

Gold Recovery:

Cyanide Leaching, Carbon Adsorption, and Electrowinning

Most of the world's gold production uses cyanide leaching followed by carbon adsorption and electrowinning because it has proven to be the best technological, environmental, and economical process for the recovery of gold from a wide variety of ores.



The process consists of leaching the gold with dilute sodium cyanide and sodium hydroxide solution followed by adsorption of the soluble gold onto activated carbon. The barren cyanide solution after carbon adsorption is recycled back to the leach circuit and the loaded carbon is advanced to the elution (or strip) circuit. Gold is stripped from the loaded carbon by a hot solution of sodium cyanide and is electroplated onto stainless steel cathodes in the electrowinning cell. The spent electrolyte from the electrowinning cell is recycled back to strip more gold from the carbon.

The stripped carbon can be regenerated and recycled back to the adsorption circuit.



100 kg/week gold production



2.5 kg/week gold production

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

SX Kinetics, Inc.

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