

Abstract

Incineration of municipal waste in incineration plants leads towards formation of many by-products, such as slug or fly ash. These by-products may contain specific amount of heavy metals. Acidic leaching enables to transfer of some of those metals into liquid phase from which they can be obtained by various methods, i.e. by electrodeposition.. This bachelor thesis is focused on the description of waste incineration process and treatment of solid residual which can potentially be used as a secondary raw material. Incineration plant with a capacity of 96 000 t/year simultaneously treats 27 t of Zinc annually. The economic value of this treated Zinc is about 1 700 000 CZK. In case of 80 % acidic extraction efficiency the price of treated Zinc is still more than 1 400 000 CZK. Thus there is a possibility of Zinc utilization as a secondary raw material.