fukushima, a renewed growth trend has emerged for nuclear power in the past 1-2 years with rapidly improving future prospects in light of the global energy transition. Thus, the global supply chain of nuclear-grade zirconium - from zircon mineral sand through the cladding and components used in finished fuel assemblies - requires renewed analysis. 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 nuclear fuel fabricators will obtain the zirconium needed to create their finished products.

What's New in the 2023 Edition?

This 2023 edition of UxC's *Nuclear Zirconium Alloy Market* report includes the following new and updated elements:

- Enhanced analysis of the latest zirconium minerals market trends, including assessment of the effects of geopolitical and trade tensions as well as fallout from the COVID-19 pandemic on the zirconium market and how the future outlook for the market may impact the nuclear zirconium industry
- Increased analysis of the nuclear zirconium alloy production cycle and the technologies deployed in this industry
- Updated supply capacities and production data for all producers in the nuclear-grade zirconium supply chain
- Current nuclear reactor and zirconium demand forecast scenarios have all been extended for the first time through 2040
- Updated supply forecasts with extended outlook through 2040 for each of the nuclear zirconium sponge, alloy, and tubing markets
- Renewed discussion of emerging market trends to provide broader context to key issues, including trade and government policies affecting the zirconium sector, the evolution of accident tolerant and other advanced nuclear fuels, and the hafnium market
- Latest nuclear-grade zirconium sponge and alloy market price estimates and future price assessments
- Improved discussion on the design of BWR and PWR fuel assemblies, the zirconium alloy components of which they are constructed, and the fuel fabrication process



Source: Tube & Pipe Journal

Standard Features


- **General Zirconium Overview** provides a detailed review of the zirconium minerals market, including discussion of the zirconium mineral occurrence, resource base, and industrial applications, along with the role of zirconium alloy production for the nuclear fuel industry. This discussion helps put the specific nuclear zirconium market analysis presented in subsequent chapters 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 materials and product supply. This includes all firms in the world involved in zirconium sponge and alloy production and processing through 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.



Pricing Information

- Full standard price: **US\$4,000.00**
- UxC Market Report Customers: **US\$3,600.00** (must be a subscriber to one of UxC's *Market Outlook* report packages - UMO/CMO/EMO/FMO)
- **Repeat Customers: US\$3,600.00** (a special discounted price is available for customers of previous editions of UxC's *Nuclear Zirconium Alloy Market* reports)
- **Special Package Offer with FMO:** A discounted package price is available for customers who purchase UxC's *Fabrication Market Outlook* (FMO) report together with the *Nuclear Zirconium Alloy Market* at the same time.

UxC's 2023 *Nuclear Grade Zirconium Alloy Market* report is available for immediate purchase. Please see our product flier and the table of contents in Adobe Acrobat PDF  format.

An **online order form** is now available.

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