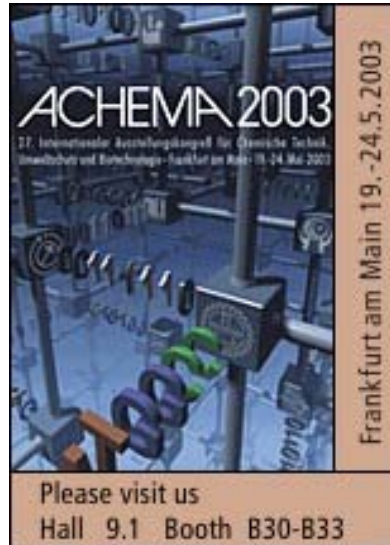


PLINKE kindly invites you to visit the Booth at ACHEMA 2003

Hall 9.1 Booth B30-B33



We further would like
to draw your attention
to the following presentation:

ACHEMA 2003

Thursday, May 22nd

11:00 a.m.

Room: ENTENTE

Hall 4.C

Environmental Protection

Waste Management VI

“Recovery of hydrochloric acid in municipal waste incineration plants”

ABSTRACT:

Recovery of Hydrochloric Acid in Municipal Waste Incineration Plants

One integral part of the waste treatment concept in Germany is the thermal treatment in municipal waste incineration plants.

Due to the composition of this waste the flue gas resulting from the incineration has a high HCl content. This HCl gas is recovered by combination of adiabatic absorption and a following concentration up to a commercial useable grade of 30 – 35 wt. % HCl.

Plinke has developed a multi-step process to purify and re-concentrate this diluted and contaminated hydrochloric acid up to a valuable product.

The first step is the separation of the non-volatile impurities by total evaporation. If necessary, volatile impurities can be transferred by chemical treatment into non-volatile ones.

For the concentration of the hydrochloric acid up to the final concentration Plinke designs an extractive rectification process using calcium chloride as extractive agent. The energy consumption is optimized by internal heat recovery. The condensate will be used as process water for the flue gas absorption.

For final purification activated carbon can be used to absorb remaining impurities in the acid. The final concentration as well as the several process steps can be always adapted according to the tasks of the client.

As a result of this combination of process steps a hydrochloric acid of commercial grade quality will be achieved.
