Zinc from Secondary Sources

**EZINEX® Process**

**Title:** The EZINEX® Process

**Paper presented at:** EDP Congress 1994, Proceedings of TMS Annual Meeting; February 27th-March 3rd, 1994; S. Francisco, California, U.S.A.

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**Abstract:** Zinc bearing materials containing chlorides and fluorides of alkali metals, such as EAF dust, Waelz oxides, galvanizing ashes, zinc & brass foundry fumes and converter fumes are little attractive, both technically and economically for processing in ISF plant or in a conventional zinc sulphate electrolys is works. The EZINEX® Process allows for the recovery of high purity zinc in cathode form, from these materials, regenerating the leaching liquor. The process is based on a new electrochemical system which depolarizes the anode reaction with reduction of the cell voltage, compared with the traditional sulphate electrolysis method. The electrolyte, based on a chloroamino complex, allows for the recovery of other valued metals present in the zinc bearing materials such as lead, copper and silver, these being recovered as a metallic cement consequently improving the economics of the process.