

The recycling plant Bernau



The “**Recyclingcenter Bernau**“ is used to produce meltable non-ferrous metal fractions from a wide variety of recycling materials. Inhomogeneous input is separated into light and heavy metal fractions through dry processing, which means that water is neither polluted nor consumed. The outfiltered materials can be reused. This means there is less need for using new resources and at the same time the environment is protected.

Fine and rough line

Two separate systems into which the input material is fed depending on grain size. All grain sizes can get in both systems. Small and big material gets filtered and processed in a second step.



Hard facts

- start of erection november 2021
- first material procession july 2022
- facility area ~15.000m²
- production hall 2.400m²
- storage area 4.000m² (50 boxes)
- processing capacity 30.000t/a
- 100% energy from PV at site

Input



We can handle any (non hazardous) contaminated NF metal fractions with an impurity of at least 50% and a grain size bigger then appr. 0,5mm. The proportion of FE metals should be less than 10%. The main input is a NF metal mix from IBA, after slag processing plant.

Typical input:

- NF mix ex IBA (EWC 19 12 03)
- shredder-outputs
- Zorba/ Zurrik
- NF ex Eddy current separators
- electronic scrap



Output



Light and heavy fraction of fine line (< 20mm):
The light fraction of the fine line is separated into three grain sizes.
The heavy fraction can be divided in up to six fractions.



Light and heavy fraction of rough line (> 20mm):
Due to the separation-technology the rough line can produce any kind of output quality. The main fractions are aluminium, stainless steel and heavy metals, each sorted according to feed material.



Did you know?

- ... that in comparison to primary aluminium production, the secondary aluminium production saves about 80% of greenhouse gas emissions?
- ... that in the secondary production of copper even 83% of greenhouse gas emissions are saved?
- ... that copper can be recycled an infinite number of times into 100% pure copper?