

## Rare Earth SX:

## The Recovery of Rare Earth Metals by Solvent Extraction

Rare earth metals and their compounds have unique physical and chemical properties that have made them essential in many high-technology applications. They are used in rare earth magnets that are used in electric motor, generators, and medical imaging technologies such as MRI's. They are also used in other applications, such as electronic devices and fiber optic.

China is the world's largest producer of rare earth metals, providing more than 90 % of the world's supply. Currently, many mining companies and metal recovery companies are developing technologies and expertise for the separation and purification of the individual rare earth metals.

The process to recover the rare earth metals from ores usually starts with the production of a mineral concentrate followed by a hydrometallurgical process to produce a mixed rare earth chemical concentrate. The mixed chemical concentrates are dissolved in a solution of hydrochloric acid and are processed by solvent extraction to separate the individual rare earth metals into high purity solutions for production of various rare earth metal compounds.







Rare Earth Solvent Extraction Pilot Plant

We can design and manufacture a rare earth pilot plant to meet your specific needs. Please contact Mr. Steven Webster at SX Kinetics for further details.

## SX Kinetics, Inc.

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