

Extraction and Applications of Rare Earth Metals and Alloys (Uranium, Lithium, Beryllium)

Description:

Extraction and Applications of Rare Earth Metals and Alloys (Uranium, Lithium, Beryllium, Selenium, Platinum Metals, Tantalum, Silicon, Molybdenum, Manganese, Chromium, Cadmium, Boron, Titanium, Tungsten, Zirconium)

Metals & Alloys is a primary source of the lanthanide rare earth metals (including yttrium and scandium) and of rare earth metal alloys. The oxides produced from processing rare earths are collectively referred to as rare earth oxides. Although rare earths are relatively common in the earth's crust, they often do not occur in high enough concentrations, or occur along with high levels of radioactive elements to make their extraction economic. The oxides that are produced from processing the rare earth elements constitute the basic material that can be sold to the market or further processed into metals or alloys.

Rare earth metals and alloys that contain them are used in many devices that people use every day such as computer memory, DVDs, rechargeable batteries, cell phones, catalytic converters, magnets, fluorescent lighting and much more.

Rare earths are essential constituents of more than 100 mineral species and present in many more through substitution. They have a marked geochemical affinity for calcium, titanium, niobium, zirconium, fluoride, phosphate and carbonate ions. Industrially important minerals, which are utilized at present for rare earths production, are essentially three, namely monazite, bastnasite and xenotime. In modern time techniques for exploration of rare earths and yttrium minerals include geologic identification of environments of deposition and surface as well as airborne reconnaissance with magneto metric and radiometric equipment. There are numerous applications of rare earths such as in glass making industry, cracking catalysts, electronic and optoelectronic devices, medical technology, nuclear technology, agriculture, plastic industry etc. Lot of metals and alloys called rare earth are lying in the earth which required to be processed. Some of the important elements extracted from rare earths are uranium, lithium, beryllium, selenium, platinum metals, tantalum, silicon, molybdenum, manganese, chromium, cadmium, titanium, tungsten, zirconium etc.

For more details download PDF file.

Keywords: Applications of Rare Earth Metals and Alloys, Beryllium, Best small and cottage scale industries, Boron, Business guidance for Rare earth metals and alloys processing, Business Plan for a Startup Business, Cadmium, Chromium, Extraction and Applications of Rare Earth Metals and Alloys, Extraction of Rare Earth Metals and Alloys, How to Start a Rare earth metals and alloys Business, How to Start a Rare earth metals and alloys extraction?, How to start a successful Rare earth metals and alloys extr

Created At: 07 Nov, 2017