

## **Copper Minerals/Scrap Treatment**

# **ECUPREX® Process**

**Title:** The ECUPREX® Process for Production of High Purity Cathodes from Copper Scrap without Smelting Operation

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**Abstract:** Presently only a few large copper refineries are able to produce Grade A cathodes from copper scrap. Today's technology needs large plants for smelting, converting, or refining the main impurities and casting the anodes for electrolytic refining. A new ECUPREX® PROCESS, by-passes all pyro-metallurgical operations and produces directly copper cathodes starting from copper scrap with high lead and tin contamination. Copper scrap from chopped cables, copper cements and electronic scrap are suitable feed for ECUPREX® PROCESS. This process uses a non conventional electrolyte and produces a surprisingly high quality, smooth cathode assaying only a few ppms of total metallic impurities. Bench-scale work followed by a successful mini-pilot plant run, has led to the constitution of an operating pilot plant equipped with a 1,000 Ampere cell. The results of the operations of this plant are presented and described in this paper.