

Global Mineral Sand Industry: Trends and Opportunities (2013-2018)

February 2014



Scope of the Report

The report titled “Global Mineral Sand Industry: Trends and Opportunities (2013-2018)” provides an in-depth analysis of global mineral sands market with focus on titanium dioxide minerals and zircon. The report also covers major applications and attributes of both these heavy minerals. It also accesses the key opportunities and underlying trends in the market and outlines the factors that are and will be driving the growth of the industry in the forecasted period (2013-18). Further, key players of the industry such as Iluka Resources Ltd., Rio Tinto plc and Tronox Limited are also profiled in the report.

Segment Coverage

- ⊖ Titanium Dioxide Minerals
- ⊖ Zircon

Company Coverage

- ⊖ Iluka Resources Ltd.
- ⊖ Rio Tinto plc
- ⊖ Tronox Limited

Executive Summary

Mineral sands refer to group of minerals commonly found and mined together from water or wind concentrated deposits. The industry primarily involves mining and processing of zircon and titanium dioxide products (ilmenite, rutile and upgraded titanium dioxide products of synthetic rutile, slag and upgraded slag). Mineral sands deposits around the world typically contain both titanium dioxide mineral and, usually, a minor proportion of zircon. Both of these heavy minerals have different properties, prices and distinct end use markets.

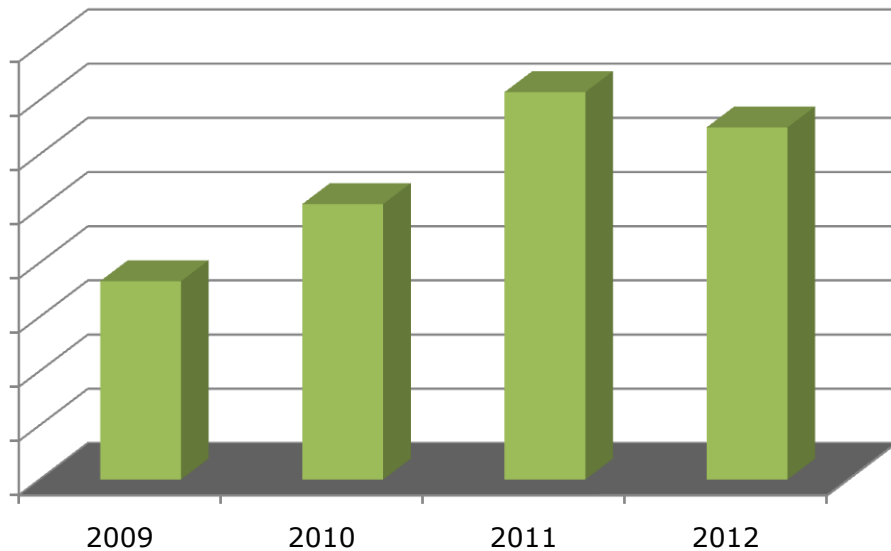
Titanium dioxide usually mined as ilmenite or rutile is dark colored minerals which after processing becomes white and opaque. It is primarily used as a whitening pigment in paints, plastics and paper. The raw minerals are also used for manufacturing of titanium metal and welding flux wire cord. Zircon is an opaque, hard wearing, inert mineral primarily used in the production of ceramic tiles. Other leading applications of zircon include use in refractories and foundry casting.

In recent years, the global mineral sand industry particularly titanium dioxide minerals and zircon is on the threshold of enormous growth. The growth of the industry is driven by growing urbanization trend, ceramic tiles consumption growth and demand from aerospace industry. However, factors such as low pigment plant capacity utilization, exchange rate fluctuation, radiological concerns and other disruptions are posing challenge to growth of the industry. Major trends prevailing in the market are end to Long Term Contracts (LTC) in the industry, popularity of zircon flour and vertical integration in the industry.

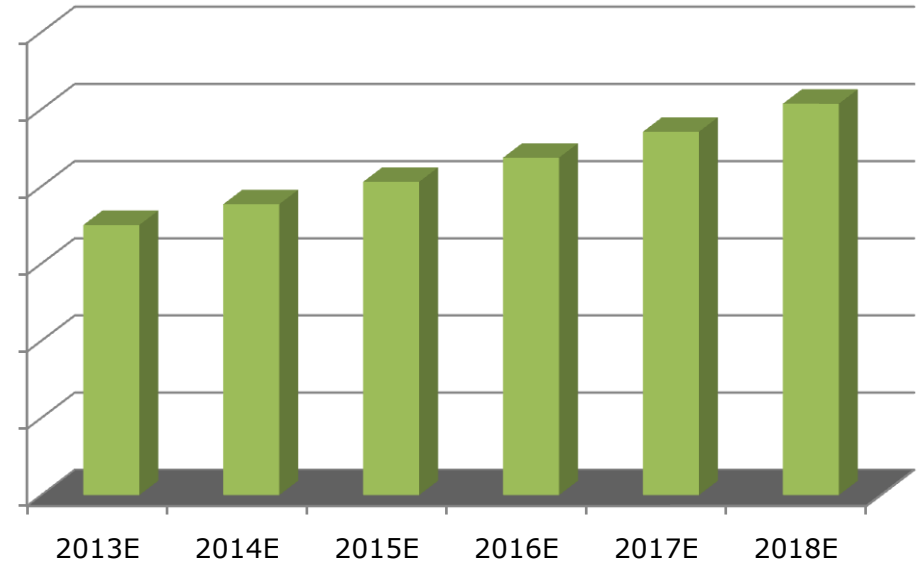
Global Titanium Dioxide Market: An Overview

Titanium dioxide is mined as ilmenite or rutile (or other variants of titanium dioxide). Titanium dioxide minerals are the main feedstock for the production of pigments used in paints, coatings, plastics, inks, fibers, rubber, food, cosmetics, pharmaceuticals, welding electrodes, and for uses in aerospace (titanium metal).

Global Titanium Dioxide Minerals Market Size by Production, 2009-12 (Million Units)



Global Titanium Dioxide Minerals Market Size by Production Forecasted, 2013E-18E (Mln Units)

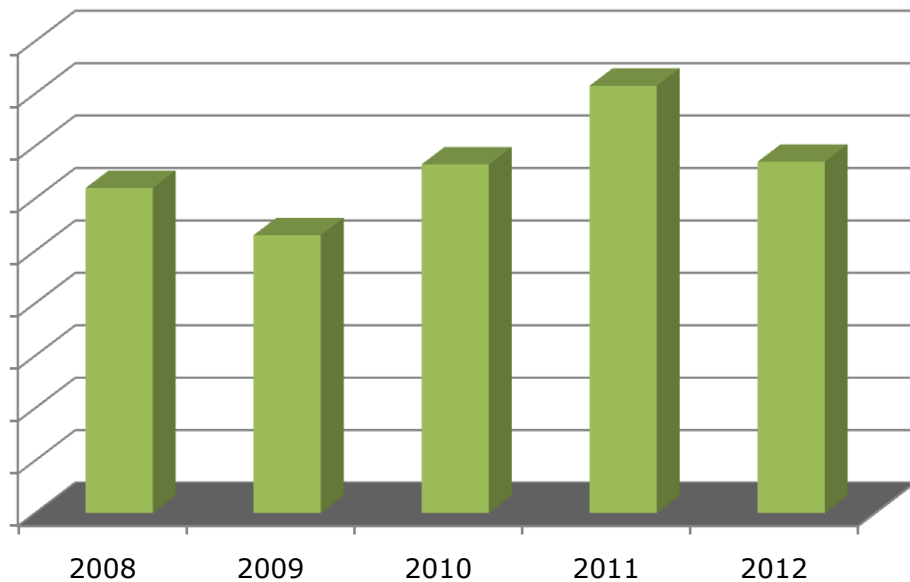


- Market size of global titanium dioxide minerals market by production is expected to reach to million units in the year 2018, from million units in 2012 by growing at a CAGR of.....%.
- Growth in the market is due to

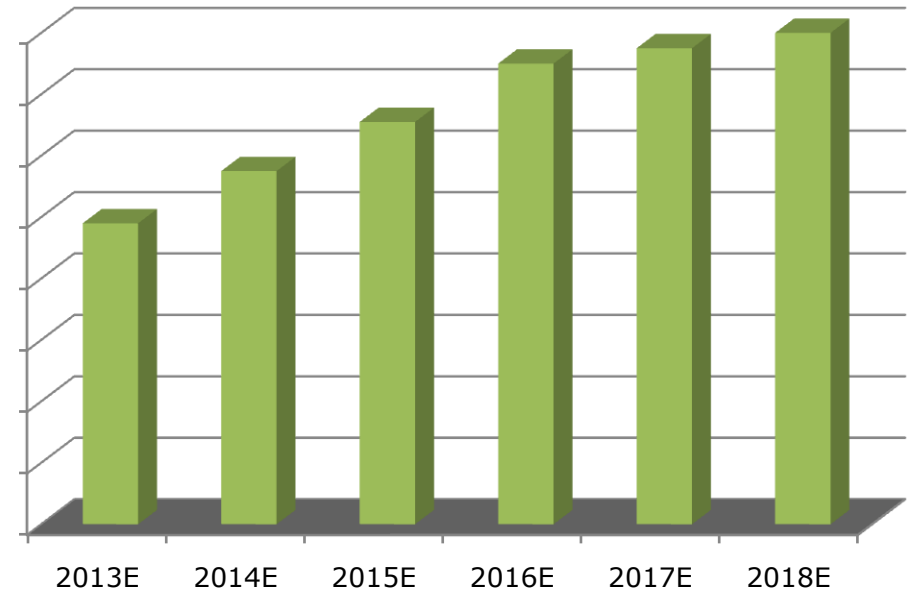
Global Zircon Market: Overview

The name "Zirconium" is derived from Arabic word "Zargon" meaning "golden in colour". Zircon is also used for the production of zirconia, zirconium metal and zirconium chemicals. These are high value and growing applications for which total consumption of zircon is becoming significant.

Global Zircon Minerals Market Size by Production, 2008-12 (Million Tons)



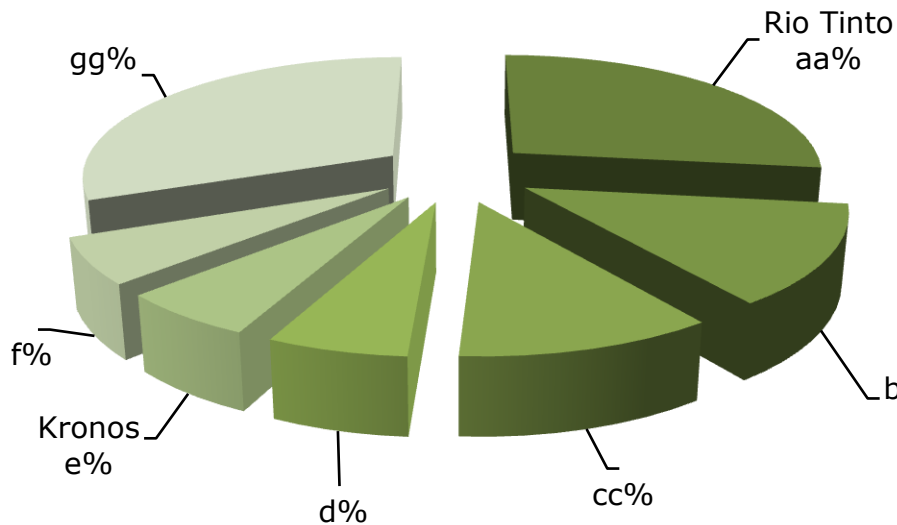
Global Zircon Minerals Market Size by Production Forecasted, 2013E-18E (Million Tons)



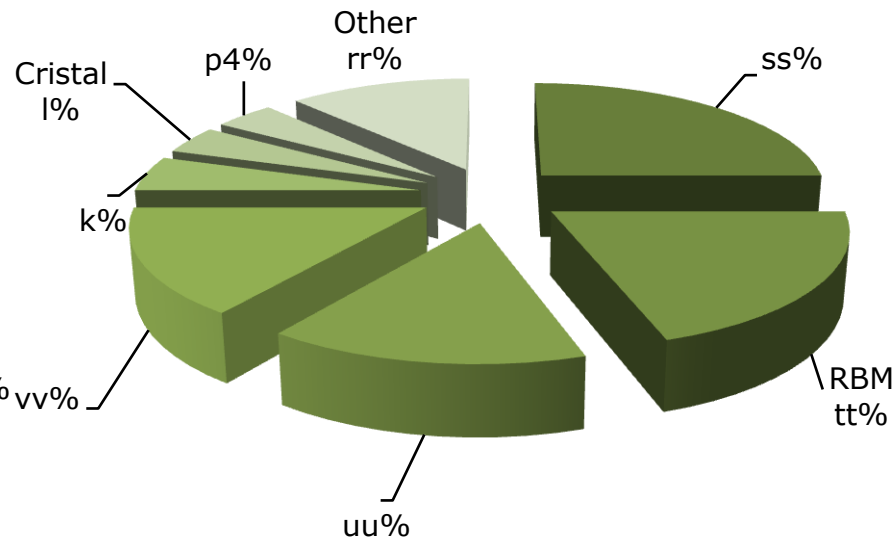
- Market size of global zircon minerals market by production is expected to reach to million tons in the year 2018, from million tons in 2012 by growing at a CAGR of.....%.
- Growth in the market is due to

Global Mineral Sands Market Share

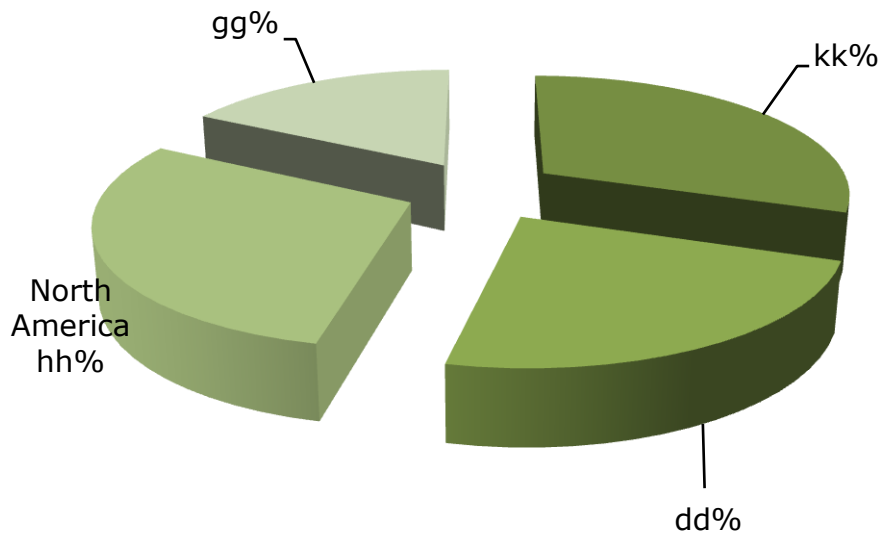
Global TiO2 Market Share by Competitors (2012)



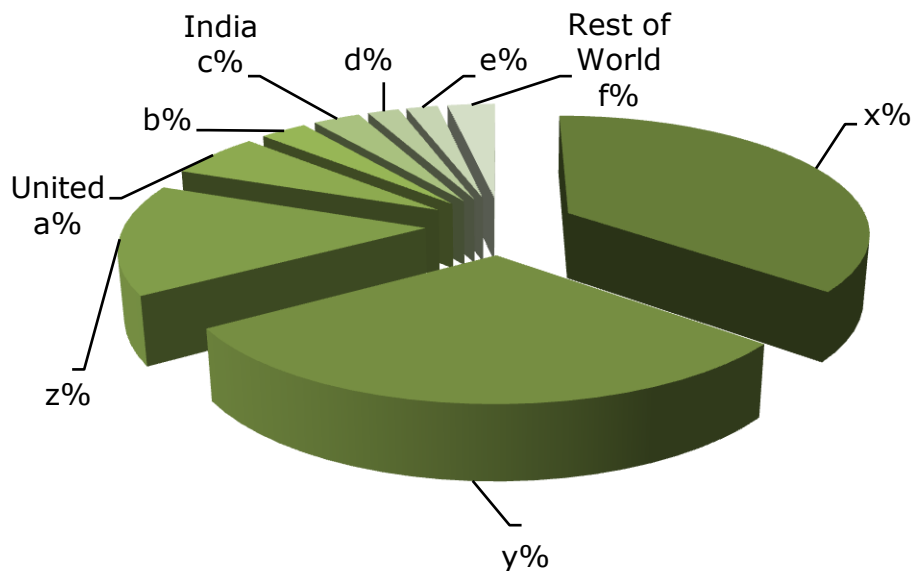
Global Zircon Market Share by Competitors (2012)



Global TiO2 Market Share by Region (2012)



Global Zircon Market Share by Region (2012)



Market Trends

End to Long Term Contracts (LTC)

-
-
-
-

Popularity of Zircon Flour

-
-
-
-

Vertical Integration in the Industry

-
-
-
-