Secondary Lead Production (Hydrometallurgical Treatment) CX-EW[®] Process and CX-EWS[®] Process

Title:A Full Electrochemical Approach in Processing Junk Batteries

- Paper presented at: EDP Congress 1993, Proceedings of TMS Annual Meeting; February 21st/25th, 1993; Denver, Colorado, U.S.A.
- Authors: Dott. Ing. Marco Olper B.U.S. Engitec Servizi Ambientali S.r.I. Milan, Italy

Abstract: The CX-EW technology, developed by B.U.S. Engitec, is improved introducing besides the battery paste electrowinning, the direct electrorefining of metallic lead (grids and poles) obtained from CX Breakers. This new concept of electrorefining the antimonial lead scrap is aimed top the production of 99.99 lead and of slimes with high antimony content avoiding gaseous emissions in melting lead scrap, and expensive and pollutant thermic refining operations.

In this way, practically all lead content in the battery is available as 99.99 lead, hence with a wider market for the lead recyclers.

This paper will describe the tests performed on a pilot plant scale with special reference to the relatively low energy consumption of the process.