

How a typical scrap shipment is processed

RECEIVING

Inspect/Weigh



The containers in your lot are opened, and the material inspected and weighed. A code number is assigned to your lot.

Burnable Scrap



Typically contains precious metals mixed in with valueless plastics, organics, sweeps and base metals.

Metallic Scrap



Typically consists of precious metals combined with base metals – usually as manufacturing scrap.

HOMOGENIZING

1. Incinerating



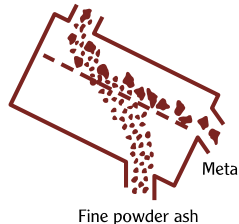
The mixed scrap is fed into an incinerator to burn off the bulk of the non-metallic elements.

2. Crushing



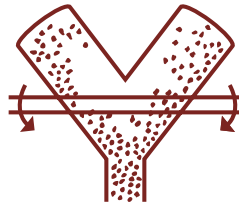
The incinerating ash is then crushed in a rotating ball mill, and pulverized to a fine powder.

3. Screening



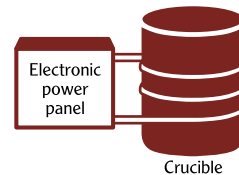
A vibratory screen separates powder from metallics. The powder will be blended and the metallics melted.

4. Blending



The powder portion of the lot is thoroughly mixed in a blender to complete its homogenization.

5. Melting



Metallic scrap – or the metallic portion of burnable scrap – is homogenized by melting in an induction furnace.

SAMPLING/ASSAYING



Sampling the powder:

Two samples are taken from the blender, using a core sampler, rolled into a layer and cross-hatched. Portions taken from alternating squares comprise samples for assay.

Sampling the metallics:

The metallic scrap is melted in a furnace. A dip sample drawn from the melt is poured into a container of water. The molten metal freezes into small spheres, samples for assay.



Fire assaying is typically used to separate precious from base metals. A combination of wet chemical and instrumental analysis methods then separate the precious metals from each other, and determine the exact proportion of each in the entire lot, as a basis for payment.