

## NON-FERROUS METAL SORTING

How to purify your heavy metals to the maximum



### down to 5 mm

Metal resources are not endless and sustainability is a factor that gets more and more important in all kinds of industries.

Additionally governmental regulations on recycling become tight and challenging for the recycling industry. Operators of scrap yards need to achieve higher recovery rates and better qualities. Even fines grain sizes need to be held in the recycling circle.

Moreover volatile global market conditions create a competitive environment for trading mixed scrap and secondary metals.

Non-ferrous metals are 100% recyclable. By using sorting technologies, this unique characteristic creates chances for all involved in the recycling circle.

Individual sorting solutions and flexible sorting equipment creates ready-to-smelt

non-ferrous metal products, the basis for the efficient use of secondary metals in new products.

This solution guide supports you in the treatment of the most effective sorting processes for the recovery of non-ferrous metals.

#### // Especially in the applications

- + auto-shredder residue (ASR)
- + incineration bottom ash (IBA)

#### // Our sorting systems take care of

- + getting rid of the waste and recover zorba
- + creating a clean aluminium product
- + purify heavy metals into its clean fractions of copper, brass, zinc

Separation of the ferrous with magnets and non-ferrous metals with eddy current technology



Separation of heavy from light metals with X-ray transmission technology

RECOVERY & PURIFICATION

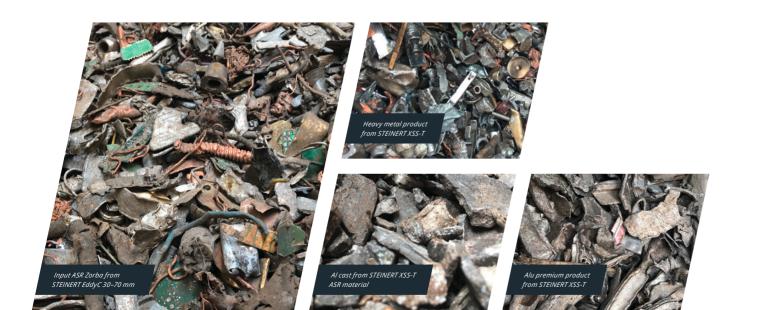


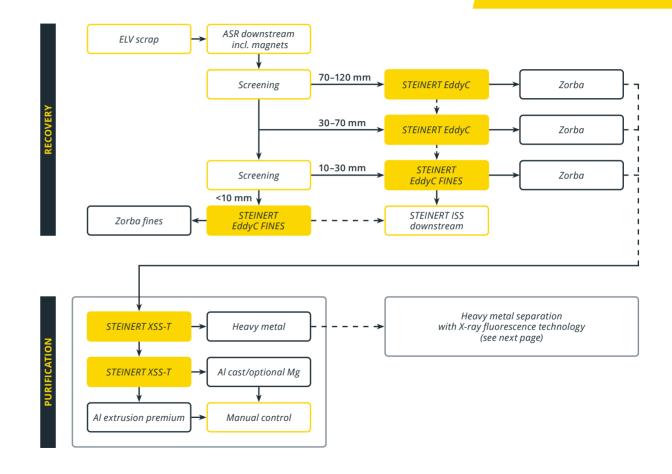
Purification of non-ferrous heavy metals down to 5 mm – into supreme copper, brass and zinc which is ready to smelt. Detected with X-ray fluorescence technology

Purification into supreme mid size copper, brass and zinc which is ready to smelt – detected with X-ray fluorescence technology

# ASR ALUMINIUM SEPARATION

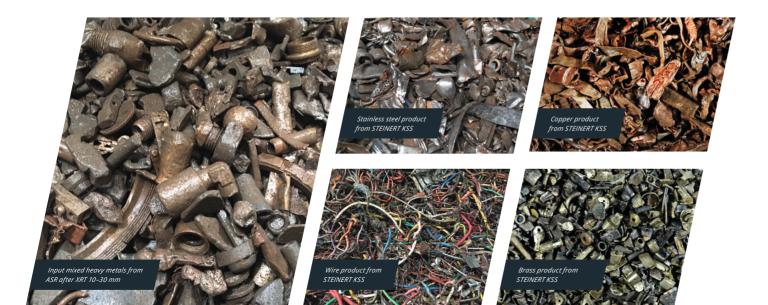
Simplified flowchart for the separation of Al scrap from (ELV) shredders

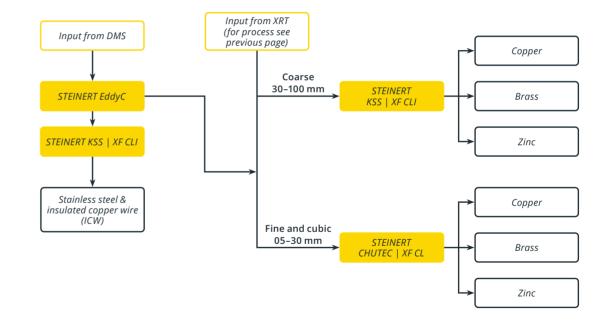




### **ASR HEAVY METAL SEPARATION**

Simplified flowchart for the separation of mixed heavy metals from ELV shredders





## **OUF**

## **OUR PRODUCTS**

## for non-ferrous metal processing

Recover non-ferrous metals:



#### STEINERT EddyC

The eddy current separator can be used any place where non-ferrous metals can be recovered or separated. It produces marketable non-ferrous metal mixtures containing aluminium, copper, zinc or brass by eddy current technology.



#### STEINERT XSS-T

Our STEINERT XSS-T separates a wide variety of materials based on differences in density. Thus X-ray transmission separates light metals like aluminium from heavy metals.

Separate light from heavy metals with

STEINERT X-ray transmission:



#### STEINERT EddyC® FINES

The STEINERT EddyC® FINES is made for the separation of extra fine non-ferrous metals. It produces marketable non-ferrous metal mixtures containing aluminium, copper, zinc or brass by eddy current technology.



#### STEINERT KSS | XT CLI

When we enhance the STEINERT XSS-T with a laser for 3D recognition, a colour and an induction sensor, one improve the sorting results and expand the application range. This multisensor machine is called STEINERT KSS.

Purify into clean copper, brass and zinc fractions ready to smelt with X-ray fluorescence:



#### STEINERT KSS | XF CLI

STEINERT KSS | XF CLI stands for high throughput rates and a wide variety of applications particularly efficient for grain sizes 30 to 150 mm. Its X-ray fluorescence sensor suits for heavy metal sorting in coarse and mid size grain sizes. It creates a copper, brass, zinc and a stainless steel product.



#### STEINERT CHUTEC | XF CL

STEINERT CHUTEC | XF CL with X-ray fluroscence sensor is particularly efficient in fine grain applications down to 5 mm. It produces clean products of copper, brass, zinc & stainless steel.



#### STEINERT LSS | XF L

The line sorting system produces several sellable, high-purity products in only one run. It determines the object-specific elemental composition using X-ray fluorescence (XRF). It works for grain sizes like 30 to 150 mm and sorts the heavy metals in absolutely pure fractions.







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