

Treatment for household waste

Recyclingtechnik
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Recyclingtechnik



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Treatment for household waste

Waste is collected and dumped at the plant.



Treatment for household waste

Household waste



The gripper has the task to fill the Bag opener with household waste

gripper



Bag opener



Treatment for household waste

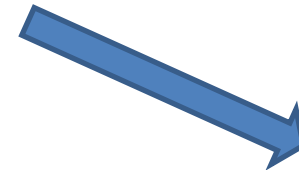
Bag opener



The bag opener opens the bags so that the content-free can be transported on the conveyor belt.
Now the material goes to the screen.
The screen has the task to sieve out the organic.



screen



fraction 100-300 mm

Organic fraction



Treatment for household waste

The fraction 100–300 mm goes to the next step to the ballistic separator
The ballistic separator has the task to make three fractions.

1. 3D fraction (shaped body material, PET bottles, glas, etc)
2. 2D fraction (flat material, film, paper, etc.)
3. Sieve fraction

Fraction 20–300mm



Ballistic separator



Treatment for household waste

Ballistic separator



2. 2D fraction

2D Fraktion



1.3D fraction

3D Fraktion



3. Screen fraction

Sieve fraction



Treatment for household waste

The organic fraction from the screen and the ballistic separator enters the drying plant.
This machine has the task to drying the material.
The material must have no more than 20% moisture.

Drying plant

Organic fraction from the screen
and the ballistic separator



Treatment for household waste

2D Fraction goes directly into the Granulator, the granulator makes a grain size from 30mm.

Now you can sell it to a cement industry as RDF.
RDF is refuse derived fuel.

2D fraction



Granulator



RDF



Treatment for household waste

The 3D fraction fall on a NIR machine.
The NIR has the task to sort out 3 fractions:

1. PET bottles
2. Plastics
3. Residue (glas, metals, non ferrous, etc.)

NIR means Near Infrared Spectroscopy and is optical sorting machine

3D fraction

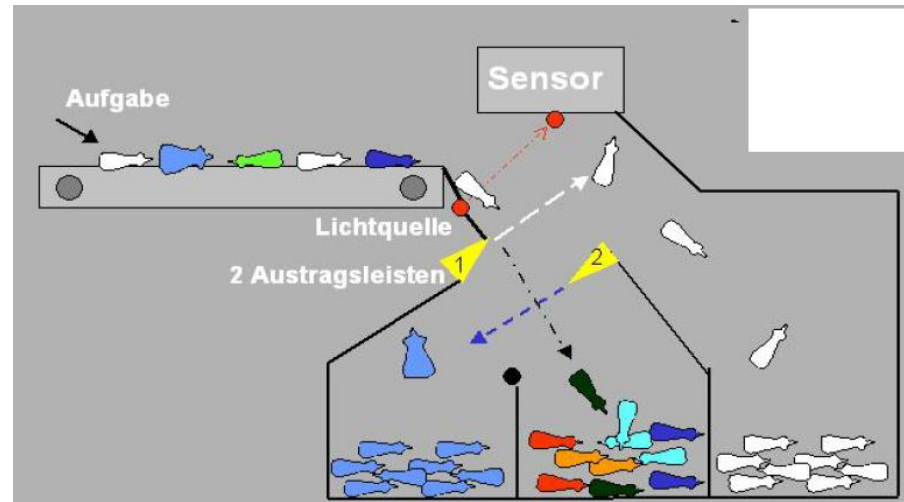


NIR-technology



Treatment for household waste

NIR machine



1. PET bottles

2. Plastics

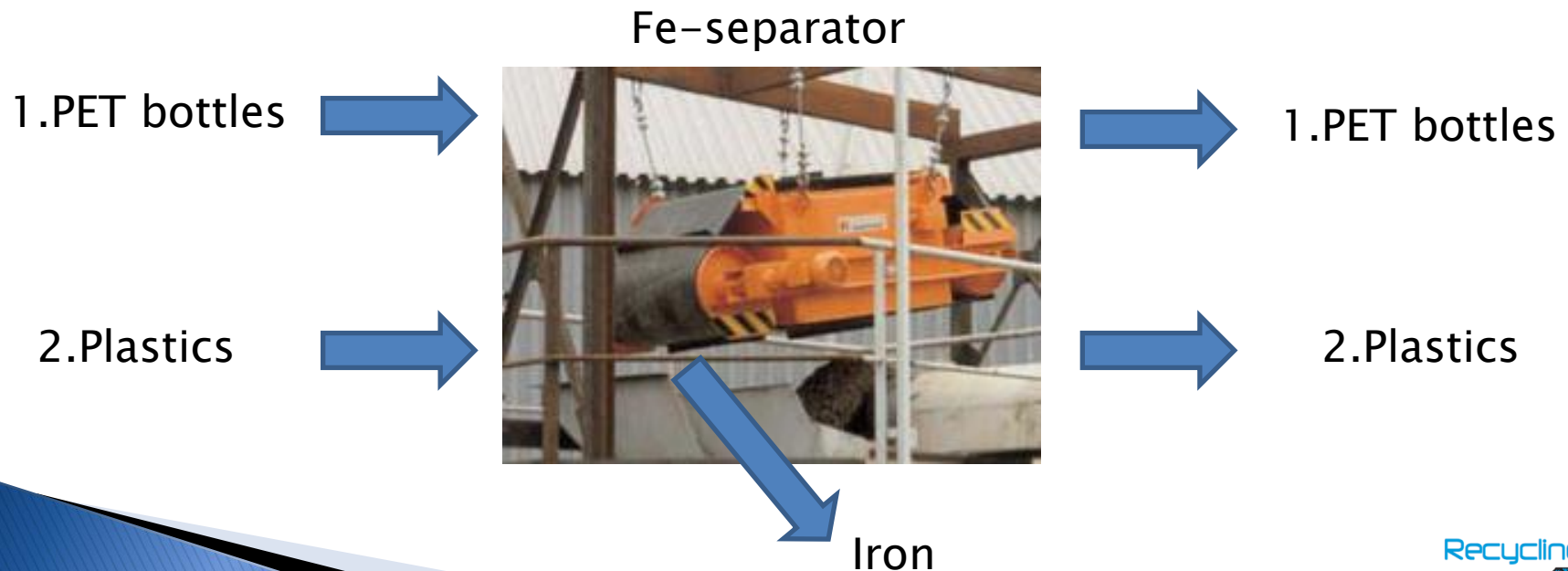
3. Residue

Treatment for household waste

At the end of the fractions PET and Plastic we mounting a Fe-separator.

The Fe-separator has the task to sort out the existing iron from the material stream.

This iron fall down into a bunker.



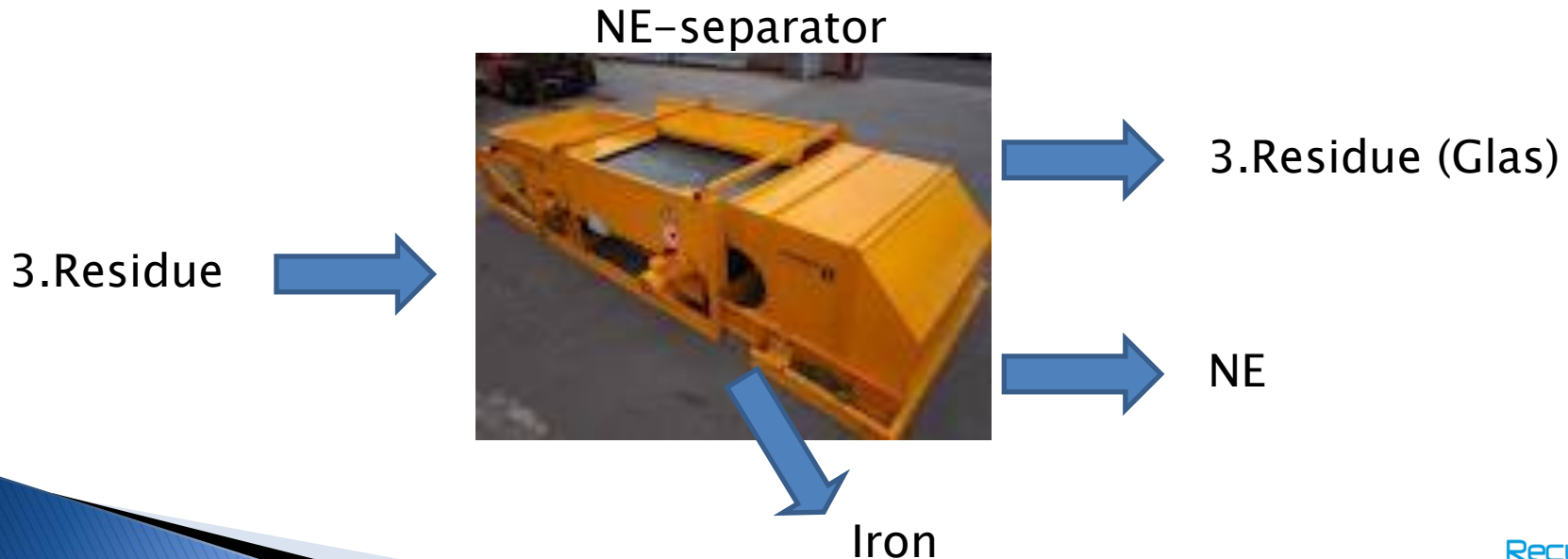
Treatment for household waste

At the end of the fraction Residue, we mount instead of the Fe-separator a Ne-separator.

The Ne-separator has the task to sort out the existing NE of the material stream and this machine can also sort out iron.

The NE-materials fall down on the floor into a bunker.

The iron material fall also down in the iron bunker.



Treatment for household waste

The wheel loader pushes the materials PET, Plastic out of the bunkers into the baler at the end of the baler comes out the finished product, that can be sold at world market.

1. PET bottles



2. Plastics



Treatment for household waste

Now we have finished PET and Plastic balls and they are ready to transport.
The other materials (glas, iron, non ferrous) can not be pressed and they are ready to transport in containers.

3D fraction



Plastic balls



PET balls



NE



Iron



Treatment for household waste

From the 2D fraction we get RDF fraction.
This RDF you can sell to cement industry.

2D fraction



RDF
Refuse derived fuel



Treatment for household waste

The organic fraction we dry it and make a granulat.
This Granulat you can also sell it as RDF.

Screen fraction



Granulat



Drying plant

