



Punching waste from non-ferrous metals respectively recycling materials

Punching waste accrues during the production of electronic components

This punching waste is on the one hand garbage on the other hand a valuable commodity. This explains the conflict of interest between the releasing company and the partner which recycles these materials and thereby winning back valuable metals. The first company though wants to achieve the highest price possible for the garbage and the second company wants to earn money by recycling it.

The task

The exact analytical detection of the contents is therefore a prerequisite for both: the commercial evaluation and the direction of the recycling process.

When viewing the task, it quickly becomes clear, that the production of a representative sample is an extreme challenge. The simplest method is the melting down of the corresponding amount of the punching waste. The biggest problem here though is how to fill a sufficient amount into a melting pot?



Fig. 1: Sample of punching waste

The solution

This task is solved with the FRITSCH Universal Cutting Mill PULVERISETTE 19 large 50-700 rpm. The punching waste is a hard, abrasive material. Therefore hardmetal tungsten carbide cutting tools are used. Equipped with a 4 mm sieve, a chunky sample is obtained. The acquired material can simply be filled into the melting pot and melted down. From the melt, a homogenous sample is easily taken.



Fig. 2: Punching waste after comminution

Author: Dipl. Chem. Wieland Hopfe, Fritsch GmbH,

E-Mail: info@fritsch.de