Secondary Lead Production (Hydrometallurgical Treatment)

CX-EW® Process and CX-EWS® Process

Title: CX-EWS: a New Process for the Electrochemical Treatment of the Spent Lead Acid Batteries by Obtaining Electrolytic Lead and Elemental Sulphur

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Abstract: After three years of extensive research on a new and innovative modification to the CX-EW process has been exploited.

This process, called CX-EWS, avoids completely all the critical aspects of the previous electrochemical process which affected the cost of the energy, of the chemicals and of the maintenance of the insoluble anodes.

All thess benefits reflect a saving of about 30 % of the operation cost compared to the present pyrometallurgical traditional production and allow for a total operating costs of less than 200 DM/t lead (net of raw material cost).

With this new technology it is allowed for the first time the treatment in the same plant facilities of both primary lead sulphide concentrates and spent batteries.

The paper describes the critical and economical aspect of the new process.